

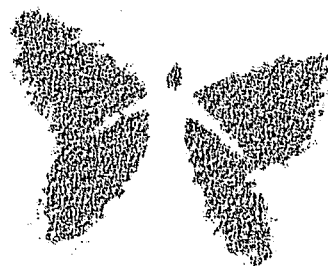
Autism

A Service Provider's Perspective

January 17, 2012

Human Service Committee

Representative Alon Wieland, Chairman



Anne Carlson

C E N T E R

Nurturing abilities. Changing lives.

Some Definitions

✧ Complex Neurological/Developmental Disability

✧ Umbrella Term

- ✧ Autism
- ✧ PDD NOS
- ✧ Rhetts Syndrome
- ✧ Childhood Degenerative Disorder
- ✧ Asperger's Syndrome

✧ Three (3) Behavioral Deficit Areas

- ✧ Reciprocal Social Interaction
- ✧ Communication and Restrictive
- ✧ Repetitive Interests and Behaviors



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Advancing the science of learning and teaching

Autism Spectrum Disorders

✧ Significant Issues

- ✧ Social
- ✧ Communication
- ✧ Behavioral

✧ Handle Information Differently

✧ Spectrum Disorders

- ✧ ASD affects person in different ways
- ✧ Mild to severe
- ✧ Some similar symptoms

✧ Differences

- ✧ Some shared – social interaction
- ✧ When symptoms start
- ✧ How severe
- ✧ Exact nature



Autism Spectrum Disorders
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Supporting children, families and schools

Three Common Categories

✧ Autistic Disorder

- ✧ Classic Autism
- ✧ Language Delays
- ✧ Social and Communication Challenges
- ✧ Unusual Behaviors and Interests

✧ Asperger's Syndrome

- ✧ Milder Symptoms
- ✧ Social Challenges
- ✧ Typically No Language or Intellectual Disability
- ✧ Good Surface Language/Cognitive Functioning



Autism Center
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OF AUTISM RESEARCH AND TREATMENT

Three Common Categories (cont'd.)

✧ Pervasive Developmental Disorder

- ✧ Sometimes Called "Atypical Autism"
- ✧ Meet some of Autism Diagnosis Criteria
- ✧ Fewer and Milder Symptoms
- ✧ Perhaps Only Social/Communication Challenges



Autism Research
CENTER
Understanding Autism. Changing Lives.

Causes and Risk Factors

✧ Factors

- ✧ Environmental
- ✧ Biologics
- ✧ Genetic Factors

✧ Risk Factors

- ✧ Genetic
 - ✧ Sibling or Parent with ASD
- ✧ Other Medical Conditions
 - ✧ Fragile X
 - ✧ Tuberous Sclerosis
 - ✧ Down's Syndrome
 - ✧ Other
- ✧ Prescription Drugs during Pregnancy
- ✧ Poor Parenting – Not a Cause
- ✧ Before and After Birth



Anne Hansen
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Building Bridges, Changing Lives

Treatment/Intervention Categories

- ✧ Behavior and Communication Approaches
- ✧ Dietary Approaches
- ✧ Medication
- ✧ Complementary and Alternative Medicine
- ✧ Tailored Autism Intervention Plans



American Association of Autism Centers
CENTERS

ACC Community-Based Autism Services



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for the Arts and Sciences

Outcomes

- ✧ Reduce Challenging Behaviors
- ✧ Increase Social Competencies
- ✧ Increase Adaptive Living and Academic Skills
- ✧ Increase Vocational Competencies for Adults



Services

- ✧ Diagnostics
- ✧ Comprehensive Evaluation to Develop Individual Program
- ✧ Program Coordination
- ✧ Interventions (Evidenced-Based)
- ✧ Education and Training for Families and Professionals



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Advancing the art and science of learning

Delivery

- ✧ Home and Community
- ✧ One-to-One Interventionist Support
- ✧ Minimum of Twenty-Five (25) Hours Per Week Intervention



Anne G. Berman
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MENTAL HEALTH SERVICES • PROVIDING HOPE

Multi-Disciplinary Team Approach

- ✧ Clinical Psychologist
- ✧ Pediatrician
- ✧ Behavioral Support Personnel
- ✧ Occupational Therapy/Speech Therapy
- ✧ Special Educator



Anne L. Brennan
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Supporting the Learning of All Children

Funding

- ✧ Autism Waiver
- ✧ Family Support Services
- ✧ Insurance
- ✧ Private Sources



Autism Center
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Supporting the lives of children with autism

Demand/Occurrence

- ✧ Center for Disease Control
- ✧ Census Data
- ✧ ND Infant Development
- ✧ ND Department of Public Instruction
- ✧ ND HCB Waiver Program



American Psychological Association
CENTER
FOR THE STUDY OF STRESS AND ANXIETY

Occurrence

Birth – 19 Years

- ✧ 1 in 110 Children According to CDC
- ✧ 1,700 – 19 and Under in North Dakota
- ✧ DPI – 627 School-Aged in 2010 or 1 in 290
- ✧ Infant Development Estimates 10% of Toddlers (2-3 years) Served



Center for Early Childhood Development
CENTER
Nurturing the Next Generation

Occurrence Adults

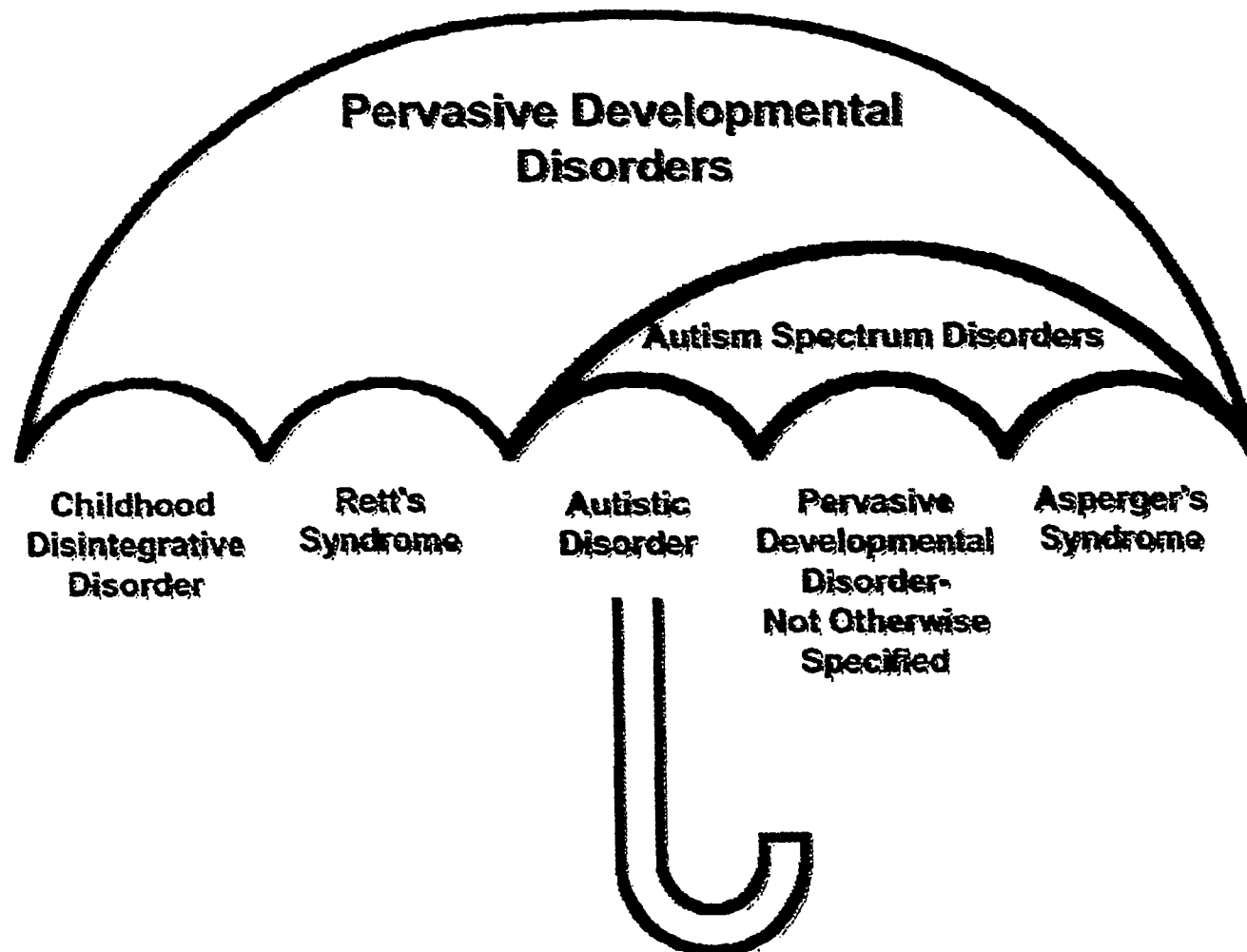
- ✧ 3,300 Adults (19-65) using 1:110 Ratio
- ✧ Adults stats based on overall adult population at the 1:110 ratio



American Association of University Professors
CENTRO
Advancing the Quality of Higher Education

DSM IV Model

(Diagnostic and Statistical Manual of Mental Health Disorders - Fourth Edition)



National Autism Center's National Standards Report Reference Sheet for Established, Emerging, & Unestablished Interventions for Autism Spectrum Disorders (2009)

From: <http://www.nationalautismcenter.org/pdf/NAC%20Standards%20Report.pdf>

Type of Intervention	Ages	Diagnostic Classification (Autistic Disorder (AD), Aspergers Syndrome (AS), Pervasive Developmental Disorder- Not Otherwise Specified (PDD-NOS))
<u>Established Treatments</u>		
Antecedent Package	3-18	AD
Behavioral Package	0-21	AD; PDD-NOS
Comprehensive Behavioral Treatment for Young Children	0-9	AD; PDD-NOS
Joint Attention Intervention	0-5	AD; PDD-NOS
Modeling	3-18	AD; AS; PDD-NOS
Naturalistic Teaching Strategies	0-9	AD; PDD-NOS
Peer Training Package	3-14	AD; PDD-NOS
Pivotal Response Treatment	3-9	AD
Schedules	3-14	AD
Self-management	3-18	AD
Story-based Intervention Package	6-14	AD; AS
<u>Emerging Treatments</u>		
Augmentative and Alternative Communication Device	3-9	AD
Cognitive Behavioral Intervention Package	6-18	AD; AS
Developmental Relationship-based Treatment	0-5	AD; PDD-NOS
Exercise	3-14	AD
Exposure Package	3-5	AD
Imitation-based Interaction	0-14	AD
Initiation Training	6-14	AD; AS; PDD-NOS
Language Training (Production)	3-9	AD
Massage/Touch Therapy	3-5	AD
Multi-component Package	0-9	AD; AS; PDD-NOS
Music Therapy	N/A	AD
Peer-mediated Instructional Arrangement	6-9	AD
Picture Exchange Communication System	0-9	AD; PDD-NOS
Reductive Package	N/A	AD
Scripting	6-14	AD
Sign Instruction	3-9	AD
Social Communication Intervention	0-5	AD
Social Skills Package	3-18	AD; AS; PDD-NOS
Structured Teaching	0-18	AD; PDD-NOS
Technology-based Treatment	6-14	AD
Theory of Mind Training	6-14	AD; AS
<u>Unestablished Treatments</u>		
Academic Interventions	N/A	N/A
Auditory Integration Training	N/A	N/A
Facilitated Communication	N/A	N/A
Gluten- and Casein-Free Diet	N/A	N/A
Sensory Integrative Package	N/A	N/A

Autism Services

Demand Estimates

Autism Services

Demand for Autism Services was estimated using various sources of data/ information and where possible alternative methods to test for reasonableness and consistency. Sources of information include general population statistics, industry data, and Anne Carlsen specific data. The following table summarizes the various data elements/sources and use in estimating demand.

Data Element	Source	Autism Services
Number of children (3 to 21) in Special Education (SPED) by Special Education units)	ND Department of Public Instruction, Special Education Unit 2010 Special Report	Current SPED population diagnosed with Autism as the primary disability
Number of children (3 to 21) in Special Education (SPED) by Special Education units	ND Department of Public Instruction, Special Education Unit 2010 Special Report	Number per year of newly identified children of SPED population diagnosed with Autism as the primary disability
General Population Birth -19 yrs.	US Census Data-ND	Population of ND
Autism Population 1:110	US Census Data-ND	Prevalence rates within Birth -19 year old general population
Adult population in Group homes	ND Department of Human Services Data	Prevalence rates
Population in ND Home and Community waived services	ND Department of Human Services Data	Prevalence rates
Number of infant and toddlers participating in Infant Development Services	ND Department of Human Services Data	Prevalence within service population
General Population 19 – 65 year olds.	United States Census	Population of ND
Autism Population 1:110	US Census Data-ND	Prevalence rates within 19 – 65 year old general population
GPAST/GPIC Services	ND Center for Persons with Disabilities Waiting List	Available slots
		Waiting list for GPAST/GPIC Services
ND Autism Waiver diagnostic Services	ND Center for Person Waiting List	Available slots
		Waiting List for ND Autism Waiver diagnostic Services
Number of students needing 3 year re-evaluations required by IDEA	ND Department of Public Instruction, Special Education Unit Special Report	33% of SPED population diagnosed with Autism as the primary disability needing 3 year evaluation each year.
		ACC captures 20% of the 188 students needing 3 yr. evaluations.