

# Using participatory action research to co-design an emergency department model of care for youth in Australia's Northern Territory.

## Abstract

Youth in the Northern Territory (NT), particularly First Nations youth, have high rates of Emergency Department (ED) visits and hospitalisations and experience some of the highest rates of mental health-related hospitalisations, child protection, and youth justice involvement in the country. There are unique opportunities for prevention and linkages to care; however, ED's are often not designed or equipped to adequately address the needs of young people. This research describes how to co-design a new ED model of care using Participatory Action Research with young people, their voices, experiences, and perspectives central to the design. Our approach aimed to ensure that Indigenous Knowledges guided the design and were applied in a way that serves all young people. The co-design process took place over eight workshops, alongside PAR qualitative work with youth in the community and the ED workforce to create a novel model of care to be piloted for youth accessing the ED. Values and principles outlined the co-design team's approach to the PAR project, and naming our priorities provided a framework to guide the co-design. Other activities included understanding the ED environment, analysing NT health data, journey mapping, and a QI initiative. The co-design team also assisted in designing focus group guides and knowledge translation of qualitative research, adapting, changing direction, and refining the model based on findings. Our project demonstrates how PAR and co-design can create context-specific knowledge production and tailored solutions for healthcare innovation. It highlights the potential for inclusive youth-led designed healthcare models to drive meaningful change in a Western health system whilst focusing on Indigenous knowledges and youth leadership.