**Introduction:** Queensland is the most decentralised state in Australia. The ‘North West Queensland’ (NWQ) GP training region incorporates the bulk of its land area, most of its rural towns, and all of its remote communities. Currently the general practice needs of the NWQ region, especially in the more rural and remote communities, are not being fully met. Generalist Medical Training (GMT) has a vision to improve health for the communities it serves through providing excellent General Practice training using a distributed training model. Generalist Medical Training (GMT) is an innovative, regionally distributed training provider for general practitioners and is part of the James Cook University College of Medicine and Dentistry (JCU-CDM). The strategic intent of the GMT program is ‘better health for regional Queensland communities through excellent General Practice training.

**Objectives:** This study applied geo-spatial analysis technology in order to identify priority areas where additional GP training practices/posts could meet the needs of underserved areas and to describe both the impact of GP training on registrars and also the impact of registrars on their communities.

**Method:** There were a total of 367 accredited GP training posts identified in the NWQ region and mapped against town based population socio-economic index (SEIFA) as an indicator of community need. Cross-sectional surveys of registrars at entry, during their training and at exit to determine practice intent, training experiences and self-assessment of ‘work-readiness’. Fellows are being tracked to determine scope of practice, distribution, retention and impact on their communities over the longer term.

**Results:** The analysis found 83% of the Indigenous and 79% of the non-Indigenous population live within 10km of an accredited NWQ practice. The practices were located close to the poorest third of the population while only 6% - 15% of less disadvantaged people live close to these practices. Based on this analysis areas of greatest need were identified. GMT local nodes worked closely with their local communities to establish eight new training posts where they were most needed. New Advanced Skills posts in Paediatrics, Acute Internal Medicine, Aboriginal and Torres Strait Islander health and Mental Health have been established to meet increasing need in priority areas. Baseline data on key indicators has been collected from the 2016 graduates and the 2016 - 2017 cohorts. Preliminary data found that 83% of respondents thought their training had positively influenced their attitude to working in rural and remote communities while 72% felt that they had made an impact on local health care. All said they were confident/very confident their training had prepared them to work anywhere in their region. Key retention factors were job satisfaction and family and 50% intended to continue working in outer regional and remote areas. thought their training had impacted their own values. 94% of registrars entering training believed community care would improve health equity and working in rural and remote general practice would make an impact on health outcomes.

**Conclusion:** This study has pivotal outcomes for future community need driven approaches to the identification and accreditation of new GP training posts in the NWQ region. The study informed future priority areas for the provision of GP training in order to increase access to general practice and provide registrars with the skills required for working in underserved areas. The evaluation framework will identify key graduate characteristics, their career intentions and the impact of the GMT training program. These findings have broader implications as evidence that socially accountable health professional institutions can produce graduates with the ability and commitment to work in medically-underserved areas. Given the world-wide difficulties attracting and retaining a health workforce in rural areas this study may inform strategies to reduce the maldistribution of doctors.