

OVERALL AIM: To identify contributing factors affecting early diagnosis and timely referral for patients diagnosed with a central nervous system (CNS) tumor at INEN in Lima, Peru, including understanding caregivers' and health care professionals' perspectives				
Inputs	Activities	Outputs	Outcomes	Impact
- Personnel - Education/training - Equipment and supplies - Funding	- Design, validate, and pilot research tools for mixed methods study - Conduct interviews with healthcare workers and caregivers of children with cancer to identify barriers in the diagnosis and referral process - Analyze medical record data to describe diagnostic intervals and epidemiology of pediatric patients with newly diagnosed CNS tumors - Establish a framework describing the factors contributing to early diagnosis and timely referral - Design intervention strategies to improve referral and coordination of timely care	- Research tools – semi-structured interview guide for caregivers, semi-structured interview guide for healthcare workers, case report form - Documentation of healthcare workers' and caregivers' perspectives - Matrix document - Framework - Proposal for intervention strategies	Short-term - Identification of demographic characteristics of patients with CNS tumors - Identification of epidemiology and disease characteristics of newly diagnosed patients with CNS tumors - Improved understanding of caregivers' and health care workers' knowledge, attitudes, and beliefs about CNS diagnosis and referral Intermediate - Identification of socioeconomic, cultural, and psychological contributing factors for delayed diagnosis - Development and dissemination of a framework of determinants for diagnosis and referral for patients with CNS tumors - Improved understanding of factors influencing diagnosis delays and the referral process Long-term - Development of intervention strategies for referral coordination and timely treatment - Establishment of a multi-disciplinary, inter-institutional working group to improve referral processes, promote early detection, educate caregivers, and provide family-centered support	Improved timeliness of care for children with CNS tumors - Implementation of policies and interventions to reduce diagnosis and referral intervals - Reduction in diagnostic delays for children with CNS tumors - Reduction in patient referral delays after surgery for children with CNS tumors - Reduced neurological impairments in children with CNS tumors Strengthened collaboration among hospitals within the national cancer network Improved survival for children with CNS tumors