

Collaborations and Growth with Physical Medicine & Rehabilitation and Embedded Cardiac Psychological and Therapeutic Services in a Multidisciplinary Cardiac Neurodevelopmental Follow up Program

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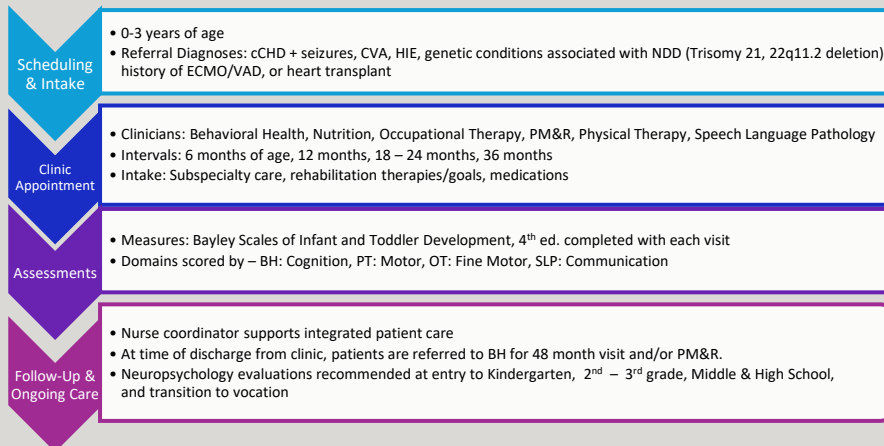


Introduction

- Cardiac neurodevelopmental follow-up programs vary by institution.
- Children with complex congenital heart disease (cCHD) are at increased risk for neurodevelopmental disabilities, as well as neurological sequelae that can affect mobility, feeding, and behavior; therefore robust multidisciplinary collaboration is essential.
- Integrating cardiac psychological and therapeutic services with physical medicine & rehabilitation (PM&R) has improved access to disability-related care including rehabilitation diagnoses, and orthosis and equipment prescription.

Methodology

- Creation of multidisciplinary clinic with inclusion of PM&R, psychology, physical therapy, occupational therapy, speech language pathology, and nursing coordination.
- Prioritize patients with cCHD and corresponding neurological injury, genetic conditions, or extensive medical courses at heightened risk.
- Patients are seen at recommended CNOC intervals in early childhood.
- Assessments include neuromotor evaluation, Bayley-4 (BSID 4) testing.
- Referrals for targeted therapies, equipment needs and neurodevelopmental outcomes were assessed.

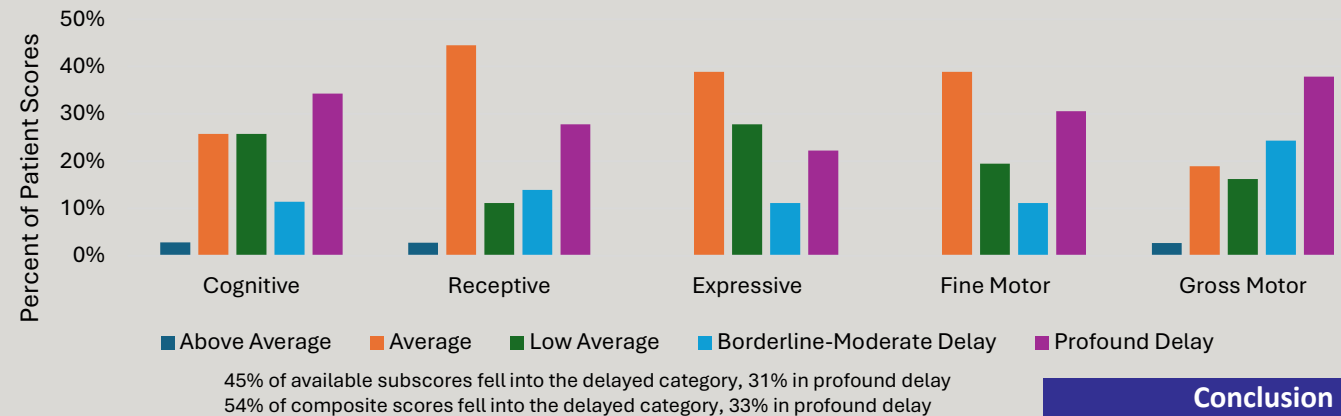


Patient Characteristics	
	N (%)
Male sex	21 (60%)
Age at visit (months)	20.9 (+/- 11)*
Single ventricle heart disease	8 (22.9%)
Status post heart transplant	2 (5.7%)
Genetic condition	20 (57.1%)
Prematurity < 37 weeks	6 (17.1%)
History of seizure	7 (20%)
History of stroke	6 (17.1%)
ECMO	5 (14.3%)
*mean (SD)	

- From June 13, 2024 – June 12, 2025, a total of 35 patients were evaluated in this clinic
- 5 patients had > 1 visit with 40 total encounters

Results

BSID 4: Subscale Score Breakdown



Conclusion

- Cardiac-focused interdisciplinary collaborations through neurodevelopmental follow-up programs are expanding across institutions.
- Coordinated efforts between embedded cardiac therapeutic teams and rehabilitation specialists enhance access to disability-related care, an area particularly at-risk in early childhood for children with cCHD.
- Multidisciplinary neuromotor evaluations and standardized assessments including the Bayley-4, have enabled earlier identification of rehabilitation and mobility specific interventions.
- Further analysis of neurodevelopmental outcomes will be explored as number of visits increases

Patient Referrals

