The rate of drug-related deaths in Scotland increased steadily between 2002-2012 and is higher than other parts of the UK. Naloxone is an opioid antagonist which can temporarily reverse the effects of an opioid overdose, allowing more time for an ambulance to arrive and provide further treatment to those in opioid overdose situations. This research provides a service evaluation of Scotland’s Take-Home Naloxone (THN) programme, rolled out from 2011 onwards, which aims to extend the distribution of naloxone to those at risk of opioid overdose and thus reduce the rate of drug-related deaths.

Main findings

- There are clear co-ordination and support structures in place at national level. The National Naloxone Advisory Group (NNAG) monitors the progress of the programme on a regular basis. There is a national Naloxone Coordinator and a national Training and Support Officer based at the Scottish Drugs Forum. The Information Services Division (ISD) has produced two annual monitoring reports to date (2011-12 and 2012-13) as well as quarterly reports for the NNAG.

- At local Health Board level there is some similarity but also variety in the way the programme is managed and delivered. Most, but not all, Health Boards manage the programme through a partnership. Nine Health Boards (out of the 13 participating Health Boards) have a Steering Group for the programme locally.

- There are regular Training The Trainer (TTT) courses across all Health Boards mostly provided by SDF and sometimes by local trainers. Across all sectors a total of 989 staff have been trained to date. Training is generally regarded as effective.

- Training about naloxone and how to administer it for people with problem drug use is provided by staff from both statutory and voluntary sectors and is voluntary in both community and prison settings.

- Peer trainers/educators are used in nine Health Boards and in two prisons and in some places are heavily relied on: for example in one prison all training on naloxone is undertaken by peer trainers. This is seen as an effective way to reach those with problem drug use but the demands on those who are peer trainers are quite high leading to drop-off.

- Naloxone is supplied mainly by nurses and in some areas by pharmacists. In prisons the kit is supplied by placing it in the person’s property prior to liberation. The evidence from this research suggests that supplying naloxone works best when it takes place as close as possible to the place and time of training. Only six areas reported using pharmacists for supplying naloxone and wider involvement of the community pharmacy network was identified as an area that could be expanded to increase naloxone supplies in the community.

- While 5,830 kits were distributed in the community setting between 2011 and 2013 this is approximately 8% of the total population of people with problem drug use, based on figures supplied by ISD. An additional 1,461 kits were issued to prisoners on liberation and this would take the percentage reach within the target population to just under 11%. The kit was generally regarded as effective in terms of ease of use by service users.

- Family members who have received training had welcomed it, but the need to gain consent from the family member with problem drug use prior to receiving a supply of naloxone was seen as a drawback.
Introduction

The aim of the National Take-Home Naloxone (THN) programme is to prevent drug-related deaths. The research evaluated the processes and structures and their perceived effectiveness as well as the early indications of impact of Scotland's national THN programme. It was undertaken between August 2013 and March 2014.

Context

The incidence of drug-related deaths in Scotland has increased steadily over the past ten years. A national database was established in 2009 to increase understanding of drug-related deaths. This showed that the majority of DRDs were accidental and took place in the company of someone else, meaning that intervention to reverse the effects of an overdose would be worth attempting.

As part of its overall strategy to support recovery, the Scottish Government's national drugs strategy from 2011 included a commitment to reduce drug-related deaths. It decided to roll out the national THN programme following successful pilots and advice from the national drug deaths forum. Nurses and pharmacists involved in the national programme supply naloxone kits to named patients at risk of future overdose by means of a Patient Group Direction (PGD). All those who receive a supply of naloxone must first have received specialist training in its use. The Lord Advocate's local guidelines issued in 2011 enabled the supply of naloxone to all staff working for services which have regular contact with people at risk of opioid overdose, for emergency use only (as naloxone is normally a prescription-only medicine).

Research aims and methods

The research aims were to:

- Examine the processes and structures put in place to implement the programme locally;
- Assess the effectiveness of identified processes and structures for the different stakeholders involved;
- Provide an early indication of programme impact; and
- Establish the key lessons learned and the implications for policy and the future development and implementation of the programme.

The following methods were used to undertake the research: a rapid literature review to inform the context for the research; initial scoping interviews with the programme providers and key stakeholders; an online survey and follow up interviews with Naloxone Coordinators (13); an online survey with service providers (186 responses); interviews with service providers, service users, families and carers, ex-prisoners, (115 interviews). In addition there were three meetings with the Research Advisory Group.

Findings

Programme Processes and Structures

There are clear coordination and support structures in place at national level and the National Naloxone Advisory Group (NNAG), which comprises a range of expert members, monitors the progress of the programme on a regular basis.

The Scottish Government's investment in the programme provides:

- A national Naloxone Co-ordinator and a National Training and Support Officer based at the Scottish Drugs Forum;
- Information and training materials including a website;
- Reimbursement to the NHS Boards for the THN kits issued in their area;
- An in-depth monitoring and evaluation programme led by the Information Services Division (ISD) of the NHS National Services Scotland. ISD has produced two annual monitoring reports to date (2011-12 and 2012-13) and provides quarterly reports to the National Naloxone Advisory Group so that its members can assess progress;
- Specific support for the roll out of the programme in prisons.

At local Health Board level there is some similarity but also variety in the way the programme is managed and delivered. Most, but not all, Health Boards manage the programme through a partnership, and while nearly all ADPs are involved, the nature of this involvement varies. Nine of the 13 Health Boards taking part in the THN programme have a Steering Group to manage the programme locally. Six of the 13 Health Board areas use community pharmacies as supply of naloxone outlets. Peer trainers/educators are used in nine Health Boards and two prisons and in some places are heavily relied on: for example in one prison all training on naloxone is undertaken by peer trainers. Since November 2011 Health Boards have had responsibility for delivery of the THN programme in prisons.

There are regular Training The Trainers (TTT) courses across all Health Boards provided mostly by SDF and sometimes by local trainers. Across all sectors a total of 989 staff have been trained.

Training about naloxone and how to administer it for people with problem drug use is provided by staff from both statutory and voluntary sectors. It is voluntary in both community and prison settings. The supply of naloxone is regulated by a PGD and is mainly administered by nurses or pharmacists where they are participating in the programme. In prisons

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1 The Road to Recovery: A New Approach to Tackling Scotland's Drug Problem, Scottish Government, 2008
the kit is supplied by placing it in the person's property prior to liberation. Training and supply can take place in a range of settings including drug treatment agencies, prison, pharmacies and outreach, such as hostels and mobile buses.

**Effectiveness of processes and structures**

The research provides evidence on the effectiveness of the various processes and structures. Key points include the following:

*Training the Trainers*

Training for those who provide training on naloxone to service users and their relatives is regarded as effective and covers the required aspects of the naloxone programme. There may be some need for refresher training for those who have not used the skills acquired after training.

*Recruitment*

Within the community the most valuable method of recruitment to THN training is by word of mouth, either by peers or professionals. Within prisons there were reports of difficulty in attracting prisoners due to the voluntary nature of the training and competing interests/activities. Those who decline training about naloxone tend to do so because they do not wish to be seen as still belonging to the life of problem drug use.

*Training people with problem drug use*

Training on a 1:1 basis is increasingly seen as the best method of training in the community setting but in prison, group training is still the main method. Peer trainers are regarded as an effective way to reach people with problem drug use but the demands (time required and intensity of the work) on those who are peer trainers/educators are quite high which can lead to drop off.

*Supplying naloxone*

Supplies of naloxone are more likely to be received by those at risk when it is done close to the place and time of training. The lack of access to supplies from pharmacies in some areas is seen as a barrier to access that could be addressed by expanding the number of community pharmacies that offer supplies. Some service users are providing a service to peers by publicising (for example through social media) the fact that they hold a supply of naloxone should anyone require it. The kit itself is generally seen as effective in terms of ease of use by service users.

*Family members*

Family members who had received training found it useful, but their inability to access a supply of naloxone unless their relative with problem drug use consented to it was seen as a drawback.

**Partnership working**

Partnership working, for example within the NNAG at national level and between public and third sectors at local levels is generally regarded as being effective.

**Impact**

The NNAG reviews quantitative data gathered by ISD on a regular basis. At present the programme is estimated to be reaching around 8-11% of the population with problem drug use based on the number of kits supplied.

The research has found that the THN programme has made service users more aware of life-saving techniques and the causes of overdose. Respondents also reported an increased sense of empowerment and improved self-esteem. It is hard to quantify “potential lives saved” as no-one can tell if an overdose would have been fatal but service users interviewed certainly believed that the programme had “saved lives”.

Families and carers reported that the main impact of the THN programme for them is peace of mind but their inability to access a supply of naloxone without the consent of their relative was seen as a drawback.

Service providers reported feeling a sense of empowerment and the benefit of being able to offer something positive.

**Policy & practice implications**

The report sets out policy and practice implications for consideration arising from its findings. In particular consideration could be given to:

- At strategic local level it appears that having a steering group to guide the programme is helpful;
- Greater consistency of ADP involvement across Scotland;
- Greater involvement of GPs in the programme;
- Extending the staff training programme to a greater number of frontline practitioners who are likely to come into contact with people at risk of opioid overdose in order to enable them to provide naloxone training;
- Explore all options within the existing legal framework to expand access to groups including family members and non-clinical staff;
- Increasing the 1:1 brief interventions approach to help reach more of the target group;
- How outreach can be undertaken effectively, particularly in rural areas, to reach those who do not use addictions services;
naloxone training and supply in future negotiations with community pharmacies.

The programme and its national coordination have been viewed very positively by those interviewed in this research and it is hoped that the issues identified above will help to increase the reach of naloxone to those most at risk of opioid overdose.

- The issues relating to peer training raised in the research and provide guidance as to best practice;
- How to increase the training and take-up of supply for those leaving prison;
- The training police receive with regard to naloxone;
- The potential to gather systematic and widespread data about the incidence and outcomes of the use of naloxone kits; and
- Greater and more consistent involvement of community pharmacies across Scotland: consideration given to