



Stanford
MEDICINE

A Path Forward for Developmental Pediatrics Argentina

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Stanford
Children's Health

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Learning objectives:

By conclusion of the discussion, participants will be able to

- Describe the evolving field of pediatrics in the US and world wide
- Discuss the need for developmental subspecialists in the US and Argentina
- Contrast models of primary care-subspecialty relations
- Evaluate steps to develop the subspecialty of developmental pediatrics in US
- Apply these concepts to development of care models and field in Argentina



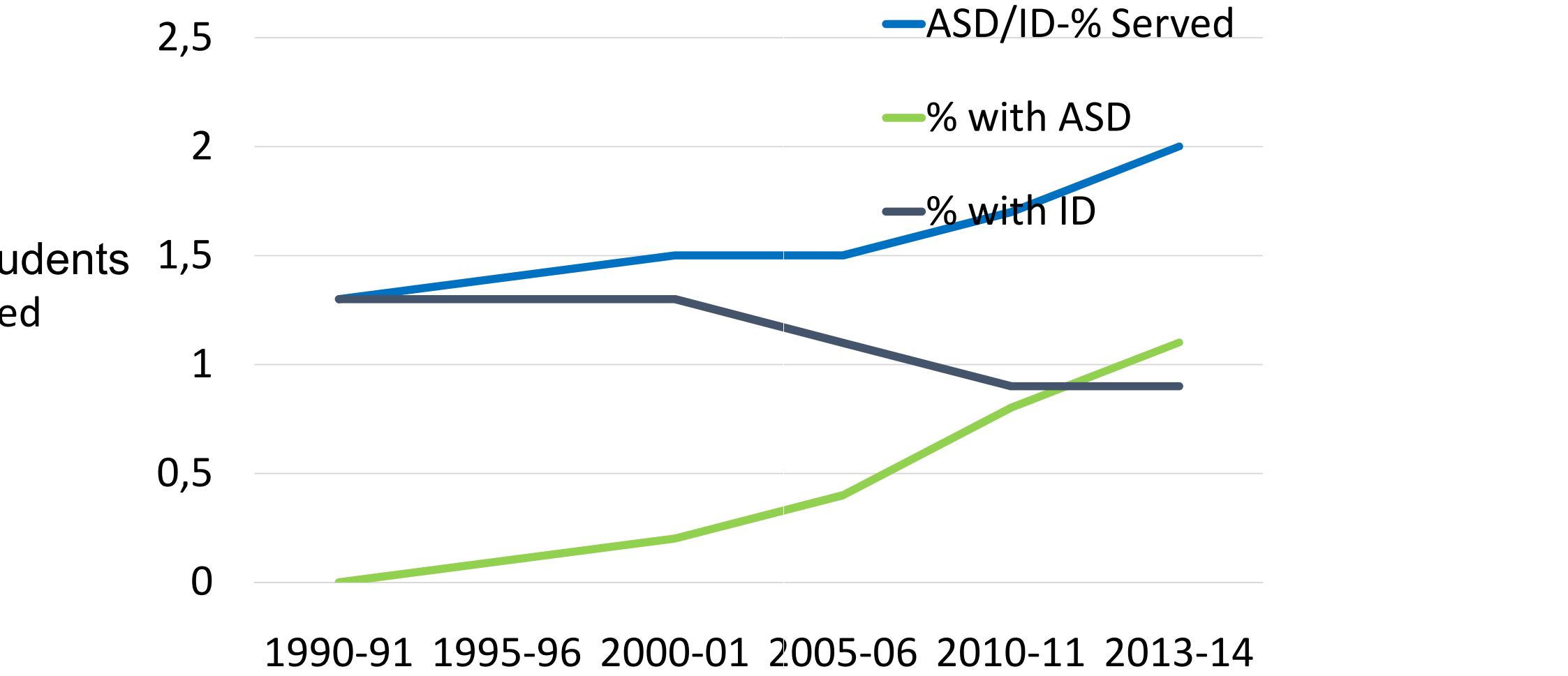
Evolving Field of Pediatrics

Evolving Field of Pediatrics

- Decline in infectious diseases via immunizations, antibiotics, public health
- Increasing prevalence of chronic conditions and disability
- “New morbidity” – learning problems, ADHD, behavior and emotional issues
- Changing social forces – trauma, migration, adverse childhood events
- Shifting focus from improving health to optimizing growth and development
- Increasing support for families

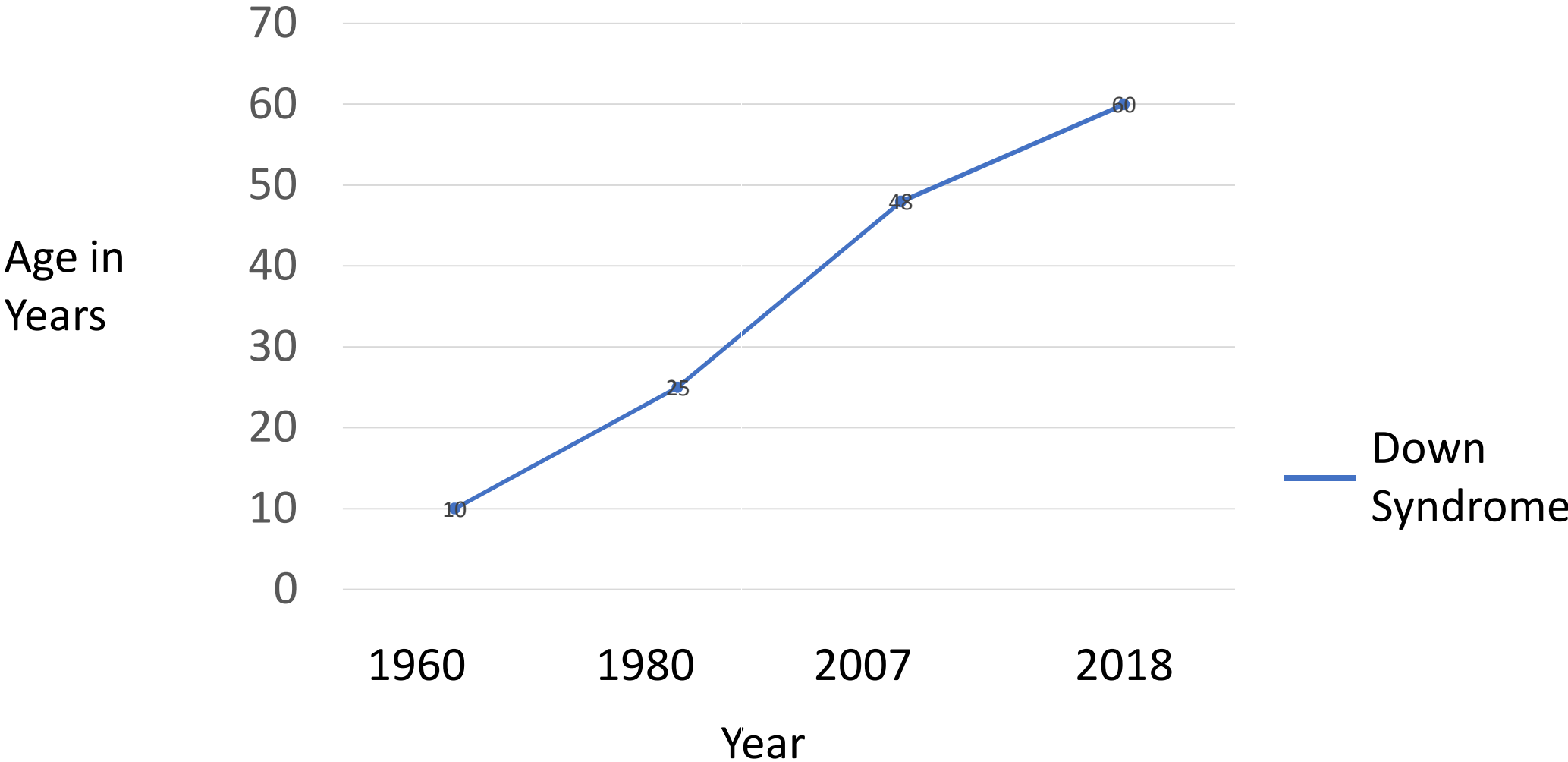


Increasing Prevalence of Disability



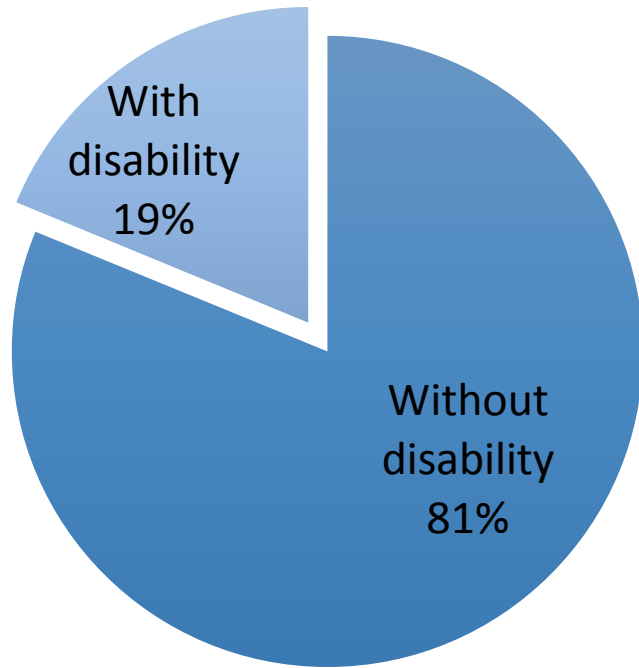
National Center for Education Statistics

Increasing Life Expectancy with Disability

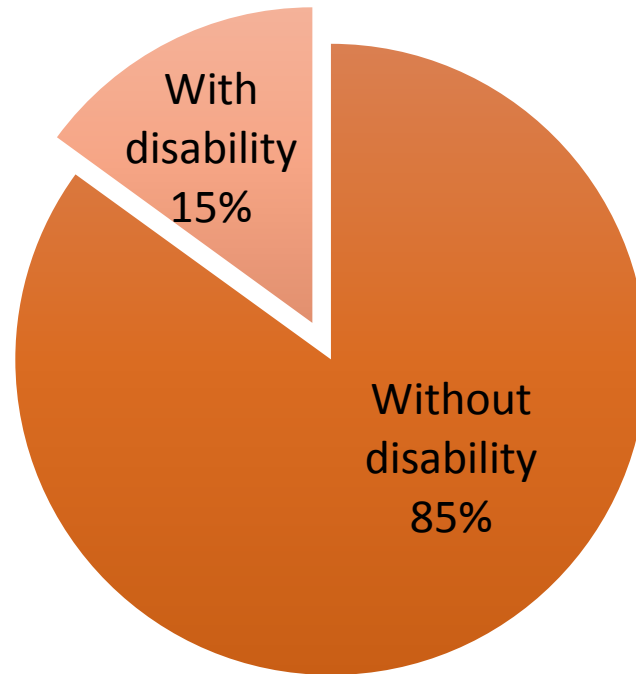


Prevalence of Disability

US Adult Population 2008



US Child Population 2008



Evolving Field of Pediatrics

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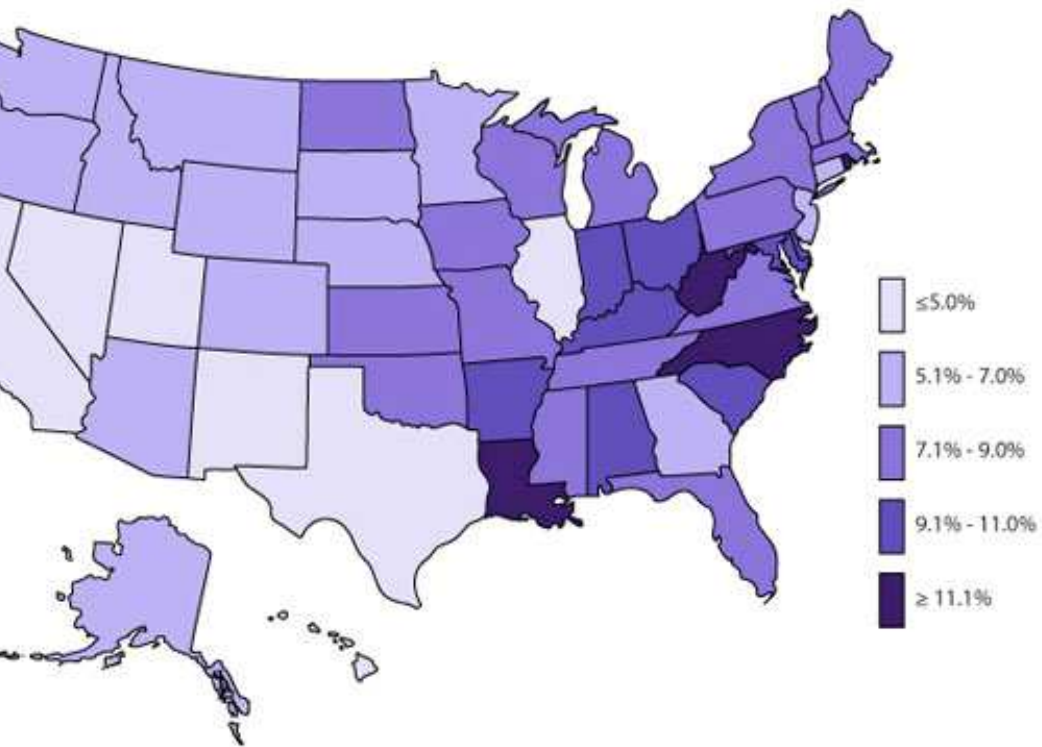
Changing Landscape of Disability in Childhood in US

1979-1981	1992-1994	2008-2009
Respiratory Disease	Respiratory Disease	Speech problems
Impairment of speech, special sense, intelligence	Impairment of speech, special sense, intelligence	Learning Disability
		ADHD
Eye or ear diseases	Other symptoms or ill-defined conditions	Other emotional, mental, and behavior problems
Deformity of limbs, trunk, back	Hearing Impairment	Other developmental problems
Orthopedic impairment	Orthopedic impairment	Asthma/ breathing problems

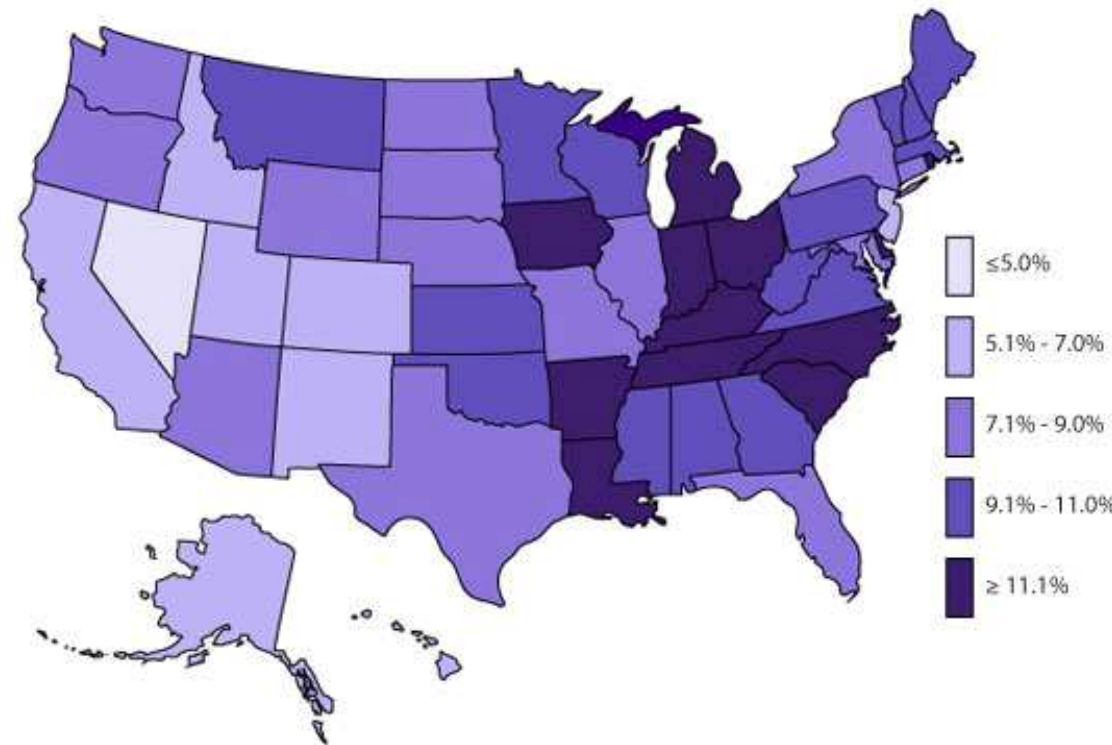
Halfon N, Hourtow A, Larson K. et al. The changing landscape of disability in childhood. *Future Child* 2012;22(1):13-42.

Diagnosis of ADHD in 4-17 year old

2007



2011



Emotional/Behavioral Health Concerns

- About 60 million children and adolescents in US
 - 11-21% of children have a behavioral or emotional disorder at any one time
 - Up to 39% will meet criteria for a mental health diagnosis during childhood
 - 50% of life-time mental health diagnoses are present by age 14
 - Only 1 in 5 receive “needed treatment”
- Additional stress of trauma
 - Migration
 - Violence



Weitzman C, Wegner L et al. Promoting Optimal Development. Pediatrics 2015;135:385-395.

Life Course Perspective: Cumulative Effects

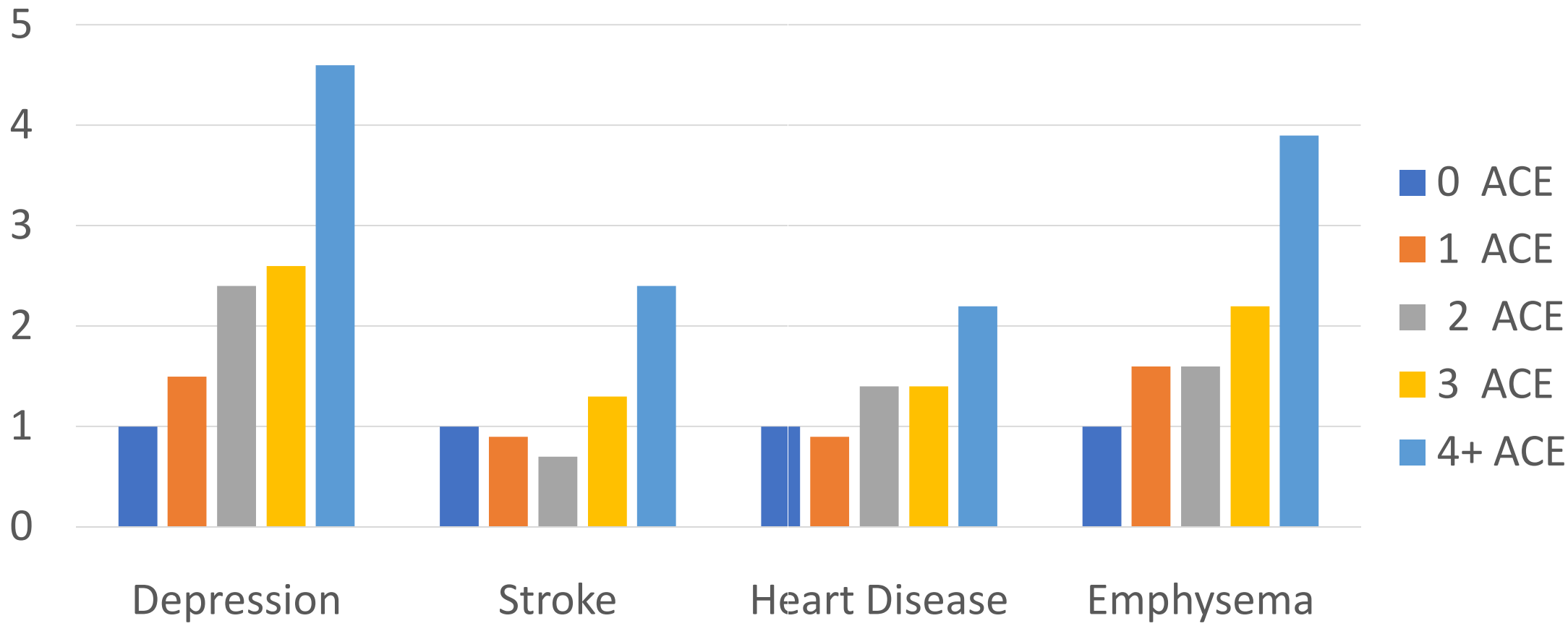


The Adverse Childhood Experiences Study

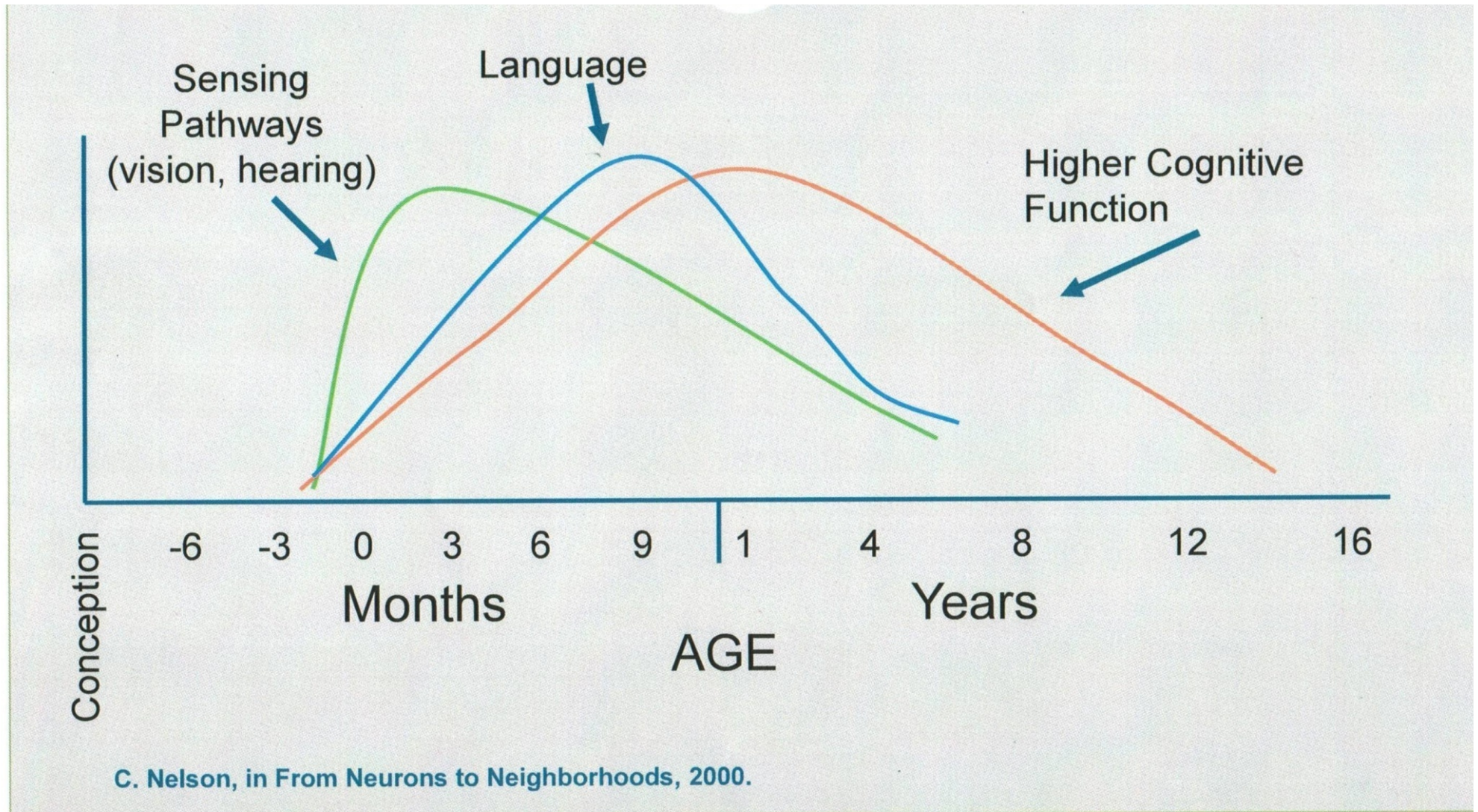
- Definition of “ACEs”
 - Psychological abuse
 - Physical abuse
 - Sexual abuse
 - Family member with substance abuse
 - Family member with mental illness
 - Mother who was treated violently
 - Household member incarcerated
- Percent of adults reported ACEs
 - At least 1 → >50%
 - At least 2 → 25%
 - 4 or more → 6%

Felitti et al., Am J Prev Med 1998;14:245-258

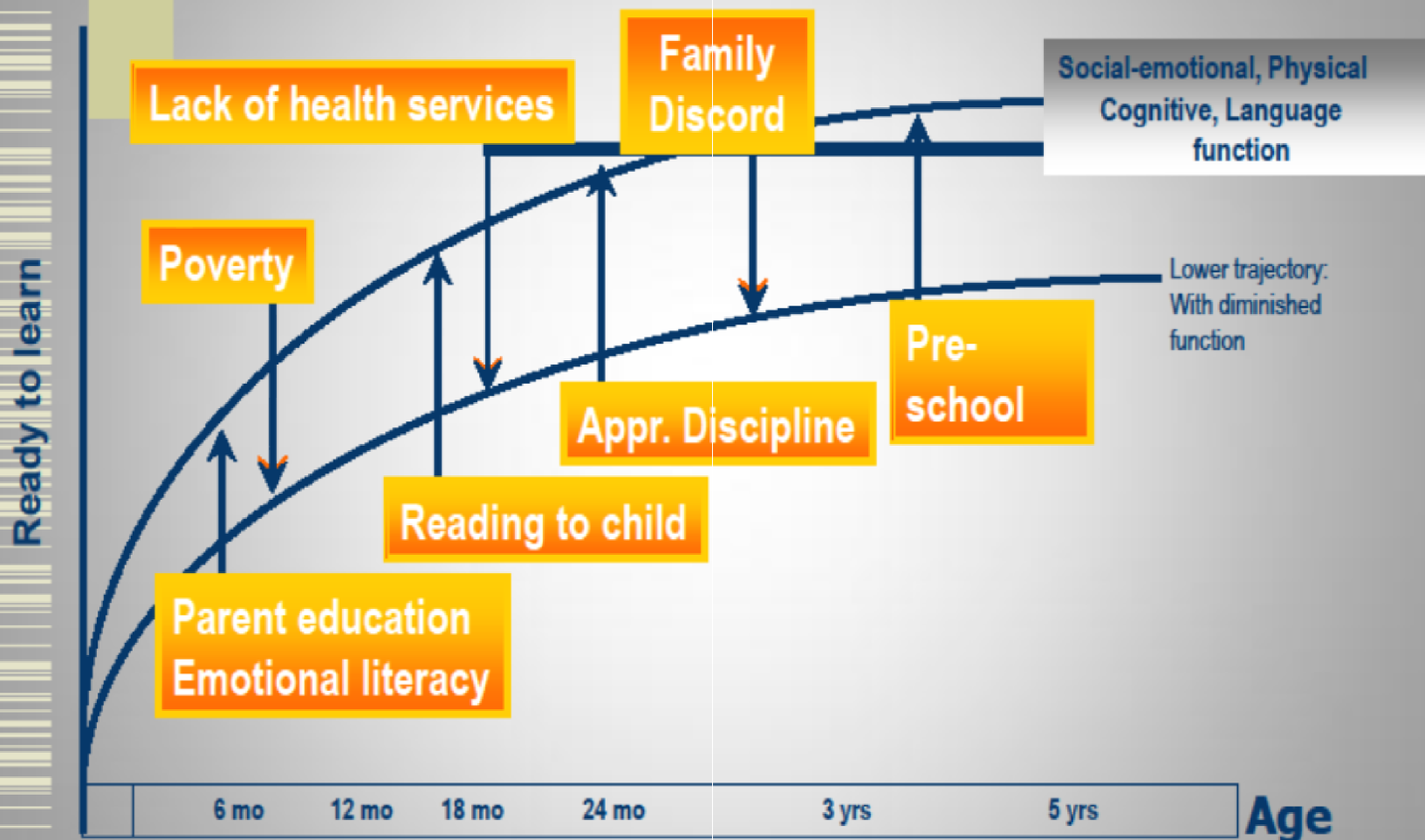
ACE as risk factor of adverse health outcomes



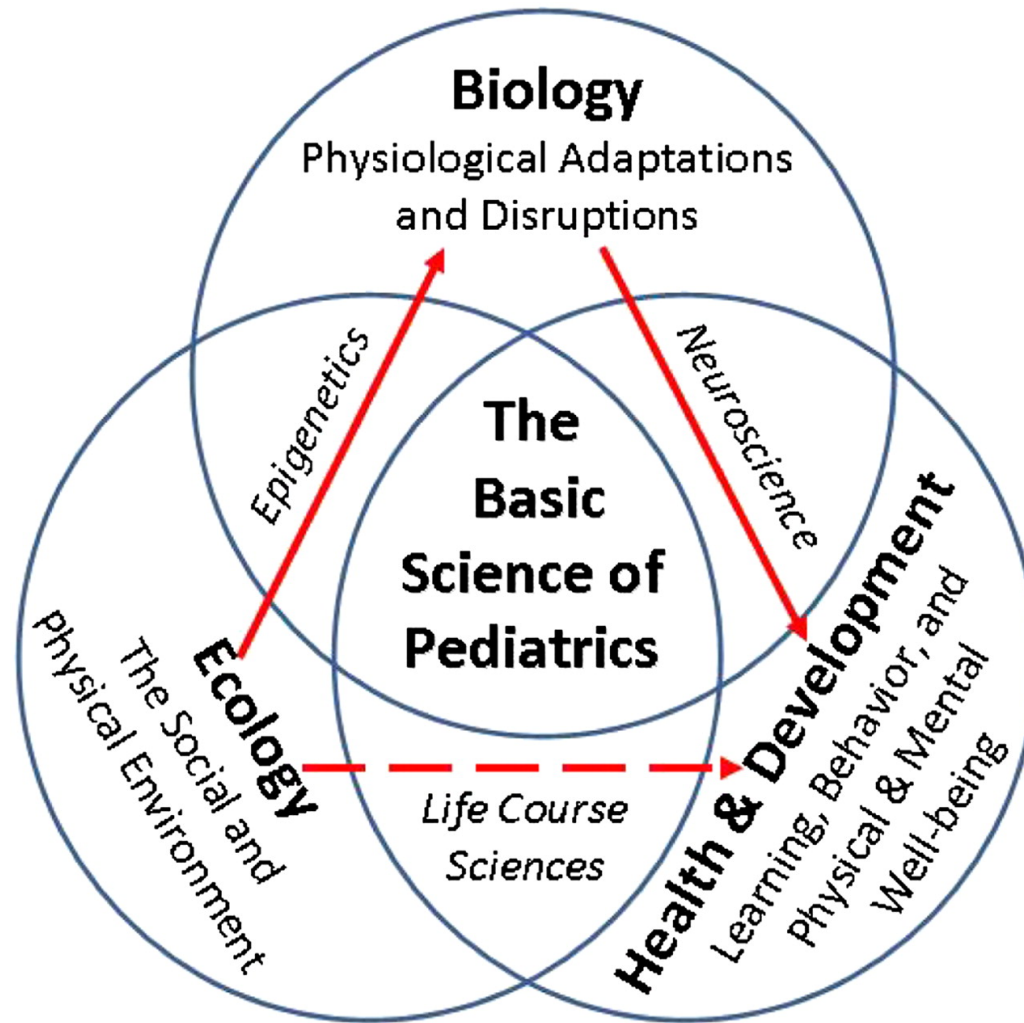
Age of ACE affects Neural Systems



“Cumulative Impact” (School Readiness)



Modern Pediatrics



Need for Developmental Subspecialists

Roles for Subspecialists - 1

- Education and training
 - Bio-psycho-social-eco model of growth and development
 - Foundations of developmental medicine: family-centered care, cultural competence, shared decision-making, community collaboration
 - Identification and management of developmental disabilities
- Clinical consultation
- Direct clinical service

Roles for Subspecialists - 2

- Research: basic, clinical, translational, health services
- Development of standards, practice guidelines
- Dissemination and implementation science
- Advocacy and policy

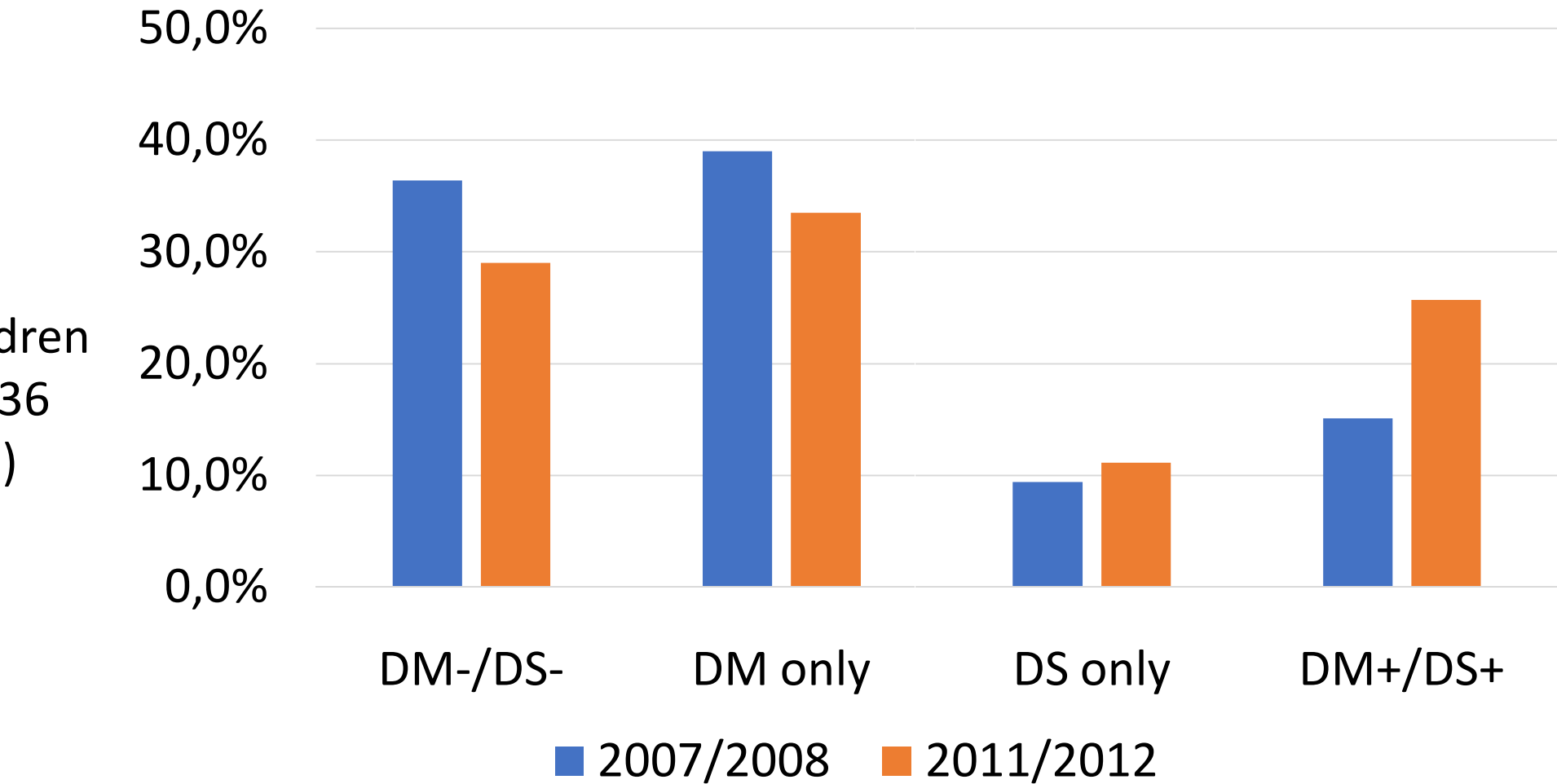
Roles for Generalist: US experience

- AAP Practice Guidelines: (Committee on Children with Disabilities, 2001, 2006)
 - Generalist conducts developmental surveillance and developmental screening for all children
 - Surveillance takes place at all encounters, using history, observation, assessment of developmental levels and behavioral characteristics
 - Screening with validated instrument at 9, 18 and 24 or 30 months (usually ASQ or PEDS)
 - Additional/secondary screen for autism at 18-24 months (M-CHAT-R/F)
- No specific guidelines for school readiness screening or mental health screening in school age and adolescence

Role for Generalist: US Experience

- Only 30% of delays/disabilities are detected before school entry, so lost all opportunities for early intervention services
- Why?
 - Few pediatricians provide developmental surveillance and screening in the preschool years

Developmental Monitoring/Surveillance (DM) or Screening (DS)



Barger et al 2018

Other Barriers

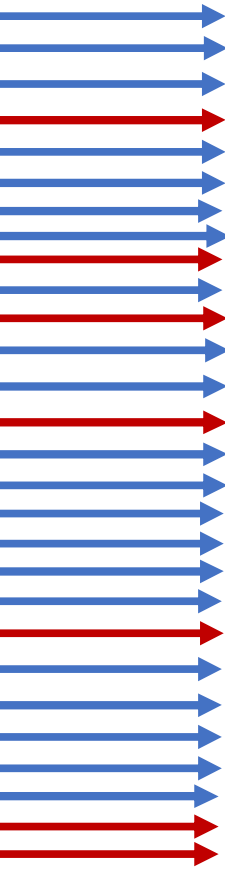
- General pediatricians who do developmental monitoring and screening may nonetheless fail to refer children with positive results to appropriate professionals
- AAP has not targeted pediatrics subspecialties with identification and referral
 - Neonatology: follow-up of the high-risk infant
 - Cardiology: children with congenital heart disease
 - Trauma surgeons
 - Teams treating craniofacial conditions or spina bifida
- No push to do school readiness screening before kindergarten or mental health screening throughout childhood

Models of Care

Priorities of clinical care

Model 1

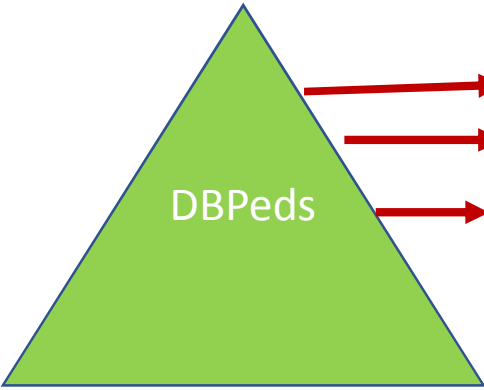
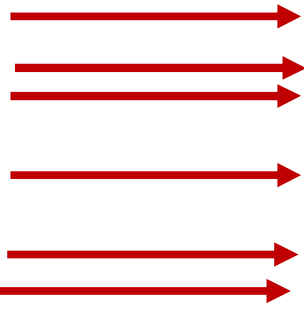
General population



General Pediatrics:
Primary Care

Developmental Surveillance
and Screening

Population at risk



DBPeds

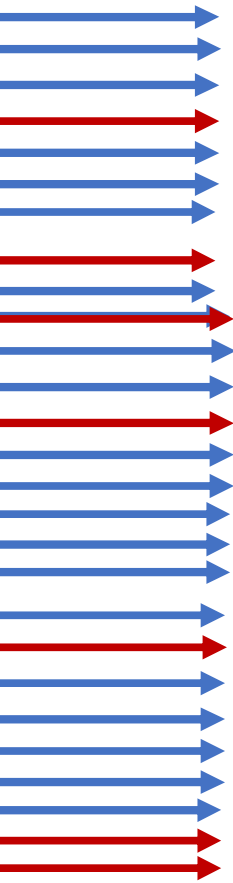
Definitive Diagnosis Management
Plan Ongoing Care



Community
Based
Services

Model 2

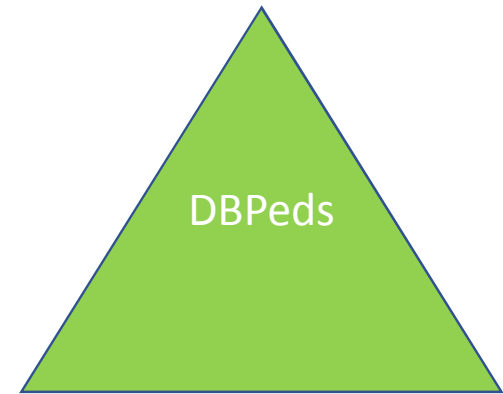
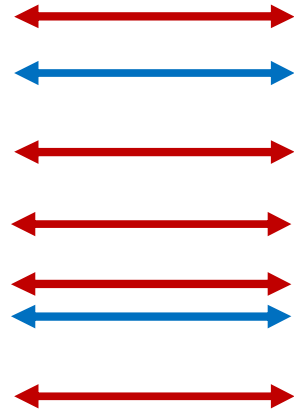
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General Pediatrics:
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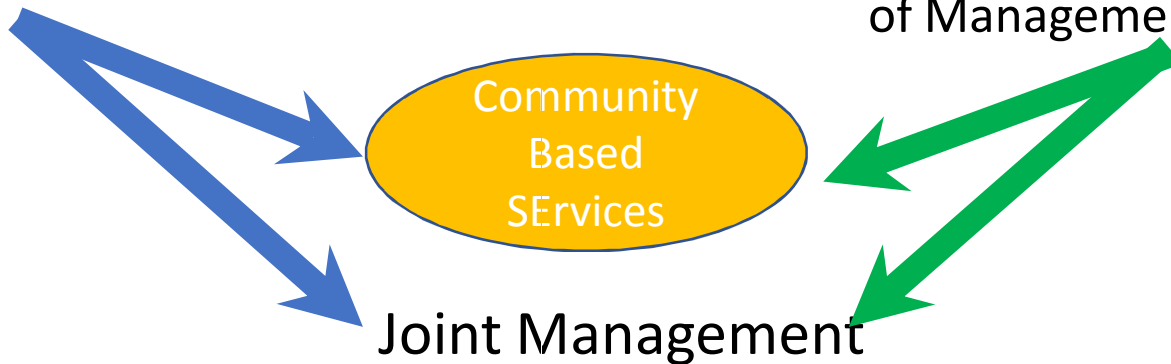
DBPeds

Definitive Diagnosis, Creation
of Management Plans



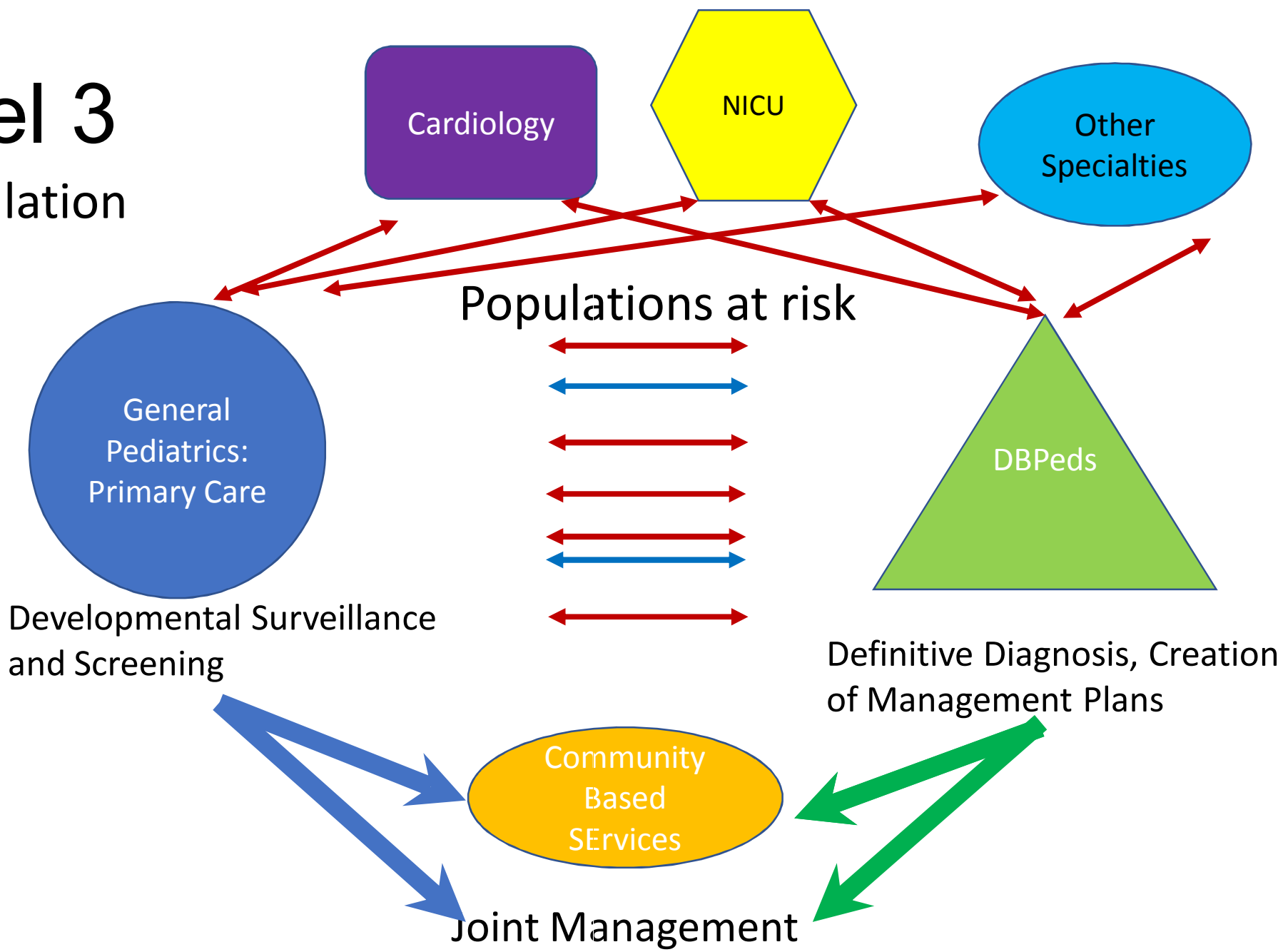
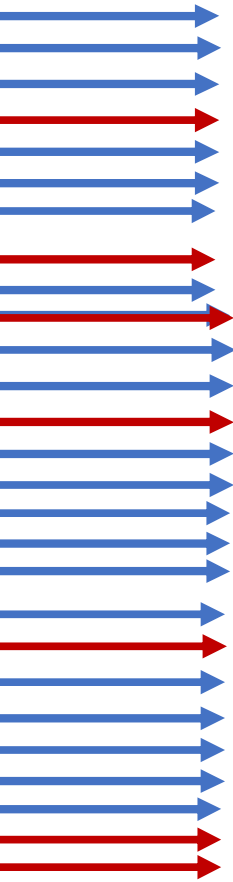
Community
Based
Services

Joint Management



Model 3

General population



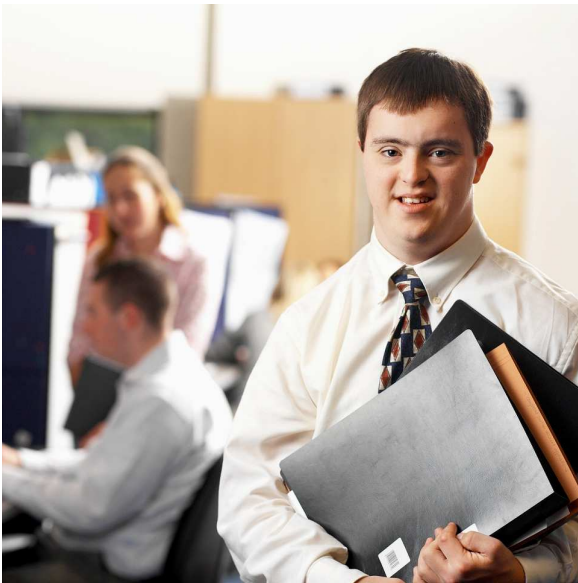
Primary Care Medical Home

- Approach for providing comprehensive, coordinated health care within the primary care setting
- Partnerships between patients, physicians, subspecialists, and community providers
- Central resource for the patient and the family
- 5 primary functions (Agency for Healthcare Research and Quality)
 - Comprehensive care
 - Patient-centered, and by extension in pediatrics, family-centered care
 - Coordinated and culturally conscious
 - Accessible service
 - Quality and safety

Establishing Priorities

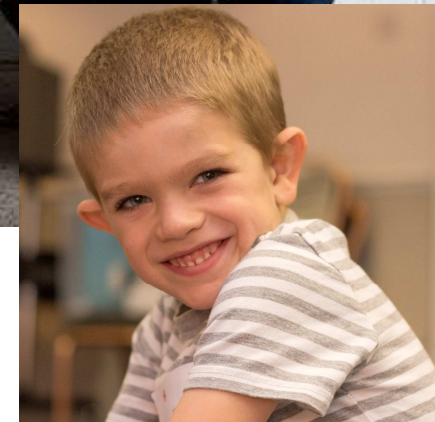


- Old Paradigm
 - Health
 - Restricted participation
 - Limited inclusion

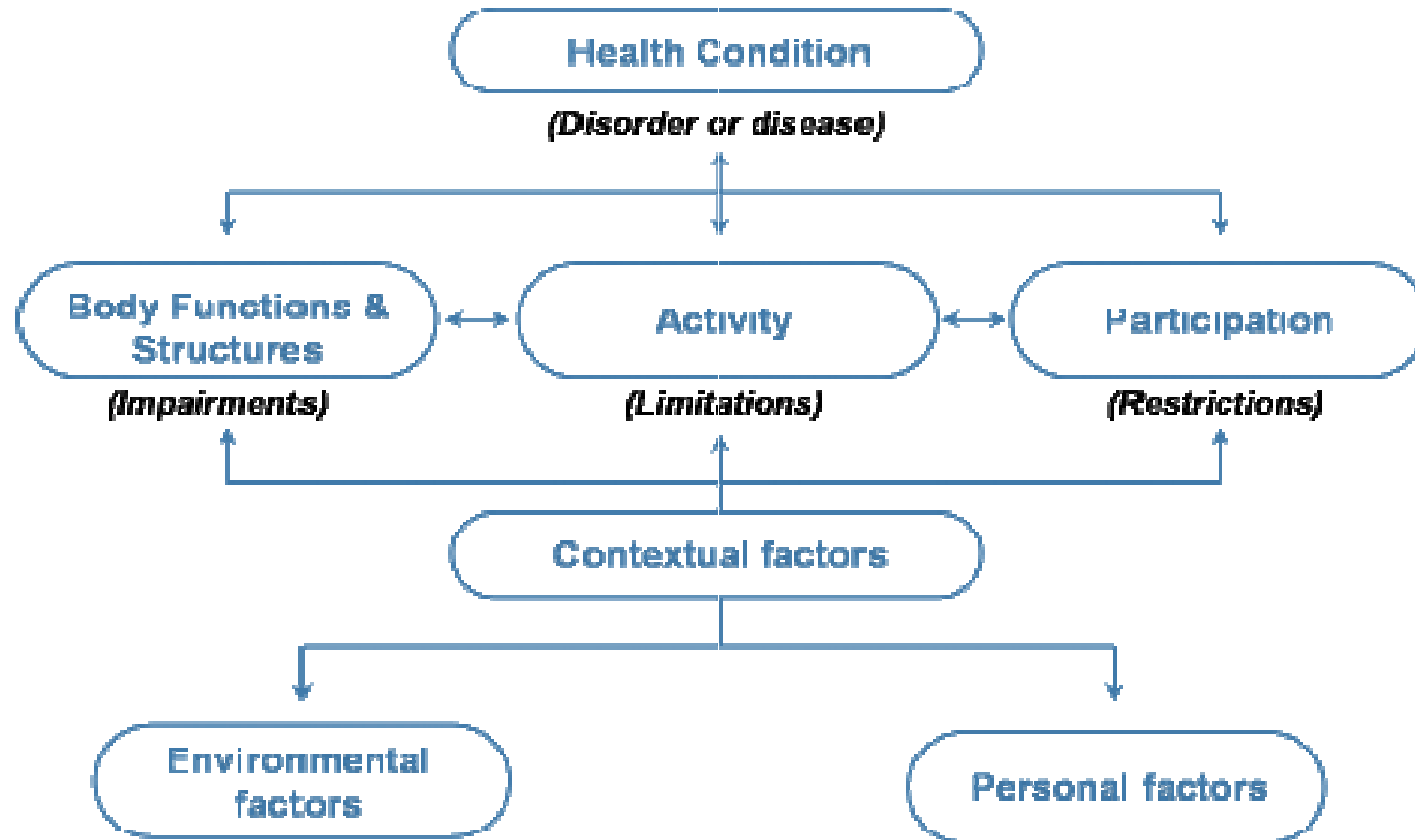


- New Paradigm
 - Inclusion
 - Contribution
 - Health

Common Approaches



International Classification of Functioning, Disability and Health



Focus Areas

- Self Care
 - Feeding, eating, nutrition
 - Toileting
 - Sleep
- Other Activities
 - Learning
 - Communication
 - Handling tasks and demands
- Participation
 - Education
 - Recreation and Leisure



Section of DBP within AAP

Training Programs

Journal of Developmental and Behavioral Pediatrics

Society of Developmental-Behavioral Pediatrics

Research Network

US History of DBP Subspecialization

Section of Developmental and Behavioral Pediatrics, American Academy of Pediatrics

- Founded in 1960
- For AAP members
- Mission: to strengthen collaboration between primary care pediatricians, developmental and behavioral subspecialists, and families to ensure children receive comprehensive DB pediatric care.
- Members: AAP fellows, specialists, national/international physicians with >50% to care of children with DB issues, other professionals
- Provides educational forum at AAP for discussion and dissemination

American Academy
of Pediatrics



DEDICATED TO THE HEALTH OF ALL CHILDREN®

Training programs

- Advanced training began 1960s within pediatrics and psychiatry
- 1970s, Task Force on Pediatric Education made training of pediatricians about development and behavior one of its highest priorities
- Sub-specialization of pediatrics
 - Emphasis on the full range of issues from variations of normal development to severe disability
 - Ability to intervene both at biological and psychosocial levels
 - Funding



MCHB Emphasis on Values

- Inclusion: the right to belong
- Humanism: the right to be different
- Clinical care that supports humanism and inclusion at all levels
 - Family-centered care
 - Cultural competence/humility
 - Community integration
 - Shared decision-making
 - Care Coordination
 - Interdisciplinary

Society for Developmental and Behavioral Pediatrics

- Grew from collaboration of fellowship training directors at Society for Pediatrics Research
- Officially organized 1982
- Initial membership
 - Interprofessional, predominantly psychology and pediatrics
 - Subspecialty pediatricians with advanced training (in pediatrics, psychiatry, neurology)
 - General pediatricians with documented interests



SDBP – Current Membership Criteria

- Regular membership
 - Research. Scholarly inquiry evidenced by one first-authored published article or chapter relating to developmental and/or behavioral issues.
 - Teaching. Developmental-behavioral pediatrics teaching as a Clinical Faculty appointment at an accredited teaching institution
 - Clinical Practice. >1/2 time spent in clinical practice of developmental-behavioral pediatrics
 - Board Certification: The applicant has received board certification in developmental and behavioral pediatrics or neurodevelopmental disabilities
- Associate membership
 - Non-doctorate professional
 - Low and middle income countries
 - Trainees



Publications

- Journal of Developmental-Behavioral Pediatrics
 - Originally published in 1980
 - Transition to official journal of the SDBP in 1982
 - Typical table of contents
 - Original Articles
 - Review articles
 - Challenging cases
 - Commentaries
 - Book reviews
- SODBP Newsletter

The logo for the Journal of Developmental & Behavioral Pediatrics is displayed on a blue rectangular background. The text is white and arranged in four lines: "Journal of" in a smaller font, "& Developmental" in a larger font with the ampersand overlapping the "D", "Behavioral" in a similar large font, and "Pediatrics" in a smaller font at the bottom.

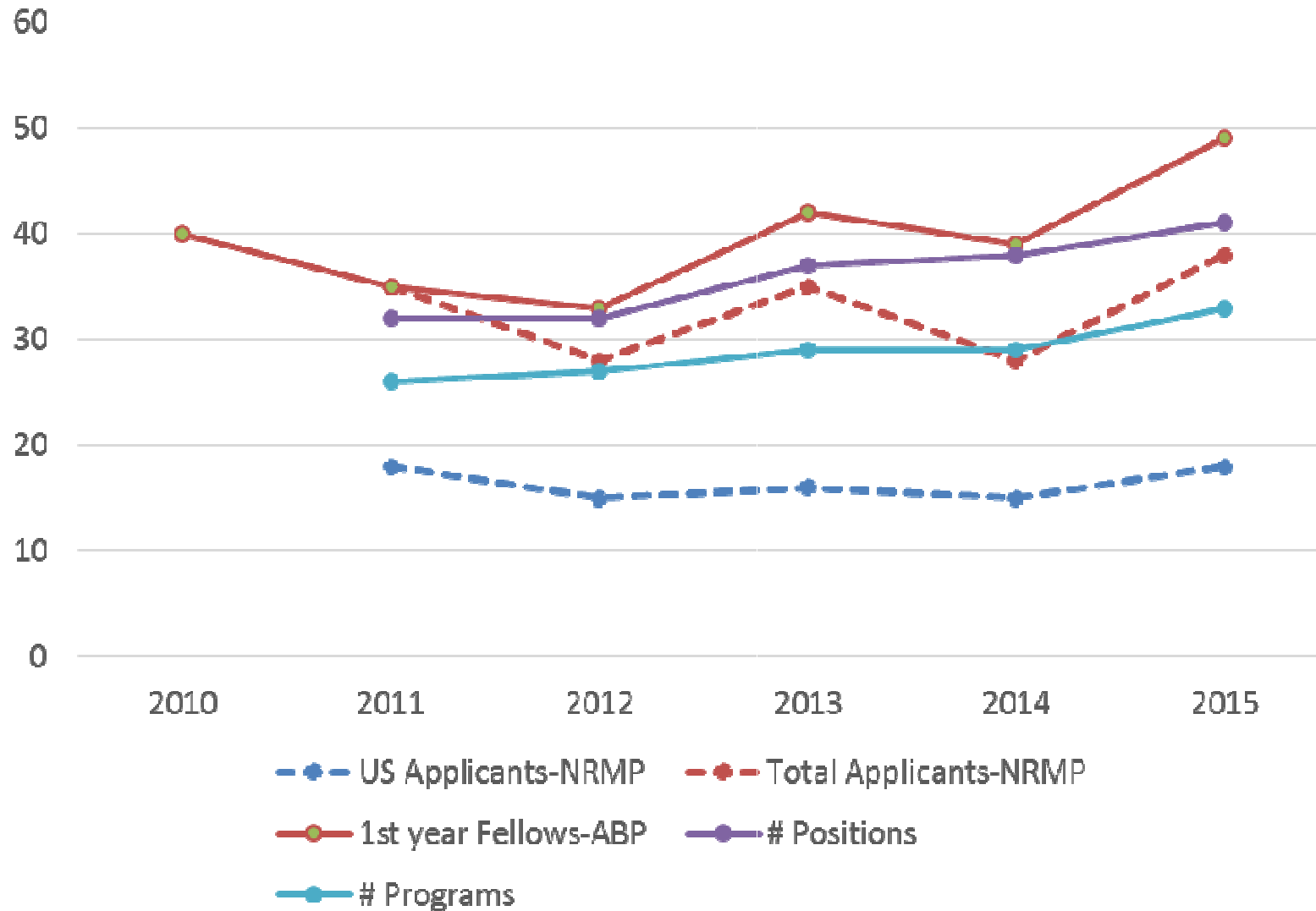
Journal of
& Developmental
Behavioral
Pediatrics

Board Certification

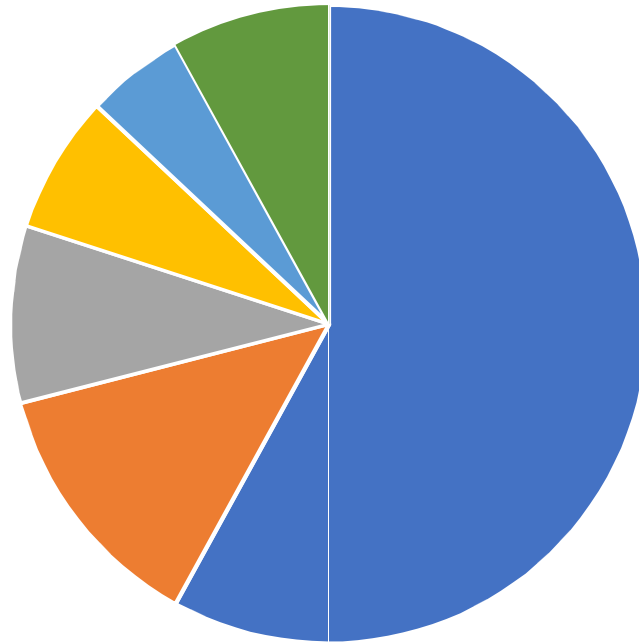
- Petition to American Board of Pediatrics and American Board of Medical Subspecialists initially rejected
- Support from General Pediatrics
- ACGME required training in DBP for pediatric residents
- ABP agreed to board certification of subspecialists
 - Creation of Sub-Board
 - Define core competencies
 - Define training requirements for subspecialists
 - Establish criteria for credentialing training programs
 - Create certification examination
- 2002 First board-certified subspecialists



Fellowship Training



Activities of DBPs



■ Direct Patient Care

■ Administration

■ Teaching

■ Research

■ Committee

■ Other

Research Network



- Mission: to conduct collaborative, interdisciplinary research in developmental and behavioral pediatrics that advances clinical practice, supports research training, and optimizes the health and functional status of children with developmental and behavioral concerns and disorders, including children with autism spectrum disorders and other developmental disabilities.
- Partnership between 14 of the country's leading DB pediatrics clinical, training, and research programs and Society for Developmental-Behavioral Pediatrics (SDBP)
- Investigates assessment practices, biomarkers, and psychosocial and pharmacological interventions for symptoms that occur commonly across many neurodevelopmental disorders.

Structure of DBPNet



- Executive committee
 - PI, Project Manager, Research Director, Subcommittee Chairs, Elected Chair Person
 - Meets monthly
- Steering Committee
 - Executive committee
 - Site lead for 14 sites
 - Member of SDBP
- Subcommittees
 - Research Protocol Development and Review
 - Dissemination

Research Nodes

- Definition
 - Leadership team
 - Members of faculty, clinical staff from sites
 - Organized to conduct research
- Current nodes
 - Autism Spectrum Disorder
 - ADHD
- Future
 - Educational scholarship
 - Health services

Studies



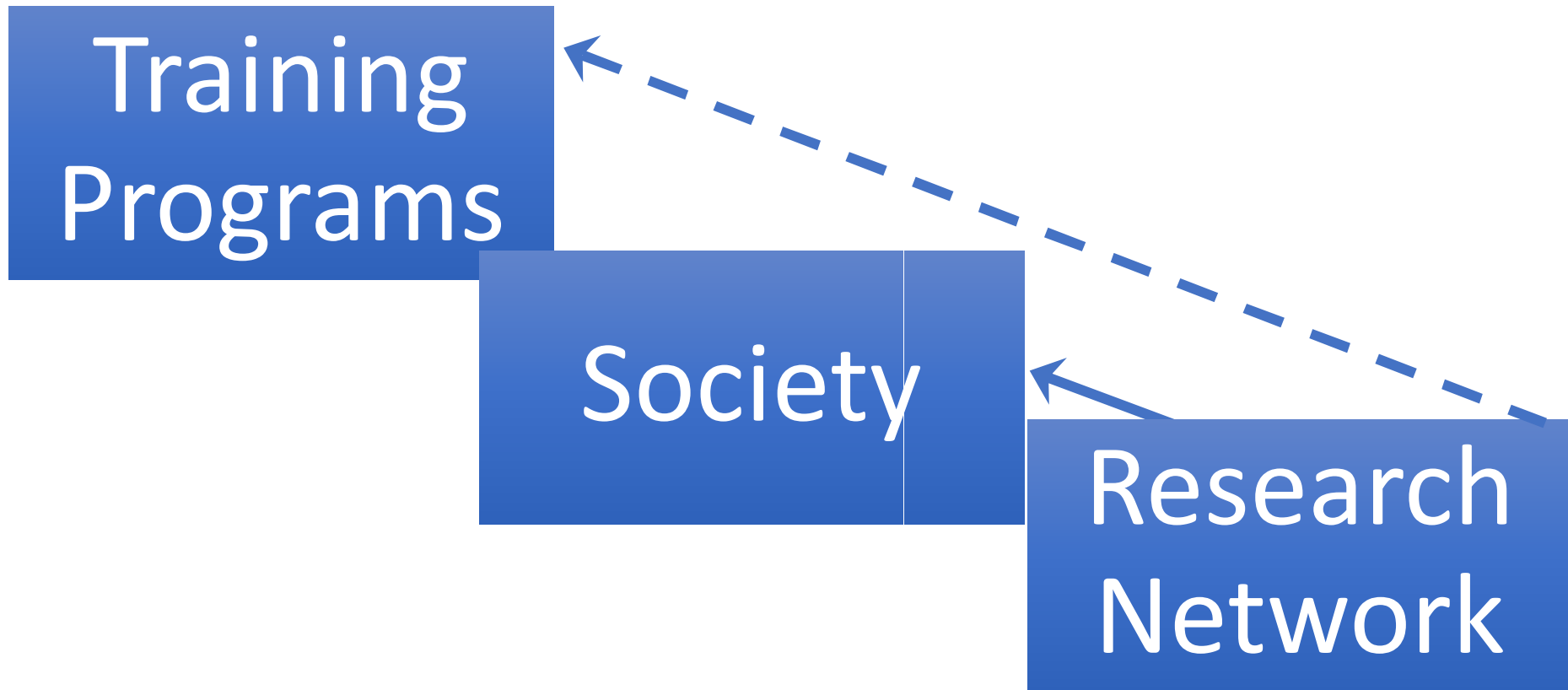
- Practice variation in the assessment and management of ADHD
- Nature of referrals to outpatient services at DBPNet sites
- Extracting Electronic Health Record Data on psychotropic medications
- Preliminary validation of PROMIS measures in children with ASD
- Family navigation to reduce disparities in timely ASD diagnosis and access to early intervention
- Maternal immune markers in ADHD
- Educational interventions to increase Shared Decision-Making

Considerations for Subspecialization in Argentina

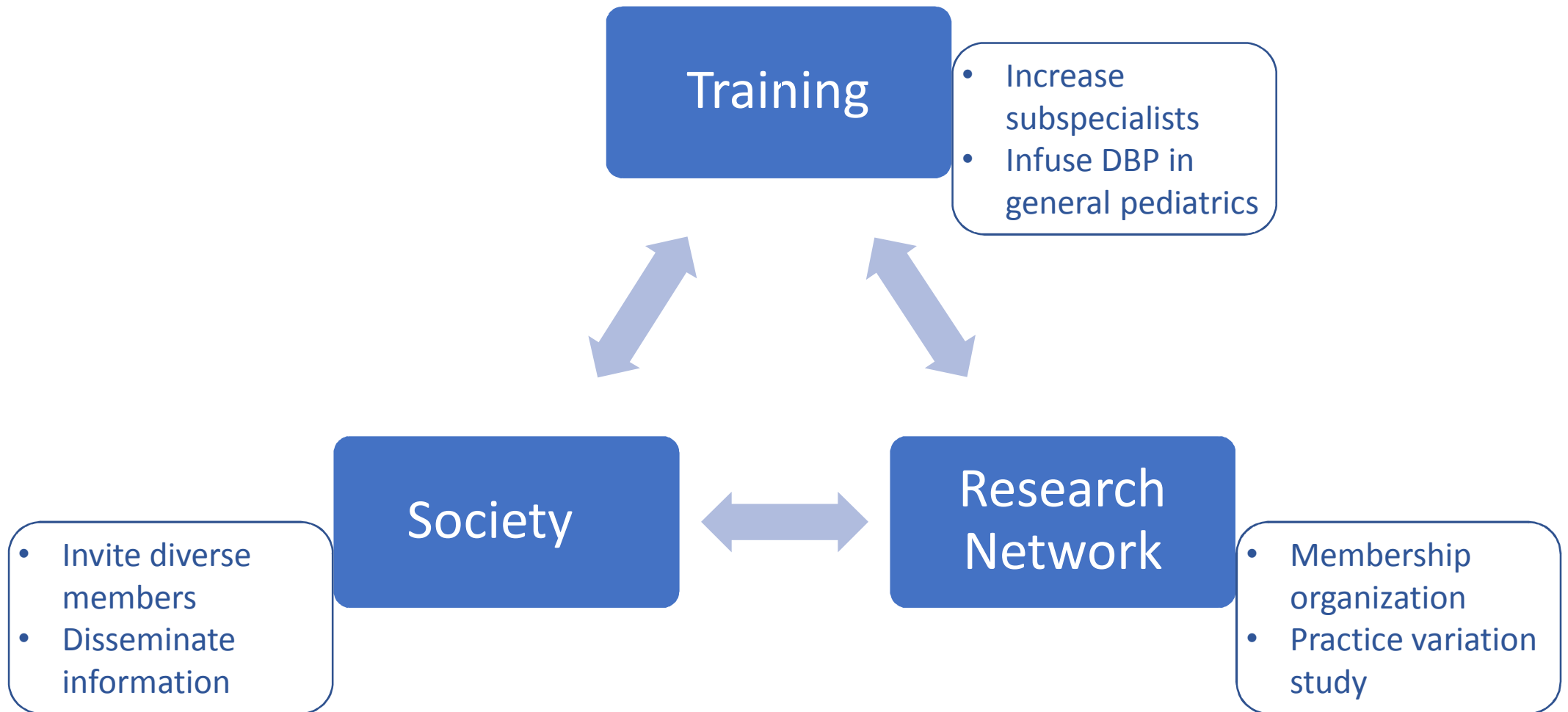
Issues in Argentina

- Support for subspecialists
 - Among other physician groups
 - Health care insurance and other payments
- Training programs
 - Subspecialty
 - Infusion in medical school, residencies, continuing medical education
- Society
 - Membership
- Journal and publications
- Research interest

Options for DBP in Argentina



Options for DBP in Argentina



Summary

- Pediatrics is evolving in US and world wide
- Increasing need developmental subspecialists
- Importance o the Primary Care Medical Home
- Many pathways to develop the field of Developmental Pediatrics in Argentina
- Open for Discussion



Closing Poem

You have seen a herd of goats going down to the water.

The lame and dreamy goat brings up the rear.

There are worried faces about that one, but now they're laughing,
because look, as they return, that one is leading.

There are many different ways of knowing.

The lame goat's kind is a branch that traces back to the roots of
presence.

Learn from the lame goat, and lead the herd home.

Mewlana Jalaluddin Rumi



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Thanks!

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