

## Evaluating the Family Nurse Partnership Programme in Scotland: a natural experiment approach

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### Introduction

The Family Nurse Partnership(FNP) is an intensive home-visiting service for teenage first-time mothers (and children), developed/trialled in the US and adapted/trialled across Europe. The Scottish Government(SG) aims to build on and supplement the existing national/international evidence base for FNP, to assess effectiveness and opportunities for optimisation of the programme, for future decision making in Scotland.

### Objectives and Approach

The evaluation commissioned is a natural experiment of FNP, taking advantage of the existing information infrastructure in Scotland. This natural experiment represents an important opportunity to determine programme impact upon many key programme outcomes using routinely collected data at a lower cost than a comparably sized effectiveness trial. Key objectives are: to identify clients in receipt of FNP-support and a control sample of matched families who would meet criteria for FNP but did not receive support, to obtain approval and through anonymised data linkage link to health and other data, and to determine the effect of FNP across a range of maternal and child outcomes.

### Results

The success of the natural experiment design in trying to replicate the gold standard design of the RCT will be presented and will cover the following topics: (how cases and a comparable group of first-time teenage women have been identified across 10 Health Boards (HBs) between 2009 and 2016 using data made available by the electronic Data Research and Innovation Service (eDRIS) from FNP, NHS Scotland and SG; the matching process of the cases and controls using propensity score methods to ensure an unbiased comparison; the linkage to health, social care and educational datasets and the approval processes involved, and the strengths and limitations of using routine data to evaluate relevant study outcomes that

map to a logic model.

### Conclusion/Implications

The impact of this evaluation into the effectiveness of FNP in Scotland will establish a robustly matched study cohort, a more streamlined linkage and approval process, and identification of outcomes not only for a short-term follow-up but also for a longer-term follow-up of the teenage mothers and their children.

