

Infant and Parent Therapy Services in the Neonatal Intensive Care Unit (NICU): Funding Source Type Predicts Robustness of Mental Health Services while Current Rehabilitation Services Staffing Exceeds Minimum Recommended Standard

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Introduction

- Parents experience high rates of traumatic stress, depression, and anxiety.^{1, 2}
- Infants admitted to NICUs are at greater risk for later neurodevelopmental sequelae.³
- Mental health and rehabilitation services in the NICU may ameliorate family and infant risk.^{4, 5}
- Aim 1:** What patient and hospital factors predict robustness of NICU mental health services?
- Aim 2:** How does actual NICU rehabilitation services staffing compare to the recommended standard?

Methods

- A survey of NICU-based mental health, occupational therapy, physical therapy, and speech-language pathology services was distributed through the National Network of NICU Psychologists listserv.
- 31 programs provided complete data.
- Aim 1:** We conducted multiple regression analyses to identify patient and hospital factors that contribute to availability of psychologists, psychiatrists, and associated trainees in the NICU.
- Aim 2:** We computed a recommended level of rehabilitation support based on an algorithm from Craig and Smith⁶:

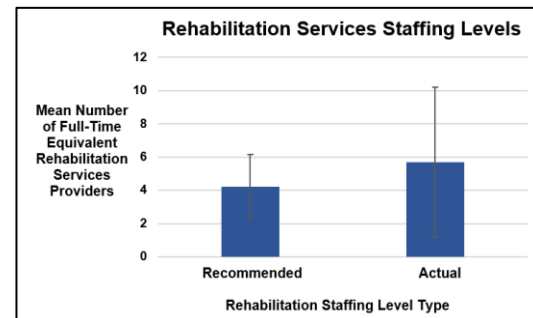
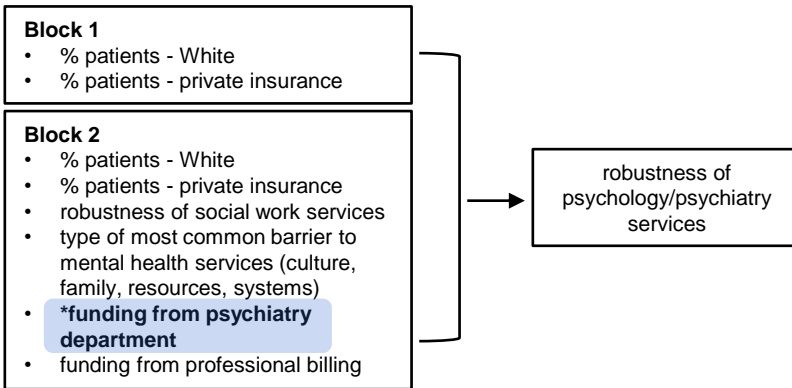
[annualized average daily census] x 0.90 = [number of potential referrals]

potential referrals / 13-15 (infants[range to allow for higher acuity]) = FTEs

A paired samples t test was utilized to evaluate how actual staffing of NICU rehabilitation services compares to the recommendation.

Results

- Aim 1 (n = 24):** The presence of funding from a psychiatry department significantly predicted increased robustness of NICU mental health services ($\beta = .57, p < .05$).
- Aim 2, (n = 31):** Actual staffing of rehabilitation services in NICUs ($M = 5.68, SD = 4.52$) is significantly higher than the recommended ratio ($M = 4.22, SD = 1.92, t(30) = 2.31, p < .05$).
 - Post hoc analysis underscored that robustness of mental health services was not significantly correlated with actual staffing of rehabilitation services in NICUs.



Discussion

- Funding support from a psychiatry department represents a critical form of infrastructural investment that promotes NICU mental health services.
- Parent-directed services are underdeveloped.
- NICU programs appear to have an appreciation of the need for neurodevelopmental support without a full understanding of the importance of the parental role.
- There may be a lack of alignment between mental health and rehabilitation services.

References

References are available upon request by emailing Elizabeth Loi at eloi@stanford.edu.

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Research Opportunity

Individuals interested in participating in this study can find the survey here:

