

Advancing Care for Individuals with Autism: A Review of Global Guidelines and Practices, Gap Analysis, and Recommendations for Improvement

Authors

Musunuri, S., Graves, L., Shah, P. B., M., Kind-Rubin, Marsh, T. N., Waller, S., Somlyay, J., Nandili M. I., Yoon, M.N., Torres, N., Hansen-Turton, T., Hayden, E., Spreat, S., Mishra, A.



THE NETWORK
TOWARDS UNITY FOR HEALTH



Mollie Woods Hare
Global Center of Excellence

ABSTRACT

Objective: To conduct research, identify gaps in current care, and highlight key opportunities for improving primary care for individuals with autism, ensuring that care is tailored to meet the unique needs of this population.

Methods: A literature review was conducted to examine and analyze existing global clinical guidelines for the primary care of individuals with autism. In addition, monthly global consultative meetings were organized to facilitate collaboration among healthcare professionals, and experts specializing in autism and related areas of care. These collaborative sessions focused on synthesizing recent empirical research, expert insights, and firsthand knowledge. To facilitate the identification of actionable opportunities for improvement, a system based on the 2018 Canadian Consensus guidelines for the Primary Care of Adults with Intellectual and Developmental Disabilities¹ was adopted.

Insights: The analysis of global clinical guidelines and related resources for autism presented several critical gaps that hinder the effectiveness of autism care worldwide. Some of the key issues covered in this paper include: the lack of centralized access to resources and system navigation; limited consideration of diverse cultural and socioeconomic contexts; and inadequate attention to the perspectives of individuals with autism. Furthermore, there is insufficient integration of trauma-informed care, and existing guidelines often overlook the needs of adults with autism, particularly in areas such as employment, independent living, and sexual health. Beyond this there's a need for better support in developing healthy social connections, including friendships, work relationships, and intimate partnerships. The challenges faced by caregivers are also not fully addressed. Addressing these gaps and more through inclusive, culturally sensitive, and person- and family-centered care models present significant opportunities to improve global support for individuals with autism.

Conclusion: This paper underscores the importance of developing more adaptable care models that cater to the diverse needs of individuals with autism. Additionally, the paper highlights the vital role of policy interventions in addressing systemic barriers, including raising awareness, reducing stigma, ensuring adequate training for healthcare professionals, and improving resources for individuals with autism, especially in adulthood. By advocating comprehensive clinical guidelines and policy reforms, this paper aims to improve autism care globally.

Table of Contents

ABSTRACT	2
INTRODUCTION	6
Target Audience	6
PURPOSE	6
DEFINITIONS	6
METHODOLOGY	10
- Literature Review of Existing Published Clinical guidelines	
- Literature Review of Workforce Competencies (WHO Publication)	
- Analysis of Existing Guidelines and Workforce Competencies	
- Gap Analysis of Existing Guidelines and Workforce Competencies	
- Recommendations	
- Discussion: Adoption and Implementation	
LITERATURE REVIEW	11
- The Adult Autism Health Resource (AAHR) Care Toolkit—Harvard Medical School	
- Centers for Disease Control and Prevention (CDC)	
- American Academy of Pediatrics (AAP)	
- National Institute for Health and Care Excellence (NICE)	
- American Academy of Child and Adolescent Psychiatry	
- Autism Speaks	
- Council of Autism Service Providers (CASP)	
- Cleveland Clinic Journal of Medicine	
- Autism Research Institute (ARI)	
- American Academy of Family Physicians (AAFP)	
- Milestones Autism Resources (MAR)	
- AASPIRE Healthcare Toolkit	
- Association for Science in Autism Treatment (ASAT)	
- The Organization for Autism Research (OAR)	
- The LifeCourse Nexus	
- International Society for Autism Research (INSAR)	
- European Society of Child and Adolescent Psychiatry (ESCAP)	
- Autism Europe	
- Canadian Paediatric Society	
- National guidelines for the Assessment and Diagnosis of Autism, Australia	
- Indian Journal of Psychiatry	
- Indian Academy of Pediatrics (IAP)	
ANALYSIS:	23
- Core Areas Addressed by Global Clinical Guidelines for Autism	
o Integrated Approach to Diagnosis and Assessment	
o Standardized Tools for Evaluating Symptoms and Behavior	
o Early Identification and Developmental Screenings	
o Evidence-Based Treatment and Intervention Strategies	

- Individualized Treatment Plans
- Management of Co-Occurring Conditions and Preventive Care
- Support for Families and Caregivers
- Care for Physical and Mental Health
- Advocacy and Legal Protections for Individuals and Families
- Educational and Social Skills Support

- Identified Gaps in Global Clinical Guidelines for Autism

- Cultural and Environmental Considerations Gaps
 - Intersectionality and Cultural Bias in Autism Care Guidelines
 - Failure to Address Diverse Healthcare Environments and Audiences
 - Overlooking the Use of Existing Resources for Early Detection and Care in Under-Resourced Areas
 - Complexity of Language and Terminology
- Accessibility and Affordability Gaps
 - Lack of a Centralized Platform and Inconsistent Updates to Autism Guidelines
 - Limited Affordability and Accessibility
- Communication and Support Gaps
 - De-Prioritization of Communication in Care
 - Overreliance on Caregiver Input
- Trauma and Crisis Management Gaps
 - Lack of Trauma-Informed Care
 - Risk of Re-Traumatization in Healthcare Settings
- Sexuality and Psychological Well-Being Gaps
 - Lack of Sexual Health Guidance for Adults with Autism
 - Overlooked Menstrual Health Needs for Women with Autism
- Holistic Autism Care Gaps Across Life Stages
 - Lack of Comprehensive Transition and Independence Support for Adults with Autism
 - Inadequate Long-Term Support for Caregivers During Life Transitions
 - Neglect of Alternative Treatments in Autism Care
- Barriers Addressable Through Policy Initiatives
 - Lack of Awareness and Stigma Surrounding Autism
 - Limited Availability and Analysis of Public Health Data Related to Autism
 - Lack of Trained Professionals
 - Funding Gaps and Limited Resources for the Autism Field and Adults with Autism
 - Limited Involvement of All Interested Parties in Autism Policy Development
- Other Gaps Addressable Through Policy Initiatives
 - Lack of a Centralized Platform for Resources
 - Limited Affordability and Accessibility
 - Poor Connection to Community-Based Resources
 - Difficulty Navigating Funding Systems

- Practical Challenges in Implementation
- Lack of Autism-Specific Insurance Resources
- Limited Peer Networks and Respite Care for Caregivers

Limited Integration of Technology in Autism Care

***RECOMMENDATIONS* 29**

- Outlines key opportunities aimed at improving autism care, with a focus on sharing more accessible, culturally sensitive, and effective support systems that truly meet the needs of the global autism community.

***DISCUSSION* 52**

- Identifies the most urgent gaps within global clinical guidelines for autism, including intersectionality, healthcare environments, resource utilization, accessibility, communication, training, and awareness.

***CONCLUSION* 54**

- A discussion on developing adaptable care models, addressing systemic barriers, and advocating for comprehensive guidelines and policy interventions to enhance global autism care.

***BIOS of AUTHORS*..... 55**

***REFERENCES*..... 60**

INTRODUCTION

Target Audience

This paper is primarily intended for mental health and social care professionals and trainees, including but not limited to primary care providers and other healthcare practitioners, as well as professionals serving individuals with autism in primary care and related public or social health contexts.

PURPOSE

Objective and Scope

This paper examines and critically assesses the current state of care for individuals with autism by analyzing global clinical guidelines and related resources, identifying key gaps and areas for improvement. It aims to highlight the diverse challenges faced by individuals with autism, emphasizing the need for more inclusive, person-centered care models that can be tailored to various cultural and socioeconomic contexts. Additionally, the paper stresses the importance of policy interventions to address systemic barriers and promote comprehensive, holistic approaches to autism care. Ultimately, the objective is to drive a global shift toward more effective and supportive systems for individuals with autism, ensuring their unique needs are met across diverse healthcare and social service settings.

This approach closely aligns with the core principles of the World Health Organization's Primary Health Care (PHC) framework,² which asserts that every individual, everywhere, has the right to achieve the highest attainable level of health. PHC is designed to address a person's health needs across the entire continuum, including health promotion, disease prevention, treatment, rehabilitation, and palliative care. Crucially, PHC ensures that care is personalized, centered on the individual's unique needs, and respects their preferences. Recognized as the most inclusive, equitable, and cost-effective model for achieving universal health coverage, PHC also plays a vital role in strengthening health systems' resilience, enabling them to effectively prepare for, respond to, and recover from health crises. Implementing the Primary Health Care Approach: A Primer,³ published in March 2024, serves as a crucial tool for policymakers to advocate for investment in primary care, drive practical changes, and advance progress towards universal health coverage and health for all.

DEFINITIONS

Autism Spectrum Disorder (ASD): ASD is a complex developmental condition involving persistent challenges with social communication, restricted interests, and repetitive behavior. While autism is considered a lifelong condition, the need for services and support because of these challenges varies among individuals with autism.⁴

It encompasses a range of conditions marked by difficulties in social interaction, communication, and atypical behavioral patterns, such as challenges with transitions and unusual sensory responses. The needs and abilities of individuals with autism vary significantly; while some may live independently, others require lifelong support. Many individuals with autism also experience co-occurring conditions like epilepsy, depression, anxiety, and attention-deficit/hyperactivity disorder (ADHD), with intellectual functioning ranging from profound impairment to superior capabilities. Globally, about 1 in 100 children is estimated to have autism, but prevalence rates can vary widely,⁵ up to approximately 1–2% of the population. Although signs of autism can be evident in early childhood, diagnosis often occurs later. Early access to evidence-based psychosocial interventions can improve communication and social skills. Comprehensive healthcare for individuals with autism requires integrated services across various sectors, including education and social care. Once diagnosed, individuals with autism and their caregivers must receive appropriate information and support tailored to their evolving needs.

Caregiver:⁶ A caregiver is a person who tends to the needs or concerns of a person with short- or long-term limitations due to illness, injury or disability. The term “family caregiver” describes individuals who care for members of their family of origin but also refers to those who care for their family of choice. This could be members of their congregation, neighbors or close friends. Family caregivers play a significant role in health care, as they are often the main source of valuable information about the patient.

Community-Based Health Care:⁷ Community-Based Health Care includes services delivered by a broadly defined community health workforce, according to their training and capacity, encompassing a range of health workers, lay and professional, formal and informal, paid and unpaid, as well as facility-based personnel who support and supervise them and provide outreach services and campaigns. Where applicable, specific occupational groups and their roles are highlighted. In every community, there are local actors, relationships, and processes that intersect with the health sector and are central to delivering high-quality, people-centered health care and to building health system resilience. Relevant actors include local authorities, faith leaders, non-governmental organizations (NGOs), and community groups, such as women’s, scouting, and youth groups. As trusted members of the community, the community health workforce usually has strong ties with these groups.

Equity Seeking:⁸ Equity seeking refers to communities and groups that experience significant collective barriers in participating in society. This could include attitudinal, historic, social and environmental barriers based on age, ethnicity, disability, economic status, Indigeneity, gender identity and gender expression, nationality, race, sexual orientation, and more.

Evidence-Based Practice (EBP):⁹ EBP is a process used to review, analyze, and translate the latest scientific evidence. The goal is to quickly incorporate the best available research, along with clinical experience and patient preference, into clinical practice, so informed patient-care decisions can be made.

Integrated Services: Integrated services are health services that are managed and delivered so that people receive a continuum of health promotion, disease prevention, diagnosis, treatment, disease-management, rehabilitation and palliative care services, coordinated across the different levels and sites of care within and beyond the health sector, and according to their needs throughout their life course.¹⁰

Intersectionality:¹¹ Intersectionality is an approach or lens that recognizes that health is shaped by a multidimensional overlapping of factors such as race, class, income, education, age, ability, sexual orientation, immigration status, ethnicity, indigeneity, and geography.

Patient-Centered Care: Patient-centered care focuses on the patient and the individual's particular health care needs. The goal of patient-centered health care is to empower patients to become active participants in their care. This requires that healthcare providers develop good communication skills and address patient needs effectively. Patient-centered care also requires that the health care provider become a patient advocate and strive to provide care that not only is effective but also safe.¹²

People-Centered Care: People-centered care is an approach to care that consciously adopts the perspectives of individuals, carers, families, and communities as participants in and beneficiaries of trusted health systems that respond to their needs and preferences in humane and holistic ways. People-centered care also requires that people have the education and support they need to make decisions and participate in their care.¹³

Primary Care: Primary care is a model of care that emphasizes first-contact, accessible, continuous, comprehensive, and coordinated person-focused care. It aims to optimize population health and reduce disparities by ensuring that all subgroups have equal access to services. The five core functions of primary care include: first-contact accessibility, which provides a strategic entry point and improves access to health services; continuity, which fosters long-term personal relationships between individuals and their healthcare providers or teams; comprehensiveness, ensuring a broad range of services such as promotive, preventive, curative, rehabilitative, and palliative care; coordination, which organizes services across different levels of the health system and over time; and people-centered care, which equips individuals with the education and support needed to make informed decisions and actively participate in their care.¹⁴

Primary Health Care (PHC): PHC is a whole-of-society approach to health that aims to maximize the level and equitable distribution of health and well-being by focusing on people's needs and preferences as early as possible along the continuum from health promotion and disease prevention to treatment, rehabilitation and palliative care. The PHC approach accelerates progress towards achieving Universal Health Coverage (UHC) and health security. At the same time, it enables health systems to have all essential health services readily available, of high quality, accessible and affordable to communities, as close as possible to people's everyday environment. PHC combines multisectoral policy and action, community engagement and high-quality services. It integrates population and individual-level health interventions and shifts

efforts from a reactive biomedical approach to illness to a more holistic and proactive approach to health and well-being.¹⁵

Trauma-Informed Care (TIC):¹⁶ TIC takes a trauma-informed approach to the delivery of behavioral health services that includes an understanding of trauma and an awareness of the impact it can have across settings, services, and populations. TIC views trauma through an ecological and cultural lens and recognizes that context plays a significant role in how individuals perceive and process traumatic events, whether acute or chronic. TIC involves vigilance in anticipating and avoiding institutional processes and individual practices that are likely to retraumatize individuals who already have histories of trauma. TIC upholds the importance of consumer participation in the development, delivery, and evaluation of services.

METHODOLOGY

This paper follows a structured process to assess and analyze common health needs, clinical guidelines, and workforce competencies in the healthcare sector. We began with a comprehensive review of various globally published guidelines, drawing from sources such as World Health Organization (WHO) documents, peer-reviewed journals, case studies, resources from government health agencies, and other credible health organizations. The guidelines were identified through a systematic online search strategy, utilizing databases such as PubMed, Google Scholar, JSTOR, PsycInfo, and official websites of international health organizations. The objective was to identify relevant standards and best practices in the care of individuals with autism.

To compare existing guidelines with workforce competencies, we employed qualitative methods, specifically thematic analysis. We organized monthly global consultative meetings to foster collaboration among healthcare professionals and experts in autism and related care fields. During these sessions, we synthesized recent empirical research, expert insights, and firsthand knowledge. This collaborative approach allowed us to identify key themes, explore regional differences in how healthcare providers interpret and implement the guidelines, and identify both the strengths and gaps in current healthcare practices for individuals with autism.

Following this, we conducted a gap analysis to uncover gaps in the current standards outlined in clinical guidelines and publications. The objective was to identify areas for improvement within healthcare systems to better align with global standards, particularly those set by the WHO. Based on this analysis, we identified actionable opportunities for improvement that can be tailored to different regional contexts, with the goal of better aligning current practices with international standards.

Finally, we discuss strategies for adopting and implementing these improvements, addressing potential challenges that may emerge. This includes practical solutions designed to support healthcare organizations and policymakers in seamlessly integrating these areas for improvement into their practices.

LITERATURE REVIEW

We conducted a comprehensive literature review of global clinical guidelines for the care of individuals with autism to assess the current state of care and identify opportunities for improvement through gap analysis. In collaboration with healthcare professionals, autism experts, and specialists in related fields, we ensured a broad and well-rounded perspective. Our primary goal was to integrate recent research findings, expert insights, and practical knowledge from those working directly with individuals with autism.

In the following section, we present a summary of the key global clinical guidelines for the care of individuals with autism. Developed by various health organizations and experts, these guidelines provide insights into best practices, diagnostic criteria, intervention strategies, and long-term care.

Overview of Existing Global Clinical Guidelines for Individuals with Autism

The Adult Autism Health Resource (AAHR) Care Toolkit¹⁷ from Harvard Medical School is designed to help caregivers access crucial health information and resources for supporting adults with autism. It includes guidance on staying healthy, with tools like dietary plans for educational programs and information on preventive care and dietary issues. For managing common conditions, it provides insights on topics such as migraines, anxiety, depression, gastrointestinal issues, sleep disorders, ADHD, and more. Communication strategies are also addressed, offering support for sibling relationships, autism-specific language, and ways to discuss pain and navigate emergencies. The toolkit includes gender-specific care for women, such as resources on menstruation and premenstrual syndrome.

Caregiver guidance covers an annual checklist, coping with grief, diagnostic criteria, care transitions, medical emergency planning, and understanding various healthcare roles, like mental health providers and primary care options. Insurance-related resources support finding autism-competent care and understanding Medicare and Medicaid,¹⁸ mental health parity, and coverage changes when turning 26 years of age. Legal aspects are covered, addressing guardianship, healthcare rights for individuals with autism, and relevant protections. This comprehensive toolkit aims to ensure caregivers are well-equipped to support the diverse and specific health needs of adults with autism.

In addition, Harvard Medical School offers a free online course titled, Clinical Care for Autistic Adults,¹⁹ aimed at those interested in providing quality care to individuals with autism. The course covers topics such as recognizing the diverse presentations of autism, managing co-occurring medical conditions, and adapting care approaches based on individual needs. The curriculum covers legal and ethical obligations under the Americans with Disabilities Act, effective communication strategies, and the influence of social support systems on healthcare access. It also addresses telehealth's advantages and limitations, crisis management protocols, healthcare transitions, and advocacy strategies, including navigating insurance policies.

The Centers for Disease Control and Prevention (CDC), a U.S. federal public health agency under the Department of Health and Human Services, launched the Study to Explore Early Development (SEED)²⁰ in 2007 to better understand autism. This initiative is one of the largest studies in the United States of America aimed at identifying risk factors and developmental characteristics in children aged 2 to 5 years with autism. In 2021, SEED expanded its research to include the health, functioning, and needs of individuals with autism and other developmental disabilities as they transition into adolescence and adulthood.

In addition, CDC's Autism Spectrum Disorder-Specific Anticipatory Guidance²¹ equips pediatricians with effective strategies to tackle common developmental challenges faced by children with autism. Key areas covered include sleep difficulties, feeding challenges, toilet training, and the importance of cultural competence in care. The guidelines also emphasize regular assessments for constipation and encourage a collaborative approach that respects family cultural norms and parenting styles.

The CDC resources to support educators working with students with autism provide essential information, including basic facts about autism, covering symptoms, risk factors, screening, and treatment options, along with guidance for educators concerned about a child's development. Additionally, it features developmental milestone resources for children aged 2 months to 5 years, helping educators monitor progress and identify potential delays, including autism. The Learn the Signs. Act Early²² program aims to improve early identification of developmental delays and disabilities, including autism, by facilitating parent-engaged developmental monitoring and promoting developmental screening so children and their families can get the early services and support they need.

In addition, CDC's resources on Treatment and Intervention Strategies for Autism Spectrum Disorder²³ aim to reduce symptoms, enhance daily functioning, and improve the quality of life for individuals with autism. Key strategies include behavioral approaches, such as applied behavior analysis, which utilize techniques like discrete trial training and pivotal response training to modify behaviors. Developmental approaches aim to improve skills in language and physical abilities through therapies like speech, language, and occupational therapy.

Educational strategies, including the Treatment and Education of Autistic and Related Communication-Handicapped Children (TEACCH), emphasize structured classroom environments that foster routine and visual learning, benefiting students with autism. Social-relational approaches focus on enhancing social skills and relationships through programs like Floor Time and Relationship Development Intervention. Psychological therapies, including cognitive behavioral therapy, are effective in addressing related mental health challenges. Additionally, complementary and alternative treatments, such as dietary changes and art therapy, should be pursued with professional guidance to ensure their safety and effectiveness.

CDC's Clinical Screening for Autism Spectrum Disorder²⁴ highlights the critical importance of early identification and developmental screening in children. It highlights recommendations from

the American Academy of Pediatrics for regular developmental screenings during well-child visits at specific ages (9, 18, and 30 months, and specifically for ASD at 18 and 24 months). Primary care providers are crucial in monitoring child development and conducting screenings, especially for those at higher risk. The resource outlines factors to consider when selecting reliable screening tools, such as psychometric properties, child characteristics, and administration setting. Various screening tools, including the Ages and Stages Questionnaires and the Modified Checklist for Autism in Toddlers, are mentioned to help identify developmental delays. Additionally, parental involvement is encouraged, as parents provide valuable insights into their child's development.

A clinical report from the American Academy of Pediatrics, Identification, Evaluation, and Management of Children With autism spectrum disorder,²⁵ provides a comprehensive overview of autism in children, detailing its prevalence, clinical symptoms, diagnostic criteria, and co-occurring conditions. It outlines the essential screening and diagnostic processes, highlighting age-specific considerations and barriers to identification. The report further delves into the biological and medical evaluations of children with autism, discussing potential biomarkers and neuroimaging findings. It also explores various intervention strategies, including educational and therapeutic approaches, and medical management of co-occurring conditions. Finally, the report emphasizes the importance of family support, transition planning to adulthood, and the need for ongoing research and services to improve outcomes for children with autism.

The National Institute for Health and Care Excellence (NICE), guidelines on autism spectrum disorder (ASD) in Adults: Diagnosis and Management²⁶ focuses on diagnosing and managing suspected or confirmed cases of autism, including conditions such as atypical autism, in individuals aged 18 and over. The recommendations outlined in the guidelines address several key areas. First, it emphasizes the importance of identification and assessment, ensuring that individuals with autism receive accurate diagnoses and tailored support. It also covers interventions specifically designed for autism, focusing on strategies to enhance daily functioning and quality of life. Additionally, the guidelines provide recommendations for managing challenging behaviors often associated with autism and for addressing coexisting mental health disorders, which can complicate the care of individuals with autism. Importantly, it recognizes the role of families, partners, and caregivers, recommending assessments and interventions to support them in their caregiving roles.

NICE, The Clinical Guidelines Autism Spectrum Disorder in Under 19s: Recognition, Referral, and Diagnosis²⁷ provides recommendations for recognizing and diagnosing autism in children and young people from birth to 19 years. It aims to enhance the experiences of children, young people, and their caregivers by ensuring timely and accurate diagnosis and support. The guidelines outline the local pathways necessary for recognizing, referring, and diagnosing potential autism cases. It emphasizes how to effectively refer them to specialized autism teams for further assessment and details of the autism diagnostic assessment process tailored specifically for children and young people. Moreover, it highlights the significance of clear

communication regarding the results of the diagnostic assessments to families and carers, ensuring they are well informed throughout the process. Finally, the guidelines offer recommendations for providing adequate information and support to families and caregivers. The guidelines are intended for healthcare professionals, children and young people with autism, and their families and carers.

Used in conjunction with the above clinical guidelines, NICE developed the autism spectrum disorder in Under 19s: Support and Management²⁸ guidelines that provide essential strategies for supporting children and young people with autism from birth until turning 19 years of age. The guidelines include recommendations on general care principles, engagement with families and carers, specific interventions for core autism features, managing challenging behaviors, enhancing life skills, and avoiding ineffective interventions. Additionally, it emphasizes the importance of a smooth transition to adult services, ensuring continuity of care and support for individuals with autism and their families.

The American Academy of Child and Adolescent Psychiatry's, Neurodevelopmental Clinical Pearls Pocket Guide,²⁹ is a concise reference for clinicians, providing key points and practical strategies for diagnosing and managing common neurodevelopmental disorders in children and adolescents, including autism, Intellectual Disability (ID), and other developmental delays. It outlines key screening instruments, and severity levels based on social and behavioral challenges and emphasizes early identification, comprehensive assessment, and tailored interventions based on individual needs.

Autism Speaks has developed an extensive collection of tool kits and guides³⁰ aimed at supporting individuals with autism and their families throughout different stages of life. These resources include the 100-Day Kit for families of newly diagnosed children, which provides essential information and strategies for navigating the early days following a diagnosis. Other toolkits focus on specific age groups, such as school-age children and adults. In addition, guides address various aspects of daily life, such as advocacy, challenging behaviors, and community-based skills assessment. Practical resources for dental care, employment, and financial planning are also included. Educational resources, including guidance on creating individualized education programs (IEPs) and information about autism-friendly youth organizations and post-secondary opportunities, emphasize the importance of fostering an inclusive environment for individuals with autism. Furthermore, the Autism Speaks Autism Treatment Network (ATN) collaborated with the Autism Intervention Research Network on Physical Health (AIR-P) to produce tool kits focused on health and well-being. These include guides on applied behavior analysis, safe medication use, and managing common health concerns such as constipation and sleep issues. In addition, Autism Speaks has a series of webinars including, Navigating A New Autism Diagnosis³¹ and Caregiver Quick Tips—Parents and Caregivers of Children with Autism³² with content adapted from WHO Caregiver Skills Training Program for Families of Children with Developmental Delays and disabilities.

The Council of Autism Service Providers (CASP) Applied Behavior Analysis (ABA) Practice guidelines for the Treatment of Autism Spectrum Disorder (Version 3.0)³³ emphasize ABA's role as a medically necessary and evidence-based approach, aimed at enhancing the functioning and quality of life for individuals with autism. They detail the qualifications and training required for practitioners, including Board Certified Behavior Analysts (BCBAs) and Registered Behavior Technicians (RBTs). A significant focus is placed on the concept of medical necessity, offering definitions and considerations relevant to various interested parties, including professional associations, state laws, and insurance providers. The guidelines stress the importance of individualized care, outlining various assessment methods and treatment planning considerations that take into account factors such as the patient's age, cultural background, and family involvement. Moreover, the guidelines advocate for collaboration among caregivers, patients, and service providers to ensure that treatment aligns with the priorities and values of those receiving care. Progress measurement and treatment implementation strategies are also discussed, emphasizing the need for ongoing monitoring and adaptation of treatment plans to achieve optimal outcomes. The guidelines serve as a vital resource for healthcare funders, regulatory bodies, service providers, and consumers.

The 2019 article published in the *Cleveland Clinic Journal of Medicine*, Adults with Autism Spectrum Disorder: Updated Considerations for Healthcare Providers³⁴ suggests that healthcare providers must modify their approaches to effectively support adults with autism as they transition from pediatric to adult care. It advocates for an integrated approach to diagnosis and emphasizes the importance of individualized treatment plans that incorporate both behavioral therapies and carefully monitored pharmacologic options. The article recommends developing comprehensive transition plans that address new healthcare needs, insurance coverage, and the cultivation of self-management skills for young adults with autism. It also highlights the necessity for open conversations about sexual health and education to meet the unique needs of this population. Additionally, it underscores the importance of connecting caregivers to adult services to alleviate caregiver stress and enhance support networks. Preventive medical care, including regular health screenings and vaccinations, is essential for maintaining overall health. Finally, it emphasizes the need for vigilance regarding adverse medication effects and suggests collaboration with behavioral health teams to ensure optimal care while minimizing potential risks.

The Cleveland Clinic, in joint-providership with the Autism Research Institute (ARI), offers a complimentary, Continuing Medical Education (CME)-certified online series designed to provide healthcare professionals and the public with essential insights into autism and associated co-occurring conditions. The series, titled Co-Occurring Conditions and Autism Spectrum Disorders,³⁵ aims to educate a primary audience that includes family practice providers, internists, pediatricians, neurologists, medical geneticists, behavioral medicine experts, and other healthcare team members. It covers a range of critical topics, such as the challenges faced by

individuals aging with autism, common gastrointestinal issues like abdominal pain, constipation, and gastroesophageal reflux disease, as well as barriers to receiving individualized medical care for people with autism. Additionally, the Current Perspectives on Autism³⁶ on-demand webcast series provides an in-depth exploration of the complex relationships between autism and co-occurring conditions. This accredited educational series covers emerging research on the connections between autism and metabolic conditions, gastrointestinal diseases, and brain imaging findings.

The Autism Research Institute (ARI) offers a range of educational tools, resources, and research-based support for individuals, families, and professionals. ARI provides free online webinars³⁷ that cater to individuals with autism, their families, and professionals, covering topics such as autism education, interventions, and strategies for managing behaviors. These webinars serve as an accessible resource for both newly diagnosed families and experienced caregivers. Additionally, ARI offers resources like the Diagnostic Checklist Form E-2 and Research Questionnaire Form E-3,³⁸ tools originally developed to assist in diagnosing autism. Furthermore, ARI offers an extensive collection of videos³⁹ on key topics such as Sleep Issues,⁴⁰ Self-Injurious Behavior,⁴¹ Sensory Issues,⁴² Anxiety and OCD in ASD,⁴³ Law Enforcement and First Responders,⁴⁴ Peer-Reviewed Research on Genetics,⁴⁵ Behavioral Support,⁴⁶ Pregnancy,⁴⁷ Physical Therapy and Motor Skills,⁴⁸ and Biomarkers,⁴⁹ including expert insights through its series Insights from Clinicians⁵⁰. Another key offering of ARI is the Autism Treatment Evaluation Checklist (ATEC),⁵¹ a tool designed to track progress and measure the effectiveness of interventions. Comprising subtests on communication, sociability, sensory awareness, and physical/behavioral health, the ATEC allows parents, teachers, and caregivers to monitor improvements or changes in a child's development over time. Additionally, ARI provides access to tools for addressing self-injurious behaviors,⁵² offering guidance to parents and professionals on identifying treatments to mitigate these challenges.

The guidelines by the American Academy of Family Physicians (AAFP)⁵³ provide a comprehensive framework for the primary care management of autism, covering critical areas such as early identification, evaluation, treatment, and long-term care. Early screening during well-child visits at 18 and 24 months is strongly recommended using validated tools like the Modified Checklist for Autism in Toddlers—Revised with Follow-Up (M-CHAT-R/F). Once ASD is suspected, an integrated evaluation involving specialists such as developmental pediatricians, psychologists, speech-language pathologists, and occupational therapists is recommended. This team-based approach ensures accurate diagnosis, identification of comorbidities, and the creation of individualized care plans. The guidelines further suggest that behavioral therapies, particularly ABA, are central to autism care, with Early Intensive Behavioral Intervention being especially effective. It emphasizes the importance of parental involvement in therapy for optimal outcomes. Primary care physicians are encouraged to provide families with resources, coping strategies, and guidance for managing behavioral challenges and accessing necessary services. Continuous monitoring and adjustments to care plans are

recommended to accommodate the child's evolving needs. Long-term care should focus on social skills, vocational training, and preparing for independent living. The guidelines also suggest complementary therapies like therapeutic horseback riding and massage therapy, which show potential benefits with minimal risks. However, it advises against unproven treatments, such as auditory integration training, facilitated communication, gluten- or casein-free diets, hyperbaric oxygen, and secretin, due to insufficient evidence of effectiveness.

Milestones Autism Resources (MAR) offers a comprehensive range of tool kits⁵⁴ and resources designed to support individuals with autism, their families, caregivers, and professionals. These toolkits cover various aspects of life, including guidance for adults seeking a formal autism diagnosis, resources for facilitating independent leisure skills and social activities, and structured approaches for summer camps. They provide essential support for families navigating the initial diagnosis process, legal guardianship, and accessing services through local developmental disability boards. Educational resources focus on improving homework success, preparing for post-secondary education, and addressing school-related challenges such as individualized education programs (IEPs). Additional kits tackle mental health services, sleep challenges, travel planning, toilet training, and the use of visual support to enhance communication and daily functioning.

In addition, MAR's Milestones Autism Planning (MAP) Tool⁵⁵ is an online resource designed to support families and individuals with autism from ages 0 to 17, as well as adults aged 18 and older. It emphasizes tailored learning and lifelong growth, offering practical tips and goals across six key categories: life and social skills, education, physical and mental health, employment, housing, and law and finance. For each age group, the tool covers essential topics such as nutrition, hygiene, social communication, and safety skills, with specific guidance for transitions, including school and employment. Additionally, it addresses mental health challenges and strategies for managing sensory issues.

The AASPIRE Healthcare Toolkit,⁵⁶ developed by the Academic Autistic Spectrum Partnership in Research and Education (AASPIRE), aims to enhance healthcare access and quality for adults on the autism spectrum. Funded by the National Institute of Mental Health in Maryland, United States, this toolkit offers comprehensive resources for adults on the autism spectrum, supporters, and healthcare providers. For individuals with autism and their supporters, the toolkit includes downloadable forms and worksheets to assist with appointment preparation, symptom discussions, and follow-up care. It provides guidance on navigating the healthcare system, tips on maintaining overall health through nutrition, exercise, recreation, and preventive care, and resources on healthcare rights, including disclosing autism, understanding privacy, and ensuring equitable access. Additionally, it offers autism-specific information for newly diagnosed adults, covering therapy options, disability rights, and autistic culture, as well as resources for obtaining low-cost or free computer and Internet access. The Autism Healthcare Accommodations Tool is a key feature, offering personalized recommendations for healthcare providers to improve accessibility for individuals with autism. For healthcare providers,⁵⁷ the toolkit serves as a

valuable resource to improve care delivery for individuals with autism. It includes detailed information on autism, diagnostic criteria, and the benefits and challenges of adult diagnoses, along with referrals for therapy, assistive technology, and related conditions. The toolkit outlines strategies to address how autism impacts healthcare delivery and provides recommendations to enhance patient care. It also covers legal and ethical considerations, offering guidance on determining consent capacity, decision-making authority, and best ethical practices. Providers can access reliable resources, downloadable tools for communication and follow-up care, and the Autism Healthcare Accommodations Tool to create personalized strategies for supporting individuals with autism.

The Association for Science in Autism Treatment (ASAT)⁵⁸ provides a comprehensive website that addresses a wide array of considerations surrounding autism. Their resources cater to both families and practitioners, emphasizing science-based approaches. For families, ASAT offers practical support on various topics, including regulating sleep, addressing food selectivity, and managing toilet and bowel training. They provide strategies to handle behaviors such as mouthing objects and offer guidance on dental exams, neighborhood safety, and adolescent safety skills. Additionally, they discuss significant concerns like mortality risks, particularly drowning, and provide insights into healthcare for children with autism. Parents can also find advice on how to prepare for discussions with doctors about medication and how to address concerns with family members. For practitioners, ASAT delivers expert guidance on critical aspects such as early detection and intervention, autism combined with intellectual disability, and the recurrence of autism in families. They emphasize the importance of encouraging parental involvement in home-based interventions and offer resources for ethical and evidence-based practices. Furthermore, ASAT provides valuable information on transitioning adolescents and adults with autism and discusses how to incorporate occupational therapy into treatment plans effectively. To assist parents of newly diagnosed children, ASAT offers a free New Parent Packet.⁵⁹ This resource is designed for families with children aged 18 months to seven years and serves as a guide during the often-overwhelming initial diagnosis process. The packet includes step-by-step guidance, beginning with determining if a child is on the autism spectrum, identifying qualified professionals for diagnosis, and exploring the best treatments available. It also helps parents navigate finding and funding treatment and addresses questions about what the future may hold for their child and family.

The Organization for Autism Research (OAR)⁶⁰ offers a wide array of resources to support families, autistic individuals, educators, employers, and clinical professionals, all available for free. Among their resources is A Parent's Guide to Research, which serves as an introductory tool to help parents understand autism and the various treatment options available following their child's diagnosis. OAR also provides A Guide to Safety, created with input from parents and first responders, focusing on strategies to prevent and manage safety threats throughout different life stages. Additionally, A Guide for Transition to Adulthood helps families navigate the significant changes and challenges associated with this transition. For educators, OAR has developed An

Educator's Guide to Autism, which outlines a six-step approach for teaching autistic children in general classroom settings, offering practical tips to create an inclusive educational environment. Complementing this resource is An Educator's Guide to ASD (Level 1 Supports), designed specifically for teachers to support students with Level 1 ASD as defined in the DSM-5. OAR also features Autism Tuned In, an engaging online platform that enhances learning about autism for elementary and middle school students through interactive content. Lastly, the Hire Autism initiative provides valuable resources for job seekers and employers, including guidance on resume writing and creating autism-friendly workplaces. Through these diverse offerings, OAR aims to enhance understanding, safety, and opportunities for individuals with autism and their families.

The LifeCourse Nexus⁶¹ provides a comprehensive framework to assist individuals with disabilities and their families in envisioning and achieving a fulfilling life at any age or stage. Central to this framework is the LifeCourse Trajectory, which helps individuals and families map out their life goals, articulating what they want and do not want for their future. This tool is particularly beneficial for planning significant transitions, such as moving from school to adulthood, entering the workforce, and achieving independent living. To facilitate daily life planning, the Life Domains and Daily Life Planning Tools cover essential life areas, including health, employment, social connections, independent living, safety, and advocacy, guiding families in identifying necessary supports. The Integrated Supports Star encourages users to consider a diverse range of supports, personal, community, technology, and public resources, rather than relying solely on formal supports. Additionally, the LifeCourse Portfolios serve as personalized planning books that document an individual's strengths, preferences, needs, and future goals. The LifeCourse Exploring Possibilities Booklets focus on various life areas, such as employment, relationships, and independent living, providing real-life examples and planning worksheets to aid in goal setting. For families of young children with disabilities, the LifeCourse Planning Guide for Parents of Young Children assists in considering long-term goals while addressing immediate early intervention needs. Finally, the LifeCourse Transition to Adulthood Tools supports teens and young adults in preparing for independent living, work, and community life through practical checklists and goal-setting exercises. Together, these resources empower individuals and families to navigate life's transitions and build the lives they envision.

The International Society for Autism Research (INSAR)⁶² is a leading scientific and professional organization dedicated to advancing knowledge about autism through high-quality research. One of its significant offerings is the INSAR Annual Meeting, recognized as the largest autism research conference globally, where researchers, clinicians, and self-advocates converge to share the latest scientific findings, clinical practices, and policy developments related to autism. Additionally, the Autism Research Journal, INSAR's official peer-reviewed publication, disseminates cutting-edge studies across various disciplines, including genetics, neuroscience, intervention, and policy, providing valuable evidence-based insights for researchers and clinicians alike. INSAR also produces Policy Briefs and Statements, which summarize key

research findings that have practical implications for policy and practice, aiding in the translation of research into actionable strategies. The organization fosters collaboration through its Global Special Interest Groups, which focus on specific areas of autism research, such as early detection, adult services, employment, and mental health. These groups unite experts, clinicians, and self-advocates to address challenges and propose solutions in these critical domains. Moreover, INSAR emphasizes Equity, Diversity, and Inclusion initiatives, supporting global collaboration and the inclusion of underrepresented populations in autism research.

The European Society of Child and Adolescent Psychiatry (ESCAP) Practice Guidance for Autism Spectrum Disorder (ASD),⁶³ outlines recommendations based on comprehensive research and clinical insights. It emphasizes the importance of standardized classifications to harmonize autism diagnosis across age groups. However, the guidance stresses that diagnosis alone does not dictate treatment; a personalized approach is crucial, considering everyone's strengths and limitations. Additionally, while various measures for detection and assessment exist, their reliability needs validation, especially for marginalized groups. The guidance advocates for creating autism-friendly environments and calls on professionals to adopt a coaching role for families and caregivers, promoting inclusion across all community services. Given the limited number of validated interventions, practitioners are encouraged to consider expert recommendations alongside scientific evidence, ensuring that treatments align with societal values and respect the rights of individuals with autism. Overall, the guidance highlights the need to focus on supporting those who are disadvantaged by autism while recognizing the unique strengths it may offer to some individuals.

Autism Europe's guidelines, *People with Autism Spectrum Disorder. Identification, Understanding, Intervention- Third Edition*⁶⁴ provides directions for supporting individuals with autism across all life stages. For children, the guidelines recommend an integrated assessment by specialists—including psychologists, educationalists, and therapists—who observe the child in varied settings. Standardized assessment tools are suggested to gauge autism-specific symptoms, yet diagnosis should incorporate cognitive assessments and evaluations of adaptive behavior, communication, physical health, and mental wellness. For adults, the assessment process builds on the child-focused model, emphasizing lifelong neurodevelopmental factors and specialized healthcare needs. The guidelines advocate for tailored interventions, promoting structured environments, consistent routines, and active family involvement. These interventions evolve to meet changing needs, from early developmental support in childhood to skills training and independence-focused strategies in adulthood. The guidelines discourage relying on medication for core autism symptoms, instead recommending evidence-based, individualized practices. Prioritizing the quality of life, the guidelines suggest supporting individuals' social, emotional, and material needs through person-centered approaches.

The article from the Canadian Paediatric Society, *Standards of Diagnostic Assessment for Autism Spectrum Disorder*⁶⁵ emphasizes the urgent need for improved diagnostic assessments for autism due to its rising prevalence. The article promotes an integrated approach to diagnosis

while encouraging training for more pediatric healthcare providers in handling less complex cases. It outlines who is qualified to diagnose autism in Canada, describing three evaluation approaches: the Sole Practitioner Approach for straightforward cases, the Shared Care Model for milder or complex cases, and the Team-Based Approach for integrated assessments. It highlights the importance of thorough diagnostic assessments, including medical history reviews, caregiver interviews, and direct child observations, using effective diagnostic tools. The article also stresses the necessity of clear communication with families about findings and recommendations and calls for comprehensive assessments post-diagnosis to inform individualized intervention planning. Additionally, it acknowledges factors such as age, sex, cultural influences, and geographical disparities that may impact diagnosis and access to care.

The National Guidelines for the Assessment and Diagnosis of Autism in Australia,⁶⁶ first published in 2018 and updated in 2023, provides evidence-based recommendations to ensure accurate, timely, and appropriate autism assessments and diagnoses. The guidelines are intended for practitioners involved in clinical assessment and diagnosis and present 66 Consensus-Based Recommendations that cover the entire process, from making initial referrals to conducting comprehensive assessments, evaluations, and referrals for further support. The guidelines emphasize an individualized, strengths-focused, culturally-affirming, and neurodiversity-affirming approach to service delivery, ensuring the assessment and diagnostic process is respectful and accessible. The document is structured into five key sections. Section 1 stresses the importance of collaboration between practitioners and clients for a timely, accurate, and appropriate assessment. Section 2 outlines the need for practitioners to provide high-quality, safe, and supportive services, ensuring respectful and accessible information sharing and timely referrals for additional support. Section 3 encourages early discussions about referral for assessment when autism is suspected. Section 4 emphasizes the importance of a comprehensive needs assessment, including an assessment of functioning and a medical evaluation, while Section 5 outlines the need for a qualified practitioner to conduct a diagnostic evaluation to determine if the client meets the criteria for an autism diagnosis, followed by necessary referrals for further support.

The Clinical Practice Guidelines for Autism Spectrum Disorder (ASD),⁶⁷ published in the *Indian Journal of Psychiatry*, emphasize a comprehensive, integrated approach to assessing and managing autism, ensuring care that is tailored to everyone's needs. The guidelines highlight important updates from the DSM-5,⁶⁸ particularly regarding the criteria for diagnosing autism. The assessment process includes the use of standardized tools, such as the Modified Checklist for Autism in Toddlers (MCHAT-R), and incorporates additional evaluations to identify co-occurring conditions, developmental delays, and functional impairments. For treatment, the guidelines emphasize the use of evidence-based behavioral therapies, alongside family psychoeducation, to support both individuals with autism and their families. They recommend coordinated care involving medical, educational, and therapeutic professionals to provide comprehensive support. For managing symptoms like irritability, attention-deficit/hyperactivity

disorder (ADHD), and anxiety, the guidelines offer guidance on the careful use of medications. They also provide updated information on treating ADHD in children and adolescents. Additionally, the guidelines stress the importance of monitoring the adverse effects of medications and working closely with caregivers to ensure the best possible outcomes.

The Consensus Statement of the Indian Academy of Pediatrics on Evaluation and Management of Autism Spectrum Disorder (ASD)⁶⁹ by the Indian Academy of Pediatrics provides detailed guidelines for the comprehensive care of children with autism in India. The primary objective of the guidelines is to emphasize the importance of early and structured intervention, which should begin as soon as possible, even in the absence of a definitive diagnosis. These interventions must be evidence-based, tailored to the developmental needs of the child, and delivered in a structured manner. The management of children with autism should be coordinated by a pediatrician, with a focus on an integrated team that addresses not only the core symptoms of autism, but also any co-morbid conditions that may impact the effectiveness of the treatment. The guidelines stress the need for therapeutic approaches, advocating for a low child-to-therapist ratio (preferably 1:1 or 1:2) to ensure that each child receives the focused attention and support they require. In addition, parental education and home-based interventions are highlighted as integral to the success of the treatment plan and should be incorporated into the broader, integrated approach. Although pharmacotherapy can be used to address specific symptoms or co-morbid conditions, it is important to note that psychopharmacologic treatments do not address the core aspects of autism. Lastly, pediatricians are urged to guide families away from these unproven treatments and focus on evidence-based, structured interventions to improve the overall functioning and well-being of children with autism.

ANALYSIS:

A) Core Areas Addressed by Global Clinical Guidelines for Individuals with Autism

The abovementioned guidelines and resources for individuals with autism emphasize key areas aimed at improving care, support, and overall quality of life. An integrated approach to diagnosis and assessment is emphasized, with recommendations for collaboration among specialists, including psychologists, therapists, and educators. The guidelines highlight the importance of employing standardized assessment tools to evaluate autism-specific symptoms along with evaluations of adaptive behavior, communication skills, physical health, and mental wellness. Early identification and regular developmental screenings are advocated, encouraging pediatricians to provide anticipatory guidance regarding common developmental challenges, such as sleep issues, feeding difficulties, and toilet training.

For treatment and intervention strategies, Applied Behavior Analysis is recognized as one of the evidence-based approaches, requiring practitioners to possess appropriate qualifications. Individualized treatment plans tailored to the patient's age, cultural background, and family dynamics incorporate a variety of behavioral, developmental, and educational therapies. Social-relational approaches, such as Relationship Development Intervention (RDI), are also emphasized for their role in fostering social connections and interpersonal skills. The guidelines address the management of coexisting conditions, including anxiety, depression, gastrointestinal issues, and ADHD, promoting preventive care and regular health screenings, including vaccinations, as integral components of comprehensive care.

The guidelines extend their scope to support families and caregivers, acknowledging their pivotal role in the care ecosystem. Practical tools and resources are offered to help navigate complex processes such as diagnosis, legal guardianship, and access to services. And strategies for managing daily challenges, including sleep disruptions and caregiver mental health, are addressed along with coping strategies for caregivers. Cultural sensitivity is emphasized, urging healthcare providers to engage with families in a manner that respects and incorporates their cultural norms, thereby fostering a collaborative and respectful care environment. In addition, the creation of autism-friendly spaces and the promotion of inclusive community practices are stressed as vital for fostering belonging and acceptance.

A notable feature of some of the outlined guidelines is their emphasis on transitioning individuals with autism into adulthood, with recommendations for developing comprehensive transition plans that address new healthcare needs, insurance coverage, and self-management skills. Ongoing support for caregivers during this transition is also highlighted, with an emphasis on connecting families to resources specifically tailored to adults with autism. Legal and ethical considerations are also covered, providing some insights into guardianship rights, healthcare

protections, and the role of telehealth in improving access to care and managing crises effectively.

In addition, the importance of physical and mental health care is emphasized in the guidelines, with a focus on managing co-occurring conditions such as anxiety, depression, sleep disorders, and gastrointestinal issues. Preventive care is advocated, emphasizing the necessity of regular health screenings and vaccinations for maintaining overall health. The guidelines also underscore the importance of monitoring medication effects, particularly concerning adverse reactions, and highlight a holistic approach to care that encompasses therapeutic interventions for anxiety and depression as well as strategies for addressing challenging behaviors.

Community integration is another cornerstone of the guidelines, promoting participation in local activities and organizations that foster a sense of belonging. Autism awareness training for community members is encouraged to cultivate inclusive environments. Sexual health education is addressed, emphasizing the need for tailored discussions that align with an individual's cognitive and emotional development. Telehealth is recognized as a critical tool for improving access to care, particularly for underserved families, and for providing timely mental health support during crises.

Advocacy education is highlighted as crucial for empowering individuals and families by informing them of their rights and legal protections under disability laws, including guardianship and healthcare rights. Educational support is equally prioritized, with an emphasis on creating individualized learning plans and fostering collaboration between teachers, therapists, and families to build cohesive support systems. Social skills development is highlighted, leveraging peer-mediated interventions and structured social activities to enhance communication and interpersonal relationships.

The guidelines cater to a diverse audience, including caregivers, healthcare professionals, educators, individuals with autism, policymakers, and others, with specific emphases. Healthcare providers are offered comprehensive materials on medical management and behavioral therapies. Families and caregivers receive practical guides and toolkits to help them navigate daily life challenges, including insurance processes. Specialists, such as therapists and psychologists, have access to resources focused on treatment planning, though these tend to be less detailed than those aimed at general providers. While resources for adults with autism are more limited than those for children, they focus on critical areas such as employment, housing, and legal matters. Researchers are provided with information on key studies, though there is less emphasis on day-to-day care. Finally, policymakers are given limited resources designed to inform legislative decisions and funding priorities related to autism services.

B) Identified Gaps in Global Clinical Guidelines for Autism

While the existing guidelines and resources for autism offer valuable frameworks for care, there are notable gaps that, if addressed, could further strengthen support for individuals with autism. These gaps highlight areas where the current guidelines may fall short in meeting the diverse and evolving needs of individuals with autism and suggest opportunities for improvement in comprehensive care, inclusivity, and accessibility.

Lack of Centralized Access to Resources and System Navigation. There is currently no single platform for families, caregivers, and providers to find comprehensive information efficiently, which complicates their ability to use available support systems. Many existing resources for individuals with autism are not easily accessible or affordable, further hindering their effectiveness. The guidelines also reveal research gaps, as they are not regularly updated to incorporate the latest findings or evidence-based practices. Although references to innovative research exist, these elements are often not central to the resources. Instead, there is a stronger focus on established care methods, which may overlook the value of ongoing research and its implications for treatment.

Western Focus. In addition, the existing guidelines for autism care are primarily based on research conducted in high-income Western countries, which often overlook the distinct needs of low- and middle-income countries. This creates a significant gap, as these guidelines fail to account for the diverse cultural, socioeconomic, and infrastructural contexts in which care is provided, making them less applicable and effective in global settings.

Lack of a Clearly Defined Target Audience. The guidelines do not distinguish between the needs of healthcare and social care professionals in different settings. For example, urban areas with well-established healthcare infrastructure may require advanced training on specific care techniques. In contrast, remote or indigenous communities, where caregiving is often community-driven and resources are limited, require support that enhances existing caregiving practices rather than introducing new and unfamiliar approaches. Additionally, the guidelines do not adequately address practical challenges, such as securing funding, forming partnerships, and finding professionals willing to provide training and outreach. These challenges further hinder the effectiveness of these guidelines in underserved areas.

Intersectionality Considerations. Many existing resources fail to consider the intersectionality of autism with other social factors, such as race, socioeconomic status, and gender identity. These challenges can severely hinder their ability to receive appropriate care and support. By neglecting to recognize how these social factors impact the lived experiences of individuals with autism, existing guidelines fail to create care strategies that fully address the diverse needs of different populations. Furthermore, these guidelines frequently fail to provide guidance on effectively leveraging existing community resources to support early detection and care for autism in under-resourced areas. For instance, a rural village in a developing country might have

minimal healthcare infrastructure but the community likely has other valuable resources that could be utilized for autism support.

Person-Centered Perspectives. The lack of consideration for diverse contexts in autism care is compounded by insufficient emphasis on the perspectives of individuals with autism themselves. Individuals with autism encompass a wide spectrum and demonstrate diverse communication styles, which can make verbal expression of their needs challenging. This variability, including difficulties in decoding and responding to non-verbal communication, is often overlooked. Failing to prioritize these unique communication challenges in assessments undermines the effectiveness of patient-centered care.

The perspective of individuals with autism is crucial for developing care models that truly reflect their lived experiences. However, while guidelines for effective communication with individuals with autism are available, they are often deprioritized compared to clinical topics. This imbalance suggests a potential oversight in recognizing the central role that communication plays in effectively supporting individuals with autism. Moreover, current resources and approaches tend to rely heavily on caregiver input rather than directly engaging individuals with autism. While caregivers are invaluable in providing context and understanding, this over-reliance creates a significant gap in fully comprehending the nuanced needs and experiences of individuals with autism themselves. Without actively listening to and prioritizing the voices of individuals with autism, care strategies risk being misaligned with their actual needs, leading to ineffective or misdirect interventions.

Lack of Trauma-Informed Care. The challenges are further exacerbated by a limited focus on integrating trauma-informed care into autism support, which is critical given the vulnerabilities of individuals with autism in healthcare settings. Inadequate trauma-informed practices can lead to the re-traumatization of this population during medical encounters, especially when communication barriers exist. Healthcare environments often fail to consider the emotional and psychological needs of individuals with autism, leaving them susceptible to stress, discomfort, and heightened anxiety.

Lack of Comprehensive Support for Adults with Autism. While there are some resources available, they are not as thorough or widely developed as those targeted at children and adolescents, leaving many key areas unaddressed. For example, guidelines for adults with autism rarely focus on practical aspects such as navigating employment, building career skills, understanding workplace rights, managing workplace expectations, or communicating challenges with employers and colleagues. These areas are crucial for fostering independence and career development, yet they remain insufficiently covered.

Similarly, guidelines for independent living and community integration often fail to address the unique challenges adults with autism face, such as accessing socialization opportunities, managing daily routines, and navigating social interactions. This oversight can limit their ability

to form meaningful relationships, actively engage with their communities, and achieve independent living. A significant gap exists in the provision of resources and strategies to support adults with autism in developing and maintaining healthy social connections, including friendships, workplace relationships, and intimate partnerships. This lack of support often contributes to social isolation, which adversely affects their mental health.

Lack of Sexual Health Resources. Many people with autism face difficulties understanding and navigating topics such as sexual rights, consent, and intimacy, due to the limited guidance available. For women with autism, in particular, menstrual health and reproductive healthcare choices are often neglected, with insufficient support for managing menstrual cycles or making informed decisions about contraception, pregnancy, and sexual health. Challenges such as sensory sensitivities to menstruation, managing emotional and physical symptoms, and accessing reproductive health information can significantly impact their well-being and autonomy.

Insurance Navigation. Navigating insurance systems poses a major barrier, as autism-specific benefits are often inadequately explained or supported. This lack of guidance leaves many individuals and families struggling to secure necessary coverage, further compounding the difficulties adults with autism face in managing their health and achieving independence.

Need for Caregiver Resources. While there are numerous guidelines and resources available to support caregivers, a study by the Council of Academic Family Medicine Educational Research Alliance (CERA)⁷⁰ identified a gap. Although most family medicine residency program directors felt confident in training residents to care for patients with autism, they reported notable challenges in preparing them for managing transitions of care. This underscores the need for improved support and training to help individuals with autism navigate life-stage transitions. Additionally, there is an opportunity to professionalize the caregiver role by expanding certification programs that can offer caregivers the training and recognition they need to provide more effective support.

Limited Integration of Technology Particularly in Reaching Underserved Populations.

While telehealth and digital mental health resources such as virtual therapy, mental health apps, and online support groups have proven to expand access, they are not sufficiently used in current practices. Additionally, there is a clear gap in the emphasis on alternative treatments in autism care. While traditional medical and behavioral interventions dominate, approaches such as dietary, art, and music therapy are given less attention, despite their potential benefits.

Long-Term Assistance. Furthermore, the guidelines fall short in providing long-term assistance to adults with autism and their caregivers, who often face significant stress and burnout. There is a lack of robust systems for continuous support, such as peer networks and respite care, leaving caregivers without adequate help. Many guidelines are also written in complex language and technical terms, making them difficult for non-professional caregivers and even some healthcare providers to interpret. For example, caregivers may struggle to understand medical terminology, which can hinder their ability to implement the recommendations effectively. Finally, while some guidelines acknowledge the involvement of interested parties such as local non-profit organizations, advocacy groups, and community leaders, they often fail to emphasize the vital role these groups play in shaping policies, advocating for resources, and delivering essential services for individuals with autism.

It is also important to note that not all individuals with autism receive services. Those who do access services typically experience better outcomes across most measures. This highlights the need to improve the availability and accessibility of services and support for all individuals with autism.

RECOMMENDATIONS

These gaps identified in global clinical guidelines and similar resources for autism present significant opportunities to enhance support for individuals with autism worldwide. To effectively address these gaps, there is a need to adopt holistic and innovative strategies that consider the diverse needs of all interested parties, including individuals with autism, their families, healthcare professionals, and community support networks. The following section outlines key opportunities aimed at improving autism care, with a focus on sharing more accessible, culturally sensitive, and effective support systems that truly meet the needs of the global autism community.

Gaps in Autism Care Guidelines and Similar Resources		Recommendations
Cultural and Environmental Considerations Gaps		
1	<p>Intersectionality and Cultural Bias in Autism Care Guidelines: Current autism care guidelines often fail to consider the intersectionality of factors such as race, socioeconomic status, and gender identity, as well as the cultural and regional differences that influence the lived experiences of individuals with autism. Many guidelines are based on research conducted in high-income Western countries, making them less relevant in low- and middle-income regions with different cultural, socioeconomic, and infrastructural contexts. This oversight hinders the development of comprehensive care strategies that are inclusive, equitable, and responsive to the diverse needs of individuals with autism across the globe.</p>	<p>Addressing Intersectionality and Cultural Bias through Global Communities of Practice (CoP) for Autism: The formation of Global Communities of Practice (CoPs) could significantly address the issue of intersectionality and cultural bias in autism care guidelines. By bringing together diverse stakeholders including caregivers, healthcare providers, individuals with autism, and their families from various cultural and regional backgrounds, CoPs could create a platform for sharing local knowledge and experiences. This collaborative exchange could help bridge the gap between Western-centric research and the needs of individuals with autism in low- and middle-income countries, where cultural, socioeconomic, and infrastructural factors may differ widely. Through CoPs, participants could document their unique care strategies, challenges, and successes, contributing to the development of more inclusive and culturally sensitive autism care guidelines. Moreover, CoPs could offer post-publication peer review on existing guidelines, helping to make them more relevant to diverse audiences by</p>

		incorporating input from a wide range of cultural, economic, and regional perspectives.
2	<p>Failure to Address Diverse Healthcare Environments and Audiences: Healthcare practitioners in rural, remote and indigenous community areas often face challenges in adapting urban-focused guidelines to align with local traditions, values, and limited resources. These guidelines are frequently developed with an urban context in mind, making them less applicable or practical in rural, remote and indigenous community areas. On the other hand, healthcare professionals in urban areas may lack specialized training in advanced care techniques that are necessary to meet the specific needs of individuals in their communities.</p>	<p>Localized Autism Care Guidelines and Training Programs: One potential solution could be to develop region-specific, culturally tailored care guidelines for people living with autism that take into account local traditions, resources, and infrastructure. These guidelines might be created through collaboration with healthcare practitioners, local leaders, and indigenous communities to ensure they are relevant and effective in those specific place-based solutions. Alongside these localized guidelines, specialized training programs could be introduced for healthcare providers in both urban and rural settings. These programs could address the unique needs of each population, offering urban practitioner techniques for providing care to diverse communities, while training remote and Indigenous healthcare providers on how to adapt general guidelines to fit their local contexts and available resources. This approach could help promote more equitable and effective care across diverse healthcare environments.</p> <p>Training programs could potentially be provided in both areas with and without internet access through a combination of in-person and offline methods. In regions with internet access, online courses, webinars, and virtual workshops might offer a flexible way for healthcare providers to access specialized content, learn at their own pace, and revisit resources as needed. In areas without reliable internet, using mobile training units that travel to local communities could be a good way to deliver in-person workshops, seminars, and hands-on demonstrations. Additionally, distributing</p>

		<p>printed materials like manuals and visual aids could support healthcare providers in implementing the best practices.</p>
3	<p>Overlooking the Use of Existing Resources for Early Detection and Care in Under-Resourced Areas: The guidelines often fail to address how to effectively leverage existing community resources to support early detection and care for autism in under-resourced areas.</p>	<p>Integrating Autism Screening into Existing Public Health Programs: A key solution for early autism detection in under-resourced areas could be integrating autism screening into existing public health programs, such as vaccination or maternal-child health visits, which would help reach a broader population and ensure early detection. This approach could reduce logistical barriers and promote routine screenings without requiring additional infrastructure. Additionally, training healthcare providers at these points of contact to recognize early signs of autism would enhance timely referrals for further evaluation and support. Furthermore, incorporating autism screening into routine check-ups could make the process more normalized and less intimidating for families, increasing overall participation rates.</p> <p>Training Non-Professional Caregivers: Training non-professional caregivers, especially parents, to recognize early signs of autism and implement basic interventions is crucial. This training can enhance early detection and intervention, particularly in areas with limited specialist access.</p> <p>In many countries, including the United States, long waits for diagnostic assessments often frustrate families and lead to missed early intervention opportunities. Implementing family coaching and peer support models can provide essential guidance and resources before and after formal assessments, helping to bridge the gap until professional interventions are available.</p>

		<p>Leveraging Information and Communication Technology (ICT): In places with internet connectivity ICT, such as mobile apps, telemedicine, and online platforms, can bridge the gap by offering cost-effective solutions for screening and ongoing support. For low-tech areas, SMS-based programs or phone consultations can still provide essential resources and guidance.</p> <p>Building Community-Based Support Networks: Creating community-based support networks can improve care for individuals with autism in under-resourced areas. These networks could enable caregivers to connect, share experiences, and exchange resources. Such peer-to-peer support fosters a sense of community and encourages the sharing of valuable strategies for managing autism. Additionally, these networks can be integrated into existing local services to ensure that families have access to ongoing support and guidance.</p>
4	<p>Complexity of Language and Terminology: Caregivers, especially those without a professional background, often find the medical language and technical terms used in existing guidelines difficult to understand and apply effectively, which can hinder their ability to provide optimal care.</p>	<p>Translation-Focused Multilingual Resource Platform: Creating a globally accessible platform that offers autism care guidelines in multiple languages could be an effective way to support caregivers from diverse linguistic and cultural backgrounds. The platform would focus on providing clear, culturally relevant language while preserving the accuracy of medical terminology. For terms that may be difficult to understand, the platform could incorporate clickable features, allowing caregivers to access simple definitions or explanations of complex medical terms. Additionally, the platform could use visual aids, infographics, and real-life examples to further clarify the guidelines. Localized translations would ensure the content is tailored to different</p>

		regions, accounting for cultural nuances and local practices.
Accessibility and Affordability Gaps		
1	<p>Lack of a Centralized Platform and Inconsistent Updates to Autism Guidelines: Caregivers and practitioners often struggle to access up-to-date autism care guidelines due to the absence of a centralized platform. This lack of centralized access, combined with irregular updates to guidelines, prevents the integration of the latest evidence-based practices, limiting the quality of care provided to individuals with autism.</p>	<p>Centralized Global Repository Platform for Autism Care: A global platform, created through collaboration between organizations like the WHO, national health agencies, academic institutions, and caregiving groups, could serve as a central resource for autism care. It could provide real-time updates on the latest research, treatments, and best practices. The platform could automatically notify caregivers and professionals about new strategies, such as effective treatments for co-occurring conditions in autism. By subscribing to the platform, caregivers and healthcare providers would stay informed about the most current approaches in autism care, ensuring they have access to up-to-date information and support.</p> <p>To enhance the platform's usability, it could be designed with a clear, intuitive structure that allows users to easily search and access relevant content. The platform could feature organized sections on guidelines, success stories, and best practices, with specific themes such as cultural sensitivity and the challenges of rural versus urban contexts. It could also facilitate collaboration by enabling users to exchange experiences, seek advice, and generate new ideas. The aim is to create a user-friendly, supportive space that encourages ongoing learning, fosters a sense of community, and drives continuous improvement in autism care.</p>

2	<p>Limited Affordability and Accessibility: Many autism care resources and guidelines are published in journals or on websites that require expensive membership or fees for access, making them unaffordable, especially in low- and middle-income countries. This limits access to essential resources for caregivers and practitioners who need them most, further exacerbating challenges in providing quality care due to the high costs.</p>	<p>Open-Access to Centralized Global Repository Platform for Autism Care: The proposed global platform could offer free or low-cost access to essential guidelines, addressing the challenges of affordability and accessibility in autism care. Funded by international organizations, governments, and key stakeholders, this platform would provide free access to a wide range of resources, including research, guidelines, training materials, and best practices, specifically designed for caregivers, healthcare providers, and practitioners. This would be particularly beneficial in underserved regions, such as low- and middle-income countries, where financial barriers often prevent access to critical care information. By removing the costs associated with memberships or subscriptions, the platform would ensure that essential autism care resources are available to all, promoting more equitable care worldwide. Collaborative support from global agencies and national governments would help drive this initiative forward, advancing access to high-quality care for individuals with autism.</p>
Communication and Support Gaps		
1	<p>De-Prioritization of Communication in Care: Communication strategies are often not prioritized in guidelines, despite being central to supporting individuals with autism. The focus is more on clinical treatment than communication needs. For example, many individuals with autism struggle with non-verbal communication, such as interpreting facial expressions and body language. This lack of understanding can lead to significant misunderstandings in social interactions.</p>	<p>Communication Support Tools and Training for Caregivers: Develop customizable, interactive communication toolkits and an adaptive curriculum for caregivers to address varying communication needs in individuals with autism. These toolkits could include visual aids, symbol boards, assistive apps, and methods for non-verbal or augmentative communication, allowing caregivers to personalize tools based on the individual's abilities. Complementing these tools, a globally accessible, adaptive curriculum could provide</p>

		<p>scenario-based training, videos, and role-playing exercises to help caregivers understand how to adjust communication strategies across different age groups and levels of autism severity, ensuring effective communication throughout the individual's life stages. Involving professionals such as speech therapists, occupational therapists, autism specialists, and people with autism themselves in the development and implementation of these tools could further enhance their effectiveness.</p>
2	<p>Overreliance on Caregiver Input: The guidelines rely too heavily on caregiver perspectives, which can overshadow the direct needs and experiences of individuals with autism themselves.</p>	<p>Person-Centered Communication Boards/ Apps for Better Expression of Needs: Person-centered communication boards or apps can be used to help individuals with autism express their daily choices, such as preferred activities, foods, or emotions, through visual symbols and pictures. Caregivers can guide individuals in using the board, allowing them to point to or select options that represent their needs. For example, a board might include images for activities like reading, going for a walk, or eating, enabling the individual to communicate their preferences without relying solely on the caregiver's interpretation.</p>
Trauma and Crisis Management Gaps		
1	<p>Lack of Trauma-Informed Care: There is insufficient focus on integrating trauma-informed care into autism support, leaving individuals vulnerable to emotional distress during healthcare encounters.</p>	<p>Trauma-Informed Autism Care Training Modules: Launch an accessible, global online training program for caregivers and healthcare professionals focused on trauma-informed care tailored for individuals with autism. The training would focus on understanding the unique ways trauma can impact individuals with autism, emphasizing the need to recognize behavioral cues associated with trauma. It would also incorporate cultural sensitivity to ensure care is respectful and effective across diverse communities. Key elements would</p>

		<p>include practical strategies for creating safe, supportive environments that facilitate healing and recovery, as well as techniques for building trust and fostering positive interactions. Offering this training globally would ensure a consistent and informed approach to autism care, helping caregivers and professionals to better address the complex needs of those with autism who have experienced trauma.</p>
2	<p>Risk of Re-Traumatization in Healthcare Settings: Due to communication barriers and a lack of trauma-informed care, individuals with autism are at risk of re-traumatization during medical visits, which further compounds their stress.</p>	<p>Sensory-Friendly Guidelines for Healthcare Facilities: To reduce the risk of re-traumatization for individuals with autism, developing a comprehensive set of global guidelines for healthcare facilities that focus on creating sensory-friendly environments is crucial. These guidelines should address key factors such as lighting, noise control, and visual stimulus to minimize sensory overload. Healthcare providers should also be trained to recognize common sensory triggers and implement strategies to mitigate their impact, such as using soft lighting, providing noise-canceling headphones, and offering quiet rooms. These measures could help ensure a safe and calming atmosphere for individuals with autism, reducing stress and promoting cooperation during medical visits.</p> <p>Predictable Healthcare Routine Guidelines: Healthcare facilities could implement guidelines that focus on maintaining consistent and predictable routines. These guidelines could recommend providing clear communication about medical appointments through visual or written schedules in advance. Additionally, reducing waiting times can significantly decrease anxiety and overwhelm, making the healthcare experience more manageable. Healthcare providers could be</p>

		<p>trained to ensure that each visit follows a structured routine, with minimal changes or surprises. This approach could help individuals with autism feel more in control of their healthcare experience.</p>
Sexuality and Psychological Well-Being Gaps		
1	<p>Lack of Sexual Health Guidance for Adults with Autism: There is limited guidance on sexual health for individuals with autism, on issues like sexual rights, consent, and intimacy, leaving these needs largely unaddressed.</p>	<p>Develop Global Sexual Health Education for Adults with Autism: To address the significant gap in sexual health guidance for adults with autism, it is crucial to develop accessible and comprehensive sexual health education programs tailored to their specific needs. These programs should cover essential topics such as consent, intimacy, sexual rights, and relationships, providing clear, easy-to-understand information. Given the diverse learning styles and communication needs of individuals with autism, the programs should incorporate visual aids, interactive tools, and social stories to ensure that the content is engaging and effective. Additionally, it is important to provide training for caregivers and healthcare providers to help them support individuals with autism in understanding and navigating sexual health matters. This training should equip professionals with the knowledge and skills needed to address these topics sensitively and appropriately, ensuring that individuals with autism receive the information and support they need to make informed decisions about their sexual health and relationships.</p> <p>Collaborative Workshops with Autism and Sexual Health Experts: Organizing collaborative workshops that bring together autism specialists, sexual health educators, and adults with autism could be a valuable way to</p>

		<p>address sexual health needs in an inclusive and informed manner. These workshops would create a space for experts from both fields to share their knowledge while involving individuals with autism in the development of the content. By including voices of individuals with autism, these workshops could cover a wide range of important topics, such as navigating romantic relationships, understanding personal boundaries, and accessing sexual health resources in a manner that is relatable and respectful. The interactive nature of these workshops might offer participants the opportunity to engage with the material, ask questions, and receive guidance tailored to their specific needs.</p>
2	<p>Overlooked Menstrual Health Needs for Women with Autism: Guidelines fail to address the specific menstrual health needs of women with autism, such as managing menstrual cycles and understanding the impact of puberty.</p>	<p>Develop Tailored Menstrual Health Education for Women with Autism: Creating specialized menstrual health education and support programs for women with autism could be a good way to address their unique needs and challenges related to menstruation. These resources might provide clear, accessible information on managing menstrual cycles, understanding the physical and emotional changes during puberty, and recognizing sensory sensitivities that may arise, such as discomfort with certain textures, smells, or sounds. The educational materials could be designed to accommodate different learning styles, incorporating visual aids, step-by-step guides, and social stories to make the information easier to understand and more relatable. Additionally, training for caregivers, healthcare providers, and educators might help ensure that they are equipped to offer appropriate support, such as recognizing signs of distress, providing coping strategies, and</p>

		fostering a supportive environment.
Holistic Autism Care Gaps Across Life Stages		
1	<p>Lack of Comprehensive Transition and Independence Support for Adults with Autism: There is a lack of comprehensive guidelines to support the transition from childhood to adulthood for individuals with autism, especially when compared to the well-established support systems available during earlier life stages. Additionally, there is limited guidance on fostering independence and supporting individuals with autism to live autonomously throughout adulthood, including navigating education, employment, and independent living. This lack of support also extends to aging, as individuals with autism may face additional challenges in adapting to the changing needs that come with aging.</p>	<p>Comprehensive, Individualized Transition Programs for Adults with Autism: The development of comprehensive, individualized transition programs aimed at supporting individuals with autism as they move from childhood to adulthood could be a good way to look at this gap. These programs might include practical life skills training in areas such as financial management, job readiness, social skills development, and self-care. Additionally, focusing on fostering independence by offering resources and guidance on accessing higher education, employment opportunities, and independent living arrangements could be beneficial. It is also essential to include specific support for aging individuals with autism, addressing their unique challenges and needs as they transition into later life stages, such as managing health concerns and accessing senior services.</p> <p>Collaboration Across Interested Parties to Personalize Support: Collaboration between families, individuals with autism, educators, healthcare professionals, and local communities could play a crucial role in ensuring that these programs are personalized to meet the unique needs of each individual. These support systems might be integrated into existing services or offered as standalone programs through schools, healthcare providers, and government agencies, depending on the resources available.</p>

		<p>Creation of National and Regional Care Guidelines for Adults with Autism: Creating national and regional guidelines specifically addressing adults with autism could be a helpful way to ensure consistency in services across communities. Policy changes and financial support from governments could fund the aforementioned programs, helping adults with autism, including aging individuals, gain the tools and resources they need to lead fulfilling and independent lives.</p>
2	<p>Inadequate Long-Term Support for Caregivers During Life Transitions: The guidelines for caregivers often overlook the unique challenges faced during key life transitions, such as the shift from childhood to adulthood or the transition between healthcare settings. These transitions can be particularly stressful for caregivers, as they often involve changes in the type and intensity of care required.</p>	<p>Transition Roadmap for Caregivers: Develop a Transition Roadmap for caregivers that provides a step-by-step guide for managing key life transitions, such as moving from childhood to adulthood or switching healthcare providers. This roadmap would offer tailored checklists, practical tips, and a resource hub for caregivers, guiding them on healthcare coordination to emotional well-being during these challenging times. Alongside the roadmap, create peer mentorship programs where caregivers who have navigated similar transitions can offer advice and emotional support, ensuring that no caregiver feels alone during these critical periods.</p>
3	<p>Neglect of Alternative Treatments in Autism Care: The focus on traditional medical and behavioral treatments often ignores the potential benefits of alternative treatments, such as art, music, and dietary therapies.</p>	<p>Incorporating Alternative Therapies in Autism Care: Practitioners can be encouraged to include alternative therapies, such as art, music, and dietary treatments, alongside traditional methods in care plans. This can be done by offering training programs that teach the benefits of these therapies and how to integrate them into existing treatment plans. These programs should be based on research to ensure they are effective, and when successful, could become part of standard care for</p>

		individuals with autism.
Barriers Addressable Through Policy Initiatives		
1	<p>Lack of Awareness and Stigma Surrounding Autism: In many low- and middle-income countries and several communities, there is a significant lack of awareness and limited initiatives focused on autism. This lack of understanding often leads to delays in diagnosis and inadequate support for individuals with autism. Additionally, the stigma surrounding autism in these regions can exacerbate challenges, leading to social exclusion, discrimination, and a lack of appropriate care.</p>	<p>Promoting Autism Awareness and Inclusion Through Government Action: Governments can raise awareness and provide support for autism through nationwide campaigns that educate the public on recognizing its signs, the importance of early diagnosis, and the benefits of early intervention. These campaigns, using media, schools, and community organizations, can help foster a better understanding and acceptance of autism. Additionally, policies can be introduced to train healthcare professionals, educators, and social workers to effectively identify and support individuals with autism. Implementing autism-friendly policies in schools, workplaces, and public spaces can promote inclusion and reduce discrimination. To help reduce stigma, governments can launch innovative initiatives that focus on correcting misconceptions about autism and emphasizing its true nature, as an aspect of human diversity.</p> <p>Support for Local Organizations: Governments can support local organizations by providing grants, funding, or tax incentives to help them offer autism-related services, such as early intervention programs, therapy, and support groups. Additionally, by partnering with private companies, governments can encourage the development of autism-friendly services and products through financial incentives like subsidies or tax breaks. Governments can also incentivize companies to offer jobs, internships, and mentorship programs for people on the autism spectrum, helping to integrate them into the workforce and to build a more inclusive job market.</p>

2	<p>Limited Availability and Analysis of Public Health Data Related to Autism: In many countries and various communities, there is a significant lack of comprehensive data on autism, which creates a gap in understanding the prevalence, characteristics, and needs of individuals with autism. This deficiency hinders the development of effective policies and interventions designed to support individuals with autism and their families.</p>	<p>Collaborative Solutions for Enhancing Autism Data Collection:</p> <p>To address the limited availability and analysis of public health data related to autism, a collaborative approach involving multiple interested parties could be essential.</p> <p>Government agencies, such as health ministries and departments responsible for public health and disability services, could lead initiatives to increase funding for autism research and data collection. Non-profit organizations focused on autism awareness and support services could partner with these agencies to advocate for resources and raise awareness about the importance of comprehensive data.</p> <p>Academic institutions with expertise in psychology, public health, and special education could contribute by developing standardized data collection methods and conducting research to better understand autism in diverse communities. Healthcare providers, including pediatricians, psychologists, and speech therapists, could share their clinical insights to inform data collection efforts.</p> <p>Additionally, community organizations and local support groups could engage families and individuals with autism, ensuring their voices are heard in the data collection process.</p>
---	--	---

3	<p>Lack of Trained Professionals: A shortage of trained professionals in autism care almost worldwide limits the support available for individuals on the spectrum</p>	<p>Scholarships and Career Development Incentives: Incentivizing young adults to enter direct care and healthcare professions is crucial for building a strong and dedicated workforce in autism care. Governments can create targeted scholarships and financial incentives to encourage individuals to pursue careers in this field. For example, offering partial tuition reimbursement or covering the cost of specialized certifications for educators and healthcare providers would help reduce financial barriers to entry. Additionally, establishing career ladders, where individuals can advance from entry-level positions to more specialized roles, can ensure long-term professional growth and retention, making autism care a more attractive and sustainable career choice.</p> <p>University and Service Organizations Partnerships: Governments can foster collaborations between universities and autism care provider organizations to develop specialized academic programs. For example, universities could offer undergraduate or graduate degrees focused on autism, while autism care provider organizations could offer internships or hands-on training opportunities. These partnerships could ensure that students are well-prepared with the knowledge and practical experience needed to meet the demand for autism professionals and create a pipeline of skilled workforce.</p> <p>In-House Training and Mentorship for Workforce Development: Governments can support autism care provider organizations in strengthening their workforce by providing tax breaks or grants for in-house training programs. These programs would focus</p>
---	---	--

	<p>on equipping direct care staff, and therapists, with the latest evidence-based practices in autism care. Additionally, structured mentorship programs can pair experienced professionals with new hires, enabling knowledge transfer, skill development, and long-term retention.</p> <p>Grant Funding for Interdisciplinary, Collaborative Care Models: To improve the effectiveness of autism care, governments can provide grant funding for training programs that promote interdisciplinary collaboration among healthcare professionals. This initiative would equip pediatricians, psychologists, speech therapists, occupational therapists, social workers, and others with the skills to work together as a cohesive team. By encouraging a coordinated approach, professionals can develop comprehensive care plans, and deliver holistic, patient-centered care that addresses the diverse needs of individuals with autism and their families.</p> <p>Enhancing the Authority of Healthcare Professionals: Giving greater autonomy to healthcare professionals, such as nurses and physician assistants, can improve access to autism care, especially in underserved areas. By implementing policy changes that enable them to diagnose, prescribe treatments, and manage care plans with less physician oversight, can make the service more efficient and responsive. However, it is essential to provide specialized training in autism care to ensure these professionals are well-prepared to address the complex needs of individuals and families.</p> <p>Training for Non-Professional Caregivers: Governments can support non-professional</p>
--	---

		<p>caregivers by providing accessible, affordable training programs focused on autism care. These programs could cover communication strategies, behavior management, and understanding autism. Offering online courses and community workshops can help caregivers improve their skills and access support, especially in underserved areas.</p>
4	<p>Funding Gaps and Limited Resources for the Autism Field and Adults with Autism: There is a significant gap in resources and funding within the autism field which limits the ability to attract and retain professionals and paraprofessionals. For adults with autism, this shortage is further compounded by limited access to specialized programs, employment opportunities, and support services. This shortage makes it difficult for adults on the spectrum to face significant challenges in living independently and fully participating in their communities.</p>	<p>Addressing the Resource and Funding Gap in Autism Care: Governments can increase investment in autism-related services by allocating more financial resources to training programs, professional development, and research. They could also offer incentives, such as grants or tax benefits, to encourage professionals and paraprofessionals to enter the autism care field and stay in it, long-term. Additionally, governments can create partnerships with educational institutions to offer specialized courses and certifications for autism care professionals, as well as provide subsidies for organizations that offer autism support services.</p> <p>Develop Tailored Support Programs for Adults with Autism: Governments could develop dedicated programs and resources specifically for supporting adults with autism in areas such as employment, community integration, and independent living. These programs could include job training, placement services, mentorship opportunities, and accessible community centers that foster social engagement and inclusivity. It is equally important to ensure that these programs are effectively marketed and made widely known to individuals with autism and their families. Additionally, creating a supportive environment that helps individuals navigate and apply for</p>

	<p>these resources is crucial. Policies should also encourage the development of housing options and support services that enable adults with autism to live independently</p> <p>Leverage Public-Private Partnerships: Governments can partner with private companies, non-profits, and local organizations to share the financial responsibility of funding autism-related programs for example, governments can offer small grants or tax incentives to businesses that develop autism-friendly services, such as employment training or social integration programs. In exchange, businesses can contribute resources or services, making the program cost-effective without relying entirely on public funds.</p> <p>Expand Existing Programs with Targeted Funding: Rather than developing new or costly programs, governments can optimize existing resources by reallocating current budgets to enhance services for adults with autism within existing frameworks. For instance, local employment services or mental health programs can be adjusted to better accommodate the specific needs of individuals with autism, requiring only minimal additional funding. This could involve incorporating autism-specific training for staff members so they can better recognize and support adults with autism in these settings.</p>
--	--

5	<p>Limited Involvement of All Interested Parties in Autism Policy Development:</p> <p>There is a significant gap in integrating and co-designing autism care models and policies with input from individuals with autism, their families, and interested parties. Non-profits, advocacy groups, local organizations, and other relevant parties are often underrepresented in shaping the policies and practices that directly affect the autism community. By excluding these voices, policies may lack critical insights and fail to address the real, lived experiences of those impacted by autism.</p>	<p>Establishing Inclusive Policy Development Platforms: Policymakers could create advisory boards or platforms that actively involve representatives from non-profits, advocacy groups, and community organizations, as well as individuals with autism, their families, and caregivers. These platforms could work by bringing together diverse voices in regular consultations, ensuring that all interested parties have a direct role in co-creating policy decisions. Through structured discussions, feedback sessions, and collaborative workshops, these platforms could help identify the specific needs and challenges of the autism community, ensuring policies are responsive and relevant. This approach not only ensures the inclusion of lived experiences but also fosters the creation of more effective, person-centered national autism care policies that reflect the real-world needs of individuals with autism, and their families.</p> <p>Global Adaptation and Implementation: To take this model globally, policymakers could establish international networks of advisory platforms that facilitate cross-border collaboration. By sharing best practices, research, and case studies from different countries, these global platforms could help identify common challenges faced by the autism community worldwide and encourage the adoption of inclusive, culturally sensitive policies. These networks could also work to ensure that autism care policies are adaptable to various local contexts, taking into account regional differences, cultural perspectives, and specific community needs.</p> <p>Foster Psychological Safety: These platforms could establish clear ground rules that promote</p>
---	--	--

		respect, active listening, and empathy, ensuring everyone feels valued. Additionally, providing anonymous feedback channels and trained facilitators can help create an environment where individuals are free to share their perspectives without fear of judgment or retaliation.
Gaps in Guidelines Addressable Through Policy Initiatives		
1	<p>Lack of a Centralized Platform for Resources: There is no centralized, easily accessible platform to gather autism care guidelines and resources, making it difficult for caregivers and professionals to find the information they need efficiently.</p>	<p>Global Centralized Platform for Autism Care Resources: Policymakers can support the development of a centralized platform by enacting policies that require government agencies or public health organizations to collaborate with experts in autism care, technology developers, and non-profit organizations. They can allocate funds to build and maintain this platform and ensure its content is inclusive and regularly updated. Policymakers can also ensure that the platform is easily accessible to caregivers, healthcare providers, and educators by integrating it into existing healthcare and education systems, making it a trusted and reliable resource.</p>
2	<p>Limited Affordability and Accessibility: Many autism care resources and guidelines are not affordable, particularly in low- and middle-income countries, where access to essential resources is often restricted due to high costs.</p>	<p>Enhancing Access to Autism Care Resources through Policy Initiatives: Policymakers can create initiatives to make autism care resources more accessible by partnering with global organizations and research institutions to provide free or low-cost access to essential guidelines and research. This could include developing open-access platforms, offering government-funded subscriptions for key resources, or collaborating with international health organizations to provide localized, cost-effective training and materials for autism care.</p>

3	<p>Poor Connection to Community-Based Resources: There is insufficient linkage between individuals with autism, their families, and local community support networks, limiting access to vital services such as employment opportunities, recreational activities, and community-based care.</p>	<p>Community Resource Mapping and Development: Policymakers should first map existing community resources for individuals with autism, such as job programs, recreation opportunities, and mental health services. If existing services are inadequate or unavailable, new programs can be developed, such as vocational training, inclusive recreational facilities, or expanded mental health support. By working with local governments, non-profits, and private organizations, policymakers can fund and create these services to ensure families and caregivers have better access to the support they need.</p>
4	<p>Difficulty Navigating Funding Systems: Families often struggle to navigate complex funding processes to access necessary services, such as therapy, respite care, and specialized education programs, due to the complexity of existing systems.</p>	<p>Improve Access to Funding for Autism-Related Services: Policymakers can push for increased funding for autism-related services and ensure that financial support is easily accessible through government programs. They can also create a centralized platform that allows families and organizations to quickly find and apply for available funding, reducing the complexity and delays associated with the current application process.</p>
5	<p>Practical Challenges in Implementation: The guidelines do not adequately address the practical barriers such as forming partnerships and finding trained professionals to provide care.</p>	<p>Building Strong Partnerships and Attracting Trained Caregivers: Policymakers can help address the shortage of trained professionals by creating partnerships between governments, healthcare organizations, and the private sector. They can support training programs by offering funding for schools to develop caregiving courses or partnering with online platforms for easier access to training. To attract more people into caregiving, governments can offer higher pay, financial incentives, and job opportunities.</p>

6	<p>Lack of Autism-Specific Insurance Resources: Autism care guidelines lack comprehensive information on navigating insurance resources and benefits, leaving families and individuals with autism struggling to access necessary support.</p>	<p>Supporting Autism Insurance Coverage in Countries with Insurance Systems: In countries with insurance systems, policymakers can collaborate with international organizations like the WHO to develop guidelines that encourage the inclusion of autism services such as therapy, education, and support within insurance coverage. These guidelines would allow flexibility for each country to tailor policies to their healthcare system, ensuring that people with autism have access to the care they need while accounting for local conditions. To ensure awareness, policymakers can promote these guidelines through national healthcare channels, community organizations, and partnerships with autism advocacy groups to reach individuals with autism and their families.</p>
7	<p>Limited Peer Networks and Respite Care for Caregivers: There is a lack of structured peer networks and respite care options for caregivers, which are crucial for preventing caregiver burnout and stress.</p>	<p>Caregiver Support Network & Respite Hub: Policymakers could create a Caregiver Support Network & Respite Hub, a national digital platform designed to connect caregivers with both peer support groups and local respite care services. This platform would allow caregivers to access online peer groups for emotional support, as well as book respite care sessions tailored to their specific needs. To ensure its effectiveness, policymakers could partner with local governments and healthcare providers to subsidize the cost of respite care and offer incentives for caregivers to join support groups. The platform would also include educational resources, training opportunities, and a directory of trained professionals to assist caregivers in their daily tasks.</p>

8	<p>Limited Integration of Technology in Autism Care: Although digital resources like telehealth and virtual therapies have proven effective, they are underutilized, especially in underserved communities, limiting access to innovative care solutions.</p>	<p>Drive Technological Innovation in Autism Caregiving: Policymakers can help by prioritizing and funding research and development of technology specifically tailored to the needs of individuals with autism. This could include grants or incentives for tech companies to create assistive devices, telehealth solutions, and virtual platforms that enhance caregiving practices. Additionally, policymakers can facilitate collaborations between technology developers, healthcare providers, and caregiving organizations to ensure these tools are effective, accessible, and user-friendly.</p>
---	--	--

DISCUSSION

The gaps identified in the global clinical guidelines and similar resources for autism represent critical challenges that impact the quality of care and support for individuals with autism worldwide. Of the various gaps discussed, those related to intersectionality, healthcare environments, resource utilization, accessibility, communication, training, and awareness are particularly pressing when viewed from a global perspective. Addressing these gaps is not only essential for enhancing care for individuals with autism, but also for ensuring that support systems are equitable, inclusive, and culturally appropriate.

The intersectionality of factors such as race, socioeconomic status, and gender identity, along with the cultural and regional differences that influence autism care, are pivotal gaps. Many existing guidelines are based on research conducted in high-income, Western countries, where the socioeconomic, cultural, and healthcare contexts are vastly different from those in low- and middle-income regions. In these under-resourced areas, individuals with autism face additional challenges, including limited access to healthcare, cultural stigma, and social exclusion. By neglecting these intersectional factors, current guidelines risk perpetuating a one-size-fits-all approach, which may fail to address the diverse needs of individuals across different global contexts. If these gaps were addressed, the resulting care strategies could be more inclusive and effective, ensuring that all individuals with autism, regardless of their background or location, receive appropriate and tailored support.

The failure to address diverse healthcare environments is a critical gap. Remote and indigenous areas, where healthcare resources are usually more limited, struggle to adapt urban-focused guidelines to meet local needs. In these regions, healthcare professionals may lack the training, resources, and infrastructure to implement specialized care techniques effectively. Conversely, urban areas may face challenges in accessing advanced autism care due to a lack of specialized expertise. To bridge this gap, guidelines must be developed that are adaptable to both rural and urban settings, taking into account the unique challenges and available resources in each. This includes leveraging local health workers, community-based services, and existing infrastructure to create contextually relevant solutions. Furthermore, it is essential to invest in the training of non-traditional, community-based support systems, such as local health workers, teachers, and community leaders, to better meet the needs of individuals with autism. These community-based professionals can play a crucial role in delivering accessible, culturally appropriate care, ensuring that support is available regardless of geographic location or resource availability.

In addition to these systemic gaps, the lack of affordability and accessibility of autism care guidelines, often confined to expensive journals or subscription-based platforms, creates an additional barrier for caregivers and practitioners in low- and middle-income countries. This financial barrier limits access to essential resources and leaves caregivers without the tools they need to provide adequate support. Addressing this gap by making guidelines more widely accessible, perhaps through open-source platforms or subsidized access, could significantly

enhance the quality of care and support available to families in economically disadvantaged areas.

The de-prioritization of communication strategies in autism care is another critical issue. Communication is at the heart of supporting individuals with autism, yet it is often overshadowed by a focus on clinical treatments. This may fail to address the true needs of individuals with autism and lead to misaligned support. Therefore, putting greater emphasis on developing effective communication strategies that cater to the diverse needs of individuals on the autism spectrum could result in more person-centered care and ensure that interventions are responsive and tailored to everyone's unique communication style.

Equally important is the lack of trauma-informed care in autism support. Individuals with autism are particularly vulnerable to emotional distress in healthcare settings, especially when communication barriers exist. Inadequate trauma-informed care could lead to re-traumatization, compounding the difficulties these individuals already face. This issue is even more pronounced in under-resourced areas, where healthcare providers often have limited or no training in trauma-informed care. In such settings, the absence of proper training can result in unintentional harm, further increasing stress and anxiety for individuals with autism. By integrating trauma-informed practices into existing guidelines, particularly in under-resourced regions, healthcare providers could be better equipped to offer compassionate, supportive care that minimizes stress and enhances the overall healthcare experience for individuals with autism.

Furthermore, the lack of comprehensive transition and independence support for adults with autism is a pressing issue that demands urgent attention. Transitioning from childhood to adulthood is a particularly challenging process for individuals with autism, and their families. As individuals with autism grow older, families often struggle with the increasing demands of care, especially as parents and caregivers themselves age and may have limited resources. With inadequate guidance on navigating education, employment, and independent living, individuals with autism are at risk of facing significant barriers to reaching their full potential.

The lack of awareness and stigma surrounding autism in many regions perpetuates delays in diagnosis and inadequate support. This stigma often leads to social exclusion and discrimination, making it even harder for individuals with autism to access the care they need. By addressing these issues through public awareness campaigns and community education, we could help reduce stigma and ensure that individuals with autism receive the recognition and care they deserve. Finally, there is a significant funding gap in the autism field, which needs to be addressed to attract more professionals and paraprofessionals. Increased funding would allow for better salaries, improved training programs, and stronger career incentives.

Hence, tackling these issues as priorities could not only improve the quality of care but also reduce disparities in autism support worldwide, ultimately leading to better outcomes for individuals on the autism spectrum, and their families.

CONCLUSION

This paper provides a comprehensive examination of global clinical guidelines for the care of individuals with autism, identifying key gaps and highlighting opportunities for improvement. Through an in-depth literature review, the paper explores core areas addressed by existing guidelines and points out the critical gaps they face in fully meeting the diverse needs of individuals with autism. These gaps mainly include the neglect of intersectionality, the lack of culturally sensitive care, insufficient integration of trauma-informed practices, and the limited focus on communication strategies.

By analyzing these gaps, this paper aims to emphasize the importance of developing more inclusive, accessible, and person-centered care models. It stresses the need for guidelines that are adaptable to various healthcare environments, particularly in under-resourced regions, and that prioritize the voices of individuals with autism themselves. Furthermore, the paper highlights the need for greater collaboration among healthcare professionals, caregivers, and community networks to bridge these gaps and create support systems that are not only effective, but also equitable and culturally appropriate.

In addition to addressing the gaps in clinical care, this paper also emphasizes the crucial role that policy interventions can play in overcoming systemic barriers faced by individuals with autism. Policies aimed at increasing awareness, reducing stigma, and securing better funding for autism services are vital for improving care and support systems. The paper also highlights the need for policies that ensure adequate training for healthcare professionals, promote the inclusion of interested parties in policy development, and increase resources for adults with autism, including employment opportunities and support services.

Ultimately, this paper aims to contribute to a global shift toward better autism care by advocating for more comprehensive and responsive clinical guidelines and policy interventions. Through these efforts, we aim to move closer to achieving a future where individuals with autism receive the holistic, compassionate, and effective care they deserve.

BIOS of AUTHORS

Sailaja Musunuri, MD, Executive Vice President of Integrative Medicine and Chief of Psychiatry is an accomplished physician, psychiatrist, and leader with over 20 years of experience in clinical practice, specializing in the care of children and adults with intellectual disabilities, autism, co-occurring psychiatric disorders, and other complex medical conditions. She currently serves as the Executive Vice President of Integrative Medicine and Chief of Psychiatry at Woods System of Care, where she is recognized for her exceptional leadership, innovative thinking, and ability to deliver results across diverse clinical settings. Double board-certified in both Adult and Child & Adolescent Psychiatry, Dr. Musunuri is known for her compassionate, high-quality care and her ability to think creatively, challenging conventional approaches to healthcare. Her leadership extends beyond clinical practice to include fostering key collaborations with nonprofit health organizations and pharmaceutical leaders, focusing on improving services and outcomes for individuals with intellectual disabilities. She has played a pivotal role in building trust and driving mission-critical initiatives within her organization. Dr. Musunuri is also the founder of the Mollie Woods Hare Center for Excellence in Neurodivergence – Intellectual Disability, Autism, and Mental Health, which serves as the training and dissemination hub for best practices in the field. In addition, she is an active Board Member of The Network: Toward Unity for Health (TUFH), a global non-state actor aligned with the World Health Organization. TUFH works to foster equitable, community-oriented health services and research globally, and Dr. Musunuri's involvement further underscores her commitment to enhancing healthcare access for vulnerable populations. With her unique combination of clinical expertise, leadership, and global partnerships, Dr. Musunuri continues to drive forward the strategic goals of Woods System of Care, ensuring that individuals with disabilities receive the highest quality of care and support. Her connections across the U.S. and India are instrumental in developing new programs and partnerships aimed at improving services for people with disabilities in both regions.

Tine Hansen-Turton, MGA, JD, FCPP, FAAN, is the President and CEO of Woods System of Care and Woods Resources, a population health management organization providing comprehensive life-cycle care for individuals with intellectual disabilities and autism (ID/A), acquired brain injuries, and/or mental health challenges, as well as complex medical and genetic conditions. In her capacity as President and CEO, she oversees more than 200 programs and 7,500 staff that serve more than 52,000 individuals. With 30 years of experience in healthcare and human services, Hansen-Turton has held senior executive roles as CEO, CSO, and COO in nonprofit, private, and government organizations. She has founded and led nationally recognized health and human services associations and secured multi-billion-dollar contracts. Hansen-Turton is known for her expertise in primary and behavioral healthcare, health and human services administration, disabilities and behavioral health, public health, and education. Throughout her career, she has developed innovative healthcare programs and business models, including integrated primary and behavioral healthcare specialty clinics, nurse-led care centers, and life-cycle care management organizations. She is also the founding Executive Director of the Convenient Care Association (CCA), which supports the growth of the retail clinic industry, serving millions of people across the country. Additionally, Hansen-Turton has played a pivotal

role in elevating nurse practitioners as primary healthcare providers globally. She served as CEO of the national nurse-led Care Consortium, supporting over 500 nurse-managed and school health clinics, and has co-published 10 books. She currently teaches public and social innovations, nonprofit leadership, health policy, and social innovation at the University of Pennsylvania Fels Institute of Government and the School of Nursing. Hansen-Turton holds a Juris Doctor from Temple University Beasley School of Law, a Master of Government/Public Administration from the University of Pennsylvania Fels Institute of Government, and a BA from Slippery Rock University. She also studied at the University of Copenhagen Law School.

Lisa Graves MD, CCFP (AM), FCFP, MCISc, is a family physician and Professor Family and Community Medicine at Western Michigan University Homer Stryker M.D. School of Medicine. One of her research interests is disability in medical education.

Elizabeth Hayden, MPH, MS.Ed serves as the Vice President of Strategy Development at Woods System of Care, where she provides strategic guidance in program and partnership development. In this role, she leads a strategy development team dedicated to supporting organizational growth, quality, and thought leadership. Elizabeth is instrumental in identifying opportunities for collaboration, leading responses to funding opportunities, and writing proposals, concept papers, and policy briefs. With over 25 years of experience in project management, program development, and management across public health, healthcare, education, and social services, Elizabeth brings a wealth of expertise to her role. Her broad background enables her to drive strategic initiatives that enhance the impact and reach of Woods System of Care. Elizabeth holds a Master's in Public Health from Drexel University, a Master's in TESOL (Teaching English to Speakers of Other Languages) from the University of Pennsylvania, and a Bachelor's in Germanic Languages and Literatures from the University of Pennsylvania.

Andrew Kind-Rubin, PhD. is a licensed clinical psychologist and certified school psychologist who has worked in the field of child and family mental health for over 30 years. Dr. Kind-Rubin has worked in a variety of settings including outpatient clinics, inpatient hospitals, partial hospital programs, schools, and private practice settings. Over the past 25 years he has been the Chief Clinical Officer and VP of Clinical Services at Child Guidance Resource Centers, a private, non-profit behavioral health setting for children, adolescents and families that offers a wide variety of services in Delaware, Chester, Philadelphia and Montgomery Counties. He retired from this position in July 2022 but then returned in 2023 to work within the Professional Development Center. He has a particular interest in community psychology and the implementation of evidence-based models of practice (EBP) within natural environments. Towards this end, Dr. Kind-Rubin serves or served on a variety of state and county committees including the Youth and Family Training Institute Advisory Board, the State SOC Evaluation Subcommittee, and the SOC State Leadership team. Related to EBP's, he is a certified MHFA and Y-MHFA trainer, a certified trainer in the Olweus Bullying Prevention Program, and a certified trainer in the implementation of Resiliency principles. Additionally, he has been instrumental in bringing such evidence-based practices as Multisystemic Therapy, The Incredible Years, Strengthening Families, and Trauma-Focused Cognitive Behavior Therapy to southeastern Pennsylvania.

Teresa Naseba Marsh, Ph.D, MA, RN, RP, SEP, is a Psychotherapist, Healer, Author, Yoga and Meditation Teacher. She is an Assistant Professor, Clinical Sciences, Northern Ontario School of Medicine, Laurentian and Lakehead Universities. Teresa Naseba Marsh immigrated to Canada from South Africa in 1992 and continued to contribute to Healing approaches to overcome suffering, trauma, addiction, historical trauma, and the aftermath of oppression. In her books, *Enlightenment is Letting Go! Healing from Trauma, Addiction and Multiple Loss* and the recently released, *The Courage of a Nation; Healing from Intergenerational Trauma, Addiction and Multiple Loss*, Teresa continues her dedication to this field by teaching people how to heal through participatory action, ancient spiritual methods, poetry and the telling of stories. Teresa's work is grounded in treating humanity holistically and embracing social accountability. Her recent work over the last 25 years in Vancouver and the North continues to expose her passion, dedication and compassion to this work. She is an inspiration to health care.

Mary Consolata Ishepe Nandili, Ph.D, MPH, Bsc, L&M Harvard, RN is a widely experienced consultant and is currently consulting for Ready Care Staffing Africa starting Schools of Nursing in African Countries. Ready Care is a training institution affiliated with Minnesota University in the USA. Mary is responsible for ensuring the School of Nursing is established and is producing credible Nurses for export to developed countries. She possesses a Doctorate Degree in Public Health; a Master of Public Health and Epidemiology degree; a Project Planning and Management degree, and a Leadership certificate from Harvard University. Mary has worked for the Health Ministry in different capacities for over 25 years. She has played an instrumental role as chief adviser to the government on Nursing Midwifery matters, formulating policies and monitoring the implementation of the said policies and strategies. She has consulted for WHO, UNICEF, and UNDP among other UN agencies reviewing and developing respective country policies and documents; evaluating the Expanded Programme on Immunization (EPI), and monitoring HIV and TB programs. Her global experience has given her an appreciation for the value of diversity in thought and opinion to apply in making credible decisions. Mary has had satisfactory experience working in Asia and Africa on health-related projects. Mary has had adequate experience working in extremely rural areas and with vulnerable populations. She worked as a volunteer under a relief program to support the population in arid and semi-arid areas of Kenya where health facilities do not exist. Through some Non-Governmental Organizations (NGOs), she has participated in the distribution of food relief and simple medicines to pregnant and lactating mothers, alongside assessing mothers and children who are underweight and not immunized. Mary has been a member of various local and international councils and Boards; a member of the Ministerial Human Resource Management Advisory Committee, a decision-making organ for the Ministry of Health; Board Director of the Kenya Medical Training college; Member of School Boards; Member of the International Union Against TB and Lung Disease; Member of the Association of Women Health Obstetric and Neonatal Nursing; Member of the Nursing Council of Kenya; Board Director of Female Genital Mutilation for Girl Child and Member of the International Nursing Council. With her remarkable effort, Mary has received several awards and certificates of participation and recognition from various institutions both locally and at the international level. She has published scientific papers in the *Africa Journal of Health Sciences*. She has continued voluntarily reviewing manuscripts and theses for students studying at various universities beyond Kenya's borders.

Pankaj B. Shah, Associate Dean Research, Professor Community Medicine, SRMC & RI, SRIHER, Chennai, India. He completed his HOD tenure of more than 7 years. He is an MD, PhD in Community Medicine and completed the National Medical Commission Advance course in medical education and international FAIMER Fellowship at GSMC, Mumbai. He is part of various committees of NMC, ICMR, and Cochrane Systematic Review conferences. He has many international and national publications and awarded grants from WHO, ICMR, AIIMS Delhi, and SPARC Govt of India.

Janet Somlyay, DNP, CPNP-AC/PC, PMHS, PMHNP-BC, is a Nursing Lecturer faculty at Rider University, Department of Health Sciences and Nursing, Lawrenceville, NJ. She is board-certified as a pediatric nurse practitioner, pediatric mental health specialist, and psychiatric nurse practitioner. She has a Doctor of Nursing Practice in child family psychiatric mental health nurse practitioner from Arizona State University, post-Master's certificate from the University of Wyoming, Masters of Science in Perinatal Nursing from the University of Utah, and a pediatric nurse practitioner degree from the US Air Force School of HealthCare Science in Texas.

Scott Spreat, EdD serves as the Vice President of Evaluation and Research at Woods System of Care, where he leads the Woods National Research and Evaluation Center. The Center is dedicated to promoting and conducting policy-related research, both independently and in collaboration with other research organizations. In addition to conducting research, the Center's mission is to inform decision-makers who influence policy and legislation impacting the individuals served by Woods System of Care. In recent years, Dr. Spreat has also served as the Research Director for the Center for Disability Information, where his research focused on workforce challenges within the intellectual disability sector. He was a member of the American Association on Intellectual and Developmental Disabilities (AAIDD) Terminology and Classification Task Force, contributing to the development of the definition of Intellectual Disability. Dr. Spreat holds a doctorate in Educational Psychology and is a licensed psychologist. He previously worked at Temple University's Woodhaven Center, where he conducted research, directed the clinical services department, and served as the Executive Director of the 284-bed program.

Nicholas Torres, MEd, has over 20 years of experience in executive management. Nicholas serves as the Executive Director of The Network: Towards Unity for Health (TUFH) an official non state actor of WHO. He is also Co-Founder and CEO of Social Innovations Partners which publishes the *Social Innovations Journal*, manages the Social Innovations Institute & Lab, and incubates and launches high impact social sector models and enterprises. He teaches Nonprofit Leadership, Social Policy, and Social Entrepreneurship at the University of Pennsylvania. He serves on many regional boards including the Free Library of Philadelphia and Springboard Health National Advisory Board. Nicholas works at the cross-section between the private sector, government, and not-for-profits and aligns them toward collective social impact goals and public policy. He has led and founded multiple for-profit and not-for-profit social ventures that are driven both by social impact and financial sustainability measures. Some of his launched social ventures include charter schools, an early literacy technology platform; school-based health centers; and community-based satellite college sites.

Susan Waller is an experienced professional educator, researcher and curriculum designer. Susan has designed and facilitated courses and workshops across Australia and internationally on interprofessional education and clinical supervision. Susan led the regional nursing and allied health clinical education program for Monash University from 2014–2020, and from 2014–2017 managed and evaluated a large government-funded simulation program in hospital and community health centers. From 2016–2020, Susan worked with colleagues at Monash University to facilitate and evaluate clinical supervision training across Victoria. Presently appointed as an Adjunct Senior Research Fellow, Susan continues to participate in a longitudinal multi-university graduate tracking outcome study. Susan supervised and examined theses on the Master of Surgical Education course at the University of Melbourne from 2017–2020. Susan completed the Harvard Macy courses on Health Professions Education (2007), on Leadership and Innovation in Education and on Assessment (2019). Susan's PhD, awarded by the University of Queensland in 2010, was in Interprofessional Clinical Education. In the past decade, Susan has contributed to 24 peer'-reviewed papers, four government reports and two book chapters. She has been a member of academic teams which have attracted just under 2 million dollars in grant support. Susan's clinical background is in paediatric physiotherapy. Graduating in 1981, Susan completed her Master of Paediatric Physiotherapy at the University of Queensland in 2003. Susan was the Senior Physiotherapist at a statewide disability service and supervised over 60 allied health professionals as a member of the Practice Support Team. Susan has been a member of the Human Research Ethics Committee of CPL since 2010. Dr Susan Waller is presently an Assistant Professor in the Department of Medical Education at the College of Medicine and Health Sciences at the UAE University since January 2021. Susan coordinates the preclinical clinical skills courses and leads the college mentoring program. Susan's research interests are in interprofessional education and practice, workplace readiness, technology enhanced education and clinical supervision.

Minn N. Yoon, PhD, is an Associate Professor at the Mike Petryk School of Dentistry at the University of Alberta. One focus of her research is the care of vulnerable and marginalized populations exploring their healthcare experience through their voices and perspectives.

Anupriya Mishra, MBA, MS serves as the Manager at the Mollie Woods Hare Center for Excellence in Neurodivergence (Intellectual Disability, Autism, and Mental Health) at Woods System of Care. Anupriya is a dedicated nonprofit professional with a strong commitment to improving healthcare access and the quality of care for individuals with intellectual disabilities, autism, and mental health conditions. She holds a Master of Science in Nonprofit Leadership from the University of Pennsylvania and an MBA from ICFAI University, India, along with additional coursework in Psychology and Sociology from Harvard University. With expertise in donor relationships, fundraising, project management, research and writing, Anupriya has made significant contributions to underserved communities in both urban and remote rural areas of India. Anupriya's passion for creating positive social change drives her ongoing work to expand economic opportunities, reduce migration pressures, and support communities globally.

REFERENCES

- ¹ Canadian Family Physician. (2018). *Primary care of adults with intellectual and developmental disabilities: 2018 Canadian Consensus Guidelines*. <https://www.cfp.ca/content/cfp/64/4/254.full.pdf>
- ² World Health Organization. (n.d.) *Primary health care*. https://www.who.int/health-topics/primary-health-care#tab=tab_1
- ³ WHO (2024). *Implementing the primary health care approach: A primer*. Geneva: World Health Organization. (Global report on primary health care). <https://www.who.int/publications/i/item/9789240090583>, <https://www.youtube.com/watch?v=zT-CVq1phSs>
- ⁴ American Psychiatric Association. (2024). *What is autism spectrum disorder?* <https://www.psychiatry.org/patients-families/autism/what-is-autism-spectrum-disorder>
- ⁵ World Health Organization. (2023) *Autism*. <https://www.who.int/news-room/fact-sheets/detail/autism-spectrum-disorders>
- ⁶ Johns Hopkins Medicine. (n.d.) *What is a caregiver?* Johns Hopkins Bayview. <https://www.hopkinsmedicine.org/about/community-health/johns-hopkins-bayview/services/called-to-care/what-is-a-caregiver>
- ⁷ World Health Organization. (2020). *Community-based health care, including outreach and campaigns, in the context of the COVID-19 pandemic*. https://www.who.int/publications/i/item/WHO-2019-nCoV-Comm_health_care-2020
- ⁸ The University of British Columbia. (2023) *Equity and inclusion glossary of terms*. <https://equity.ubc.ca/resources/equity-inclusion-glossary-of-terms/#E>
- ⁹ Johns Hopkins Nursing Center for Nursing Inquiry. (n.d.) *Evidence-based practice*. Johns Hopkins Medicine. <https://www.hopkinsmedicine.org/nursing/center-nursing-inquiry/nursing-inquiry/evidence-based-practice>
- ¹⁰ World Health Organization. (n.d.). *Services organization and integration*. <https://www.who.int/teams/integrated-health-services/clinical-services-and-systems/service-organizations-and-integration>
- ¹¹ National Collaborating Centre for Determinants of Health. (2016) *Public health speaks: Intersectionality and health equity*. <https://nccdh.ca/resources/entry/public-health-speaks-intersectionality-and-health-equity>
- ¹² National Library of Medicine. (2009). *Patient-centered care*. PubMed. <https://pubmed.ncbi.nlm.nih.gov/19901351/>

-
- ¹³ World Health Organization. (n.d.). *Services organization and integration*. <https://www.who.int/teams/integrated-health-services/clinical-services-and-systems/service-organizations-and-integration>
- ¹⁴ World Health Organization. (n.d.). *Primary care*. <https://www.who.int/teams/integrated-health-services/clinical-services-and-systems/primary-care>
- ¹⁵ World Health Organization. (2024) *Implementing the primary health care approach: A primer*. Geneva: World Health Organization; (Global report on primary health care). <https://www.who.int/publications/i/item/9789240090583>, <https://www.youtube.com/watch?v=zT-CVq1phSs>
- ¹⁶ Substance Abuse and Mental Health Services Administration. (2014). *SAMHSA's concept of trauma and guidance for a trauma-informed approach*. <https://library.samhsa.gov/sites/default/files/sma15-4420.pdf>, <https://library.samhsa.gov/product/tip-57-trauma-informed-care-behavioral-health-services/sma14-4816>
- ¹⁷ Harvard Medical School. (n.d.). *Adult Autism Health Resource (AAHR) Care Toolkit*. <https://adult-autism.health.harvard.edu/aahr-healthcare-toolkit/>
- ¹⁸ U.S. Department of Health & Human Services. (2022) *What's the difference between Medicare and Medicaid?* <https://www.hhs.gov/answers/medicare-and-medicaid/what-is-the-difference-between-medicare-medicaid/index.html>
- ¹⁹ Harvard University. (2023) *Clinical care for autistic adults*. <https://pll.harvard.edu/course/clinical-care-autistic-adults>
- ²⁰ Centers for Disease Control and Prevention. (2025) *Study to Explore Early Development (SEED)*. <https://www.cdc.gov/autism/seed/index.html>
- ²¹ Centers for Disease Control and Prevention. (n.d.). *Autism Spectrum Disorder—specific anticipatory guidance*. https://www.cdc.gov/ncbddd/actearly/autism/curriculum/documents/autism-specific-anticipatory-guidance_508.pdf
- ²² Centers for Disease Control and Prevention. (n.d.). *Learn the signs. Act early*. <https://www.cdc.gov/ncbddd/actearly/index.html>
- ²³ Centers for Disease Control and Prevention. (2024) *Treatment and intervention for autism spectrum disorder*. <https://www.cdc.gov/autism/treatment/index.html>
- ²⁴ Centers for Disease Control and Prevention. (2024). *Clinical screening for autism spectrum disorder*. <https://www.cdc.gov/autism/hcp/diagnosis/screening.html>

-
- ²⁵ American Academy of Pediatrics. (2020). *Identification, evaluation, and management of children with autism spectrum disorder*. <https://publications.aap.org/pediatrics/article/145/1/e20193447/36917/Identification-Evaluation-and-Management-of?autologincheck=redirected>
- ²⁶ National Institute for Health and Care Excellence. (2021). *Autism spectrum disorder in adults: Diagnosis and management*. <https://www.nice.org.uk/guidance/cg142>
- ²⁷ National Institute for Health and Care Excellence. (2017). *Autism spectrum disorder in under 19s: Recognition, referral and diagnosis*. <https://www.nice.org.uk/guidance/cg128>
- ²⁸ National Institute for Health and Care Excellence. (2021). *Autism spectrum disorder in under 19s: Support and management (Clinical guidelines CG170)*. <https://www.nice.org.uk/guidance/cg170>
- ²⁹ American Academy of Child and Adolescent Psychiatry. (2025) *Neurodevelopmental clinical pearls pocket guide*. https://www.aacap.org/AACAP/Member_Resources/ASD-ID/Practice_Resources.aspx
- ³⁰ Autism Speaks. (2025) *Autism Speaks tool kits*. <https://www.autismspeaks.org/autism-speaks-tool-kits>
- ³¹ Autism Speaks. (2025) *Navigating a new autism diagnosis*. <https://www.youtube.com/playlist?list=PLt1KSMgVd6T3vS2x9sOaPpEOwzJ1xLg40>
- ³² Autism Speaks. (2025) *Caregiver quick tips: Parents and caregivers of children with autism*. Autism Speaks. <https://www.youtube.com/playlist?list=PLt1KSMgVd6T0qOmhGpxjHEFSTIV7E2GtG>
- ³³ Council of Autism Service Providers. (2024). *Applied behavior analysis practice guidelines for the treatment of autism spectrum disorder* (Ver. 3.0). <https://www.casproviders.org/standards-and-guidelines>
- ³⁴ Swetlik, C, Earp, S, Franco, K. Adults with autism spectrum disorder: Updated considerations for healthcare providers. (2019). *Cleveland Clinic Journal of Medicine*. 86 (8) 543-553; DOI: <https://doi.org/10.3949/ccjm.86a.18100> <https://www.ccjm.org/content/86/8/543>
- ³⁵ Cleveland Clinic, & Autism Research Institute. (2022). *Co-occurring conditions and autism spectrum disorders*. <https://www.clevelandclinicmeded.com/online/webcasts/cooccurring-autism-spectrum-disorders/default.asp>
- ³⁶ Cleveland Clinic, & Autism Research Institute. (2024). *Current perspectives on autism*. <https://www.clevelandclinicmeded.com/online/webcasts/perspectives-autism/default.asp>
- ³⁷ Autism Research Institute. (2024). *Free online webinars*. <https://autism.org/webinars/>

³⁸ Autism Research Institute. (n.d.) Diagnostic Checklists. *Form E-2 & Research Questionnaire Form E-3*. <https://autism.org/diagnostics-checklist/>

³⁹ Autism Research Institute. (n.d.) *YouTube*. <https://www.youtube.com/@Autism-org/playlists>

⁴⁰ Autism Research Institute. (n.d.) *Sleep Issues & Autism*.
<https://www.youtube.com/playlist?list=PLpIoh-N2Q1jZPIhN46ImY6m1nPjOxN-mh>

⁴¹ Autism Research Institute. (n.d.) *Self-Injurious Behavior*.
https://www.youtube.com/playlist?list=PLpIoh-N2Q1jaENhXAJSwFNno2_yZO2tr5

⁴² Autism Research Institute. (n.d.) *Sensory Issues*.
<https://www.youtube.com/playlist?list=PLpIoh-N2Q1jbAyaKdqftgBIBnBh2uOA-X>

⁴³ Autism Research Institute. (n.d.) *Anxiety and OCD in ASD*.
<https://www.youtube.com/playlist?list=PLpIoh-N2Q1jaeHl01KqHKxc54h9Gg0hDO>

⁴⁴ Autism Research Institute. (n.d.) *Law Enforcement and First Responders*.
<https://www.youtube.com/playlist?list=PLpIoh-N2Q1jYnu5OpScPz9Awrazf9VGG>

⁴⁵ Autism Research Institute. (n.d.) *Peer-Reviewed Research on Genetic*.
<https://www.youtube.com/playlist?list=PLpIoh-N2Q1jb7t5ANiISsJqN8R9bqEtRZ>

⁴⁶ Autism Research Institute. (n.d.) *Behavioral Support*.
<https://www.youtube.com/playlist?list=PLpIoh-N2Q1jYIE5I3IgyVvR1oZx-qjir>

⁴⁷ Autism Research Institute. (n.d.) *Pregnancy*. <https://www.youtube.com/playlist?list=PLpIoh-N2Q1jb0R79qiDS8Hmg9m1L3JEw0>

⁴⁸ Autism Research Institute. (n.d.) *Physical Therapy and Motor Skills*.
<https://www.youtube.com/playlist?list=PLpIoh-N2Q1jZjocE4AsgYaLFQUXjLd6Y9>

⁴⁹ Autism Research Institute. (n.d.) *Biomarkers*. <https://www.youtube.com/playlist?list=PLpIoh-N2Q1jY3fmJoApiPNYP4Wmuxbj2b>

⁵⁰ Autism Research Institute. (n.d.) *Insight from Clinicians*.
<https://www.youtube.com/playlist?list=PLpIoh-N2Q1jYE1LNDd1s1wsTM8JfKSWzu>

⁵¹ Autism Research Institute. (n.d.) *Autism Treatment Evaluation Checklist (ATEC)*.
<https://autism.org/autism-treatment-evaluation-checklist/>

⁵² Autism Research Institute. (n.d.) *Understanding and Treating Self-Injurious Behavior*.
<https://self-injuriousbehavior.com/>

-
- ⁵³ Sanchack, K, Thomas, C, (2016). Autism spectrum disorder: Primary care principles. *American Family Physician*. 94(12):972-979A. <https://www.aafp.org/pubs/afp/issues/2016/1215/p972.html>
- ⁵⁴ Milestones Autism Resources. (n.d.) *Tool kits*. <https://www.milestones.org/resources/tool-kits>
- ⁵⁵ Milestones Autism Resources. (n.d.) *Milestones Autism Planning (MAP) tool*. <https://www.milestones.org/map/browse-articles>
- ⁵⁶ Academic-Autistic Spectrum Partnership in Research and Education. (2024). *AASPIRE healthcare toolkit*. AASPIRE. <https://autismandhealth.org/?p=home&theme=ltlc&size=small>
- ⁵⁷ Academic-Autistic Spectrum Partnership in Research and Education. (2024). *AASPIRE healthcare toolkit*. AASPIRE. <https://autismandhealth.org/?a=pv&p=main&theme=ltlc&size=small>
- ⁵⁸ The Association for Science in Autism Treatment (ASAT). (n.d.) *Providing support to families*. <https://asatonline.org/for-medical-professionals/>
- ⁵⁹ The Association for Science in Autism Treatment (ASAT). (n.d.) *New Parent Information Packet*. <https://asatonline.org/wp-content/uploads/asatdocuments/NewParentPacket.pdf>
- ⁶⁰ Organization for Autism Research. Resources. (n.d.) <https://researchautism.org/shop/>
- ⁶¹ LifeCourse Nexus. *Foundational tools*. (n.d.) <https://www.lifecoursetools.com/lifecourse-library/foundational-tools/>
- ⁶² International Society for Autism Research. (n.d.). *INSAR*. <https://www.autism-insar.org/page/INSAR>; <https://www.autism-insar.org/page/journal>
- ⁶³ Autism Europe. (2020) *ESCAP practice guidance for autism: a summary of evidence-based recommendations for diagnosis and treatment*. <https://www.autismeurope.org/blog/2022/11/01/escap-practice-guidance-for-autism-a-summary-of-evidence%e2%80%91based-recommendations-for-diagnosis-and-treatment/>
- ⁶⁴ Autism Europe. (2019) *People with autism spectrum disorder: Identification, understanding, intervention* (3rd ed.) <https://www.autismeurope.org/blog/2019/09/16/people-with-autism-spectrum-disorder-identification-understanding-intervention-third-edition/>
- ⁶⁵ Brian, J., Zwaigenbaum, L., Ip, A. (2019). Standards of diagnostic assessment for autism spectrum disorder. *Paediatrics & Child Health*, 24(7), 444-450. <https://academic.oup.com/pch/article/24/7/444/5603338>
- ⁶⁶ Autism CRC. (2023). *National guidelines for the assessment and diagnosis of autism in Australia*. <https://www.autismcrc.com.au/best-practice/assessment-and-diagnosis>

⁶⁷ Subramanyam AA, Mukherjee A, Dave M, Chavda K. (2019). Clinical practice guidelines for autism spectrum disorders. *Indian Journal of Psychiatry*. Jan; 61 (Suppl 2):254-269. doi: 10.4103/psychiatry.IndianJPsychiatry_542_18. PMID: 30745701; PMCID: PMC6345133 <https://pmc.ncbi.nlm.nih.gov/articles/PMC6345133/>

⁶⁸ American Psychiatric Association (2024). *Diagnostic and Statistical Manual of Mental Disorders*. <https://www.psychiatry.org/psychiatrists/practice/dsm>

⁶⁹ National consultation meeting for developing IAP guidelines on neuro developmental disorders under the aegis of IAP childhood disability group and the Committee on Child Development and Neurodevelopmental Disorders. (2017). Dalwai S, Ahmed S, Udani V, Mundkur N, Kamath SS, C Nair MK. Consensus statement of the Indian Academy of Pediatrics on evaluation and management of autism spectrum disorder. *Indian Pediatrics*. May 15;54(5):385-393. doi: 10.1007/s13312-017-1112-4. Epub 2017 Mar 29. PMID: 28368272. <https://pubmed.ncbi.nlm.nih.gov/28368272/>

⁷⁰ Soares N, Vanderkolk K, Hassan S, Burge S, Graves L. (2023). Family medicine residency program directors' perception of curricular elements related to autism: A CERA study. *Family Medicine*. 56(2):94-101. doi:10.22454/FamMed.2023.160547

ADDITIONAL RESOURCES

- The impact of primary care access on autism spectrum disorder awareness in an underserved population- <https://www.frontiersin.org/journals/public-health/articles/10.3389/fpubh.2023.1250259/full>
- A national framework to deliver improved outcomes in all-age autism assessment pathways: guidance for integrated care boards- <https://www.england.nhs.uk/long-read/a-national-framework-to-deliver-improved-outcomes-in-all-age-autism-assessment-pathways-guidance-for-integrated-care-boards/>
- Operational guidance to deliver improved outcomes in all-age autism assessment pathways: Guidance for integrated care boards- <https://www.england.nhs.uk/long-read/operational-guidance-to-deliver-improved-outcomes-in-all-age-autism-assessment-pathways-guidance-for-integrated-care-boards/>
- Implementation and Evolution of a Primary Care-Based Program for Adolescents and Young Adults on the Autism Spectrum- <https://link.springer.com/article/10.1007/s10803-021-05171-w>
- Autism in England: assessing underdiagnosis in a population-based cohort study of prospectively collected primary care data- <https://www.sciencedirect.com/science/article/pii/S2666776223000455>

-
- Characteristics and primary care experiences of people who self-report as autistic: a probability sample survey of adults registered with primary care services in England-
<https://bmjopen.bmj.com/content/14/9/e081388>
 - A new adventure': a case study of autistic children at Forest School-
<https://www.tandfonline.com/doi/full/10.1080/14729679.2022.2115522#abstract>
 - The impact of autism spectrum disorder on parents in Arab countries: A systematic literature review-
<https://www.frontiersin.org/journals/psychology/articles/10.3389/fpsyg.2022.955442/full>
 - Autism spectrum disorder in children: The disparities between the developed and developing countries-<https://www.longdom.org/open-access/autism-spectrum-disorder-in-children-the-disparities-between-the-developed-and-developing-countries-35040.html>
 - Managing autism spectrum disorder in developing countries by utilizing existing resources: A perspective from Bangladesh-
https://www.researchgate.net/publication/325316536_Managing_autism_spectrum_disorder_in_developing_countries_by_utilizing_existing_resources_A_perspective_from_Bangladesh