HIPS/17/10 – Improving the rate of bystander CPR in deprived communities: a development study

Out-of-hospital cardiac arrest (OHCA) is a significant health problem in Scotland with approximately 3,000 resuscitation attempts each year. Survival is only 6.4%, with those in the more deprived quintile of the population (Scottish Index of Multiple Deprivation 1) twice as likely to suffer an OHCA, but 43% less likely to survive compared with those who are least deprived. The most important modifiable factor affecting survival is cardiopulmonary resuscitation (CPR) by a bystander. Bystander CPR more than doubles the likelihood of survival, but occurs only around 40% of the time, and least often in the SIMD 1 quintile. In 2015 the Scottish Government launched Scotland's OHCA strategy with a key aim to improve survival by increasing rates of bystander CPR. The proposed study will contribute to that aim by developing a strategy to ensure that communities who most need increased CPR rates will be targeted. We will accomplish this by designing an evidence based intervention to improve the rate of bystander CPR in deprived areas using a social marketing framework (applying commercial marketing tools to create health behaviour change) and social network theory. Research design includes a systematic review and a range of qualitative methods with key partners and stakeholders.