Improving Access to Sexual Health Services in General Practice Using a Huband-Spoke Model: A Mixed-Methods Evaluation

Jason J. Ong^{1,2}, Christopher K. Fairley^{1,2}, Ria Fortune¹, Melanie Bissessor¹, Chantal Maloney¹, Henrietta Williams¹, Adrian Castro³, Lea Castro³, Jason Wu³, Pei Sue Lee⁴, Eric P.F. Chow^{1,2} and Marcus Y. Chen

¹Melbourne Sexual Health Centre, Alfred Health, Melbourne, Australia ²Central Clinical School, Monash University, Melbourne, Australia ³Kings Park Medical Centre Hillside, Hillside, Australia ⁴Tarneit Family Medical & Dentral Centre, Tarneit, Australia

Background:

Improving access to sexual health services is critical in light of rising sexually transmitted infections (STIs). We evaluated a hub-and-spoke model for improving access to sexual health services in three general practices in Victoria, Australia.

Methods:

We created a hub-and-spoke model where a network with a central facility (Melbourne Sexual Health Centre) that provided a full array of sexual health primary and specialist services ("the hub") supporting geographically dispersed secondary services ("the spokes"), which provides primary but more limited specialist service. Using a mixed-methods approach, we evaluated the impact on HIV and STI (chlamydia, gonorrhoea, syphilis) testing. Segmented linear regression analysis was conducted to examine the trends in the total HIV/STI tests pre- (from January 2019 to June 2020) and post-implementation (from July 2020 to July 2021). We evaluated the feasibility and acceptability of integrating this model into the general practices using semi-structured individual interviews.

Results:

There was a statistically significant rise in testing for HIV and STIs in all general practices: post-implementation, there was an increase of an average of 11.2 chlamydia tests per month (p = 0.026), 10.5 gonorrhoea tests per month (p = 0.001), 4.3 syphilis tests per month (p = 0.010), and 5.6 HIV tests per month (p = 0.010). Participants reported increases in knowledge level and confidence in offering STI testing and managing a greater variety of sexual health cases.

Conclusion:

This study demonstrates the feasibility of implementing a hub-and-spoke model to enable general practitioners to deliver sexual health care with support from a sexual health specialist service.

Disclosure Of Interest Statement:

All authors declare they do not have any conflicts of interest.