

Institution: Queen's University Belfast		
Unit of Assessment:3		
Title of case study: Improving sexual healthcare: Collaborating with partners in practice and policy		
Period when the underpinning research was undertaken: 2012 – 2020		
Details of staff conducting the underpinning research from the submitting unit:		
Name(s): Dr Carmel Kelly Professor Maria Lohan	Role(s): CK: Joint appointment Lecturer/nurse consultant ML: Professor of Social Science and Health	Period(s) employed by submitting HEI: CK: Employed since 2013 ML: Employed since 2005
Period when the claimed impact occurred: 2013 – 2020		
Is this case study continued from a case study submitted in 2014? N		
<p>1. Summary of the impact</p> <p>Kelly and Lohan have improved the quality of sexual healthcare provision for the general population in Northern Ireland (NI) and for all prisoners in NI, and their research is shaping the World Health Organisation's (WHO) global agenda for the improvement of sexual healthcare by effective engagement with males.</p> <p>To overcome the limited capacity of specialist hospital-based sexual healthcare, the Queen's University Belfast (QUB) team generated and evaluated a cost-effective community-based model which expanded access to testing beyond the hospital setting. This community model of care was adopted by 49 of 54 GP practices in a Trust serving 20% of the NI population and led to improved health outcomes.</p> <p>The QUB team contextualised and adapted the community model of care for <i>all</i> prisoners in NI, with particular focus on male prisoners (97% of prison population is male), thereby addressing the sexual healthcare needs of one of society's most under-served high-risk groups.</p> <p>The QUB team's long-standing specialist research expertise in the engagement of males in sexual health led to a commission by the WHO to scientifically synthesize the global evidence to shape the WHO's global policy agenda on engaging males in sexual and reproductive health and rights.</p>		
<p>2. Underpinning research</p> <p>Kelly and Lohan have conducted research on community sexual healthcare provision for the general population, on prison sexual healthcare provision, and on the global evidence relating to engaging males in sexual healthcare.</p> <p>Community</p> <p><u>The general challenge.</u> More than one million sexually transmitted infections (STIs) are acquired every day worldwide. STIs are especially prevalent among young sexually active people, 5% of whom are estimated to have an STI. Chlamydia is the most common STI and while it can be easily treated, there are often few symptoms, so people do not realise they have it. If left untreated, it may cause pelvic inflammatory disease and infertility, as well as an increased vulnerability to acquiring HIV. Early detection and treatment are much more cost effective than late detection and treatment in terms of reducing complications and onward transmission.</p>		

Addressing the general challenge in Northern Ireland. Kelly held a joint-appointment as lecturer in QUB and as Nurse consultant in the South Eastern Health & Social Care Trust (SEHSCT). Alongside Trust colleagues in 2013, Kelly co-led the development and evaluation of a new community model of care for the early detection and treatment of STIs in NI. This model of care was designed to overcome the constraints of specialist hospital-based care by enabling GPs and practice nurses in primary care to provide comprehensive asymptomatic STI testing to patients over 16 years of age, including appropriate counselling and partner notification (R1).

Evaluation of the first six months based on both clinical and laboratory data, in partnership with the Public Health Agency for NI, demonstrated that the community model was viable in providing accessible, cost effective, and clinically robust care to a wider population (R1). Of particular note, was the previously undetected high positivity rate for chlamydia, particularly among young men.

Prison

Kelly and Lohan examined how this community model of care could be adapted to comprehensively target vulnerable and high-risk groups who may otherwise be insufficiently served. Specifically, they focused on prison populations which are globally recognised to have higher rates of STIs combined with complex health and social care needs. In a multi-stage process, Kelly and Lohan conducted research to transform prison sexual healthcare.

First, Kelly and Lohan developed, implemented and evaluated a model of continuous, nurse-led sexual health services within all prisons in NI through research funded by the Burdett Trust for Nursing and a partnership with prison healthcare. This is the first nurse-led service of its kind reported in the international literature, designed to improve the sexual healthcare of all prisoners [R 2].

Second, to overcome the stigma of male prisoners attending this new nurse-led in-prison sexual healthcare service, the team used rights-based action research to co-design an intervention to promote sexual health. The intervention, designed with and for prisoners, comprised a video and posters (*Dick loves Doot*) [R3].

Third, to more fully understand the broader relationship and sexuality education (RSE) needs of male prisoners, the team conducted research with young male offenders (R4). Building on this and Lohan's earlier successful NIHR-funded trial of an RSE programme designed to especially target males in UK schools entitled *If I were Jack* (R5), Lohan & Kelly were awarded an MRC grant to research and co-design with young male prisoners and Barnardos the first bespoke RSE programme for young offenders entitled "[If I Were a Dad](#)"

From Northern Ireland to the world

Engaging males in sexual and reproductive health is also a global priority for the WHO. To inform WHO's global leadership in future policy and programming on male engagement in sexual and reproductive health, the WHO commissioned Professor Lohan and team to conduct systematic reviews of the global evidence and generate Evidence-and Gap-Maps (R6 & R7). According to the WHO's Director of Sexual and Reproductive Health, Professor Lohan and team were selected to produce the underpinning evidence because of their research track record on male engagement in sexual health:

"The work was led by Professor Maria Lohan and her team, who were selected based on a competitive call for expressions of interest. Their selection was based on: their in-depth knowledge of the literature on masculinities and male engagement; their methodological expertise in systematic reviews; and their track record of delivering policy relevant research briefs". (Director of SRH, WHO, Source (S)10)

3. References to the research

- R1. Kelly, C., Johnston, J. & Carey, F. (2014) Evaluation of a partnership between primary and secondary care providing an accessible Level 1 sexual health service in the community. *International Journal of STD & AIDS*.
<https://doi.org/10.1177/0956462413519430>
- R2. Kelly, C., Templeton, M., Allen, K. & Lohan, M. (2020) Improving the sexual health of men in prison *Journal of Clinical Nursing* <https://doi.org/10.1111/jocn.15237>
- R3. Templeton, Kelly and Lohan (2019) Developing a Sexual Health Promotion Intervention with Young Men in Prisons: A rights-based participatory approach *Journal of Medical Internet Research* <https://doi.org/10.2196/11829>
- R4. Templeton, M., Lohan, M., and Linden, M. (2016) The relationship and sexuality education needs of young offenders. [Report to Northern Ireland Prison Service](#).
- R5. Lohan, M. et al. (2018) Can teenage men be targeted to prevent teenage pregnancy? A feasibility cluster RCT in schools. *Prevention science* <https://doi.org/10.1007/s11121-018-0928-z>
- R6. Ruane-McAteer et al. (2019) Interventions addressing men, masculinities and gender equality in sexual & reproductive health & rights: an evidence-and-gap map and systematic review of reviews. *BMJ Global Health* <http://dx.doi.org/10.1136/bmjgh-2019-001634>
- R7. Ruane-McAteer et al. (2020) Gender-transformative programming with men and boys to improve SRHR: a systematic review of intervention studies. *BMJ Global Health* <http://dx.doi.org/10.1136/bmjgh-2020-002997>

4. Details of the impact

Kelly and Lohan's research has led to: the re-organisation of community sexual healthcare provision, the training of nearly 250 healthcare professionals and consequent improved health outcomes for the general population; the implementation in prisons of a new sexual healthcare service, associated health promotion strategy and educational service and consequent improved health outcomes for prisoners; and the generation of global agenda setting by the World Health Organisation on how to best engage males in sexual healthcare.

Community

Re-organisation of sexual healthcare provision. Kelly and Lohan's research on seven GP practices demonstrated how a new community-based model of sexual healthcare could be implemented. This led to major financial investment from the NI Health & Social Care Board for the roll out of the model to an additional 42 practices, now covering 49 of 54 GPs in a Trust that serves 20% of the NI population. An essential feature of this widespread roll-out is the upskilling of health professionals to facilitate the effective delivery of this new service. Queen's University led the training in the evidence-based community/primary sexual healthcare model to key professionals.

"The joint appointment in QUB and SEHSCT of Dr Kelly as Consultant Nurse and lecturer has strengthened the Queen's team in providing quality training programmes for GPs, practice nurses and prison healthcare in effective sexual health promotion within patient consultations. To date, almost 200 medical and nursing staff from 48 GP practices, along with 30 prison nursing staff have completed training". (S1, Director of Nursing SEHSCT)

"I am now more confident in discussing sexual health with patients". (Nurse, S2)

Improved health outcomes. The roll out of the community model of care to 49 GP practices increased capacity to test and treat from 288 per annum patient consultations for the whole Trust in 2012 (pre-implementation) to 817 per annum consultations in 2018 (post-implementation), as measured by the Health & Social Care Board for NI (S3). Improving access to testing increases earlier detection of asymptomatic STIs, resulting in earlier treatment and preventing onward transmission and long-term sequelae. The largest impact in the early detection and treatment of STIs in NI is in relation to chlamydia. Initially as sexual healthcare expanded in GP practices, Trust data showed an increased chlamydia detection

rate across GP Practices with minimal decrease in the hospital-based detection rate, reflecting a new and additional burden of previously undetected infection within the community (see Figure 1). Since 2017, diagnoses in GP Practices (n= 198) have overtaken the specialist sexual health service (n= 126), now making chlamydia testing a routine part of primary care. Crucially, this increases the capacity of specialist services to see more complex symptomatic patients.

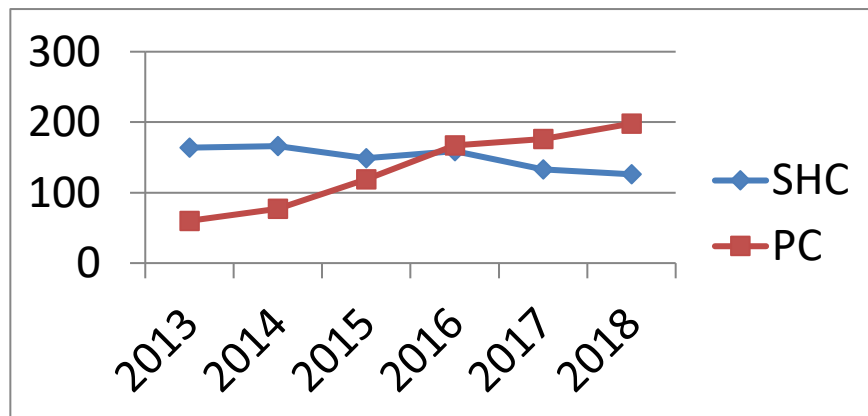


Figure 1 Chlamydia diagnoses in Specialist Hospital Care (SHC) and Primary Care (PC) 2013-2018 [S3]

Impact on health policy. This new community-based model has proved to be cost-effective with improved medical outcomes, and expansion of the model to cover all of NI is being considered. As stated by the Chief Medical Officer of NI:

“Independent evaluation of this new model of care by the Public Health Agency demonstrated a clinically robust and cost effective service delivery model, leading to my recommendation that this model be considered for extension to the whole of Northern Ireland, as stated in the Addendum to the Progress and Priorities: Addendum to the Sexual Health Promotion Strategy and Action Plan”. (S4 published Strategy & S5, Testimonial, CMO)

Prisons

Re-organisation of sexual healthcare provision. Kelly and Lohan’s research demonstrated how a contextually appropriate version of their new community-based model could be applied in all prisons throughout NI (serving circa 2000 prisoners). This new prison-based, continuous nurse-led service is now applied in all prisons replacing since 2018 the previous inferior minimal and ad hoc system. As stated by the Chief Medical Officer:

“Prior to Kelly’s conception of this service in a Burdett Trust research grant, prisons had an ad hoc consultant led in reach service for mostly symptomatic patients, with no nurse involvement or health promotion focus”.
(S5, Chief Medical Officer, NI)

Effective health promotion strategy. Both the Director of Public Health NI and Assistant Director of Prisons, NI have acknowledged that Kelly and Lohan’s research has led to an award-winning health promotion strategy co-produced with prisoners and implemented in all prisons in NI (Trust and Chartered Institute of Public Relations Awards, 2018). (S6 & 7) The two key elements of the health promotion strategy are featured prominently: the *Dick loves Doot* posters are displayed around the prisons and the video <https://goo.gl/iZf4qJ> is played in waiting areas of prison sites (and youTube hits exceeded 22,500 in 2020). In addition, their research led to the roll-out since 2019 of ‘*If I were a Dad*’, the first relationship and sexuality education programme in the national youth offender institutions of Scotland and NI. (S7)

Improved health outcomes. The new model and associated health promotion led to an increased detection rate and earlier treatment of chlamydia and gonorrhoea as well as

syphilis, HIV and hepatitis in all prisons (S2). A case note audit of 171 patients seen in the NI prison service during the first six-month period (1 July to 31 December 2018), demonstrated 90% of Chlamydia (CT) positive patients received treatment within 14 days, 94% received an HIV test and partner notification was documented as completed in 90% of CT positive patients. This meant the NI prison health service was for the first time meeting robust clinical performance indicators set by the British Association of Sexual Health & HIV (BASHH). (S2)

According to the Assistant Director of Prisons in NI, “everything the Queen’s team has achieved has begun with a better understanding of the prison residents, tapping into their motivations and their own possible solutions to turning around their lives”. The Assistant Director emphasises how, on this “innovative basis”, the Queen’s team “has developed services that actually have serious traction with the young men and have led to improving their health and education”. (S7) He further emphasises that “the feedback from prisoners themselves speaks volumes of the importance of this work on their lives”. He highlights an example of young men’s feedback on the *If I were a Dad* programme:

“I really hate this programme. It wraps all my issues up into one ball and shows me them. I hate it but I love it and need to do it”. (Participant, NI Young Offender Institution, included in testimonial of A/Director of Prison Service, S7)

International Policy Impact

The WHO is co-ordinating a global agenda for future programming on engaging boys and men in sexual and reproductive health to address the sustainable development goals, based on the underpinning ‘Evidence-and-Gap Maps’ and systematic reviews of evidence of Professor Lohan and the QUB-WHO team (S8 & 9). According to the Director of Sexual and Reproductive Health and Research, including the Human Reproduction Programme, at WHO:

“Drawing from our collaboration with Professor Lohan and her team, WHO and HRP will be able to offer global leadership and guidance on masculinities and sexual and reproductive health and rights (SRHR) through: 1) a published research agenda on addressing masculinities and engaging men and boys in the context of SRHR; and 2) guiding principles for programmers, policy makers and researchers working on this issue. In the context of the 2030 Agenda for Sustainable Development, this work contributes to the attainment of SDG 3 on healthy lives and wellbeing (i.e. target 3.7 on ensuring universal access to SRH care services) and SDG 5 on gender equality (i.e. targets 5.2 on elimination of violence against women, 5.3 on ending harmful practices and 5.7 on universal access to SRH and reproductive rights)”. (S10, Director of SRH, WHO)

5. Sources to corroborate the impact

- S.1. Testimonial, South Eastern Health & Social Care Trust- Director of Nursing
- S. 2. Kelly, C., Templeton, M., Allen, K. & Lohan, M. (2020) Improving the sexual health of men in prison *Journal of Clinical Nursing* <https://doi.org/10.1111/jocn.15237>
- S.3. NI Sexual Health Activity by Calendar Year, Health and Social Care Board, 2019. Health and Social Care Board can be contacted for further information.
- S.4. Department of Health, (2014) [Progress and Priorities: Addendum to the Sexual Health Promotion Strategy and Action Plan, Action 18.](#)
- S.5. Testimonial, Chief Medical Officer of Northern Ireland
- S.6. [Director of Public Health Annual Report, 2017.](#)
- S 7. Testimonial, Northern Ireland Prison Service - Assistant Director of Prisons,.
- S 8. WHO website <https://srhr.org/> Masculinities and SRHR [By outcomes & income](#)
- S 9. WHO [Press Release: Engaging men, addressing harmful masculinities to improve sexual and reproductive health and rights.](#)
- S.10. Testimonial, WHO – Director of Sexual and Reproductive Health and Research