

# Summary Report – H1N1 Vaccination Programme

## A. Purpose

The purpose of this report is to update NHS Lanarkshire Board on the current situation with the H1N1 vaccination programme, to draw conclusions from the programme and make recommendations for the coming months.

## B Background

The H1N1 (Swine Flu) vaccination programme was carried out in two phases beginning mid-October 2009 with small quantities of H1N1 vaccine and increasing in pace as more vaccine became available:

- **Phase 1** –was to be delivered between mid-October and 31 December 2009, with ongoing vaccination until 31 March 2010 This included a range of groups:
  - Health and Social Care employees (direct patient/ client care);
  - ‘At Risk’ patients, including people with existing conditions;
  - Pregnant women;
  - Children in Additional Needs Schools; and
  - Homeless people

The timescale for phase 1 was recently extended to 30 September 2010, with a particular emphasis on proactive administration of H1N1 vaccine for pregnant women, people with newly diagnosed ‘at risk’ conditions and new NHS and social care employees.

Phase 1 was primarily delivered by GP practices, acting under a Directed Enhanced Service (DES), and the NHS Lanarkshire Occupational Health service (SALUS).

- **Phase 2**– was to be delivered to all children aged between 6 months and 5 years to take place between 1 January 2010 and 31 January 2010 again with availability of vaccination until 31 March 2010.

Phase 2 was delivered by a combination of GP practices (~35%), acting under a Local Enhanced Service (LES), and public health nurses vaccinating children in centralised clinics (~65%).

- **Phase 3**- made provision for a further extension of the programme to the wider healthy population but at present there are no plans for this to happen.

## C. Phase 1 Delivery

Phase 1 of the H1N1 vaccination programme had 5 main streams, and each was implemented in a different way.

### C.1 Health and Social Care

Under national direction, NHS Boards were required to prioritise Health and Social Care staff for H1N1 vaccine by distinguishing between those with and without direct patient or client care. Only those employees with direct patient or client care were eligible for H1N1 vaccine.

NHS Lanarkshire’s occupational health provider SALUS provided a vaccination programme, which was initially targeted at priority healthcare staff, including A&E and ITU clinicians, from 16 October 2009. The main roll out of the programme was via scheduled clinics on a range of sites, available to all NHS Lanarkshire employees identified as eligible under national guidelines.

- **Hairmyres Hospital**
- **Monklands General**
- **Wishaw General**
- **Central HC**
- **Centrum Park**
- **Udston Hospital**
- **Lanark HC**

In addition, these scheduled clinics were open to a range of external health and social care providers, including local authority employees and voluntary and private sector. Each of these organisations was specifically agreed with SALUS and a list of eligible employees was drawn up for validation at the clinics.

The second wave of occupational health vaccination clinics was able to start on 16 November 2009, when more vaccine became available. Vaccination was administered by SALUS employees and Bank Aide nurses, with additional administrative support for data management. Additional mop-up clinics have continued since January 2010 on an adhoc basis

Vaccination data was entered into the SALUS system (COHORT) and weekly reports issued to the registered GP of each patient vaccinated. The current staff uptake rates (excluding any staff vaccinated by their GP) are shown in the table (below).

<b>Workforce</b>	<b>Number Eligible For H1N1 Vaccine</b>	<b>Total number received one dose of H1N1</b>	<b>Proportion of eligible staff vaccinated</b>
NHS staff	10,334	5,163	50.0%
Social care staff	9,836	3,325	33.8%

## **C.2 ‘At Risk’ Patients (excluding pregnant women)**

With the exception of children in additional needs schools, housebound patients and the homeless, all vaccinations of ‘at risk’ patients were delivered by their registered GP practice, acting under a nationally-agreed DES. This DES remains in force until 30 September 2010, and vaccinations will continue to be delivered by GP practices.

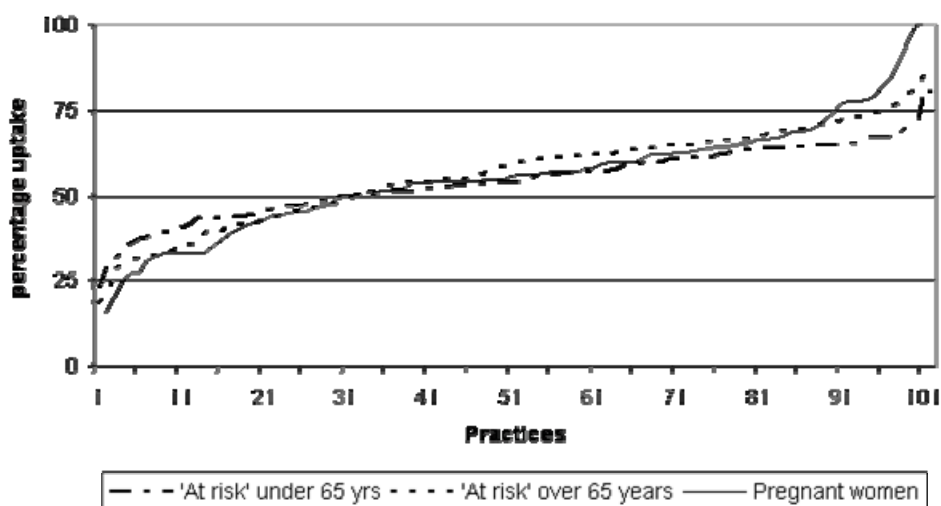
As the DES was in force, GP practices were responsible for the identification, call, vaccination and data management of all vaccinations for this cohort of patients. Where patients were housebound, lists of those patients were provided to NHSL district nursing teams to vaccinate and the vaccination details provided to GPs.

The table (below) shows the latest uptake rate of NHSL practices (including CamGlen and Northern Corridor) compared against the national average (as of 28 February 2010). The data is restricted to practices using GPASS and EMIS, due to data extraction issues at the national level.

NHS Board	No. of practices included	% practices with valid data	No. of under 65 at risk (+ pregnant women)	No. of doses given to under 65s At Risk	% uptake - Under 65s At Risk	No. of Over 65s at risk	No. of doses given to Over 65s At Risk	% uptake - Over 65s At Risk
Lanarkshire (& CamGlen)	102	88.6%	65,945	35,837	54.3%	46,216	25,679	55.6%
Scotland	748	73.3%	452,886	245,797	54.3%	346,827	194,635	56.1%

The graph (below) shows the uptake rates by practice, demonstrating a wide range of uptake rates by GP practice for each of the three 'at risk' groups.

**H1N1 vaccine uptake: phase 1 groups as of 28 Feb 2010 for Lanarkshire and CamGlen practices (electronic extract)**



### C.3 Pregnant Women

Although pregnant women fell under the general heading of 'at risk', and therefore the GP DES, NHS Lanarkshire (in common with other Boards) introduced a variety of additional measures to promote uptake amongst this cohort due to the particular risks associated with pregnancy and incomplete GP based data. In particular:

- Midwife training – Awareness sessions were held with the Public Health consultant lead to encourage midwives to promote H1N1 vaccination;
- GP notification – Lists of identified pregnant women were sent to their registered GP to encourage them to invite their patients to vaccination clinics;
- Patient notification – midwife lists of pregnant women were compiled and used as the basis of a mass-lettering campaign to encourage those women to contact their GP for vaccination;
- Post-natal vaccination – H1N1 vaccination was made available to women who had just given birth in post-natal wards.

Any vaccinations provided by NHSL staff, e.g. post-natal wards, were notified to the registered GP, in the same way as for housebound patients.

The table (below) shows the latest uptake rate of NHSL practices but has the same qualifications on the data quality as the general table for 'at risk' patients.

NHS Board	No. of Pregnant Women	No. of Doses given to Pregnant Women	Percentage Uptake Pregnant women
Lanarkshire (& CamGlen)	3,769	2,056	54.6%
Scotland	29,795	14,197	47.6%

#### **B.4 Children in Additional Needs Schools**

Due to outbreaks in some additional needs schools, the vaccination programme for children in those schools in Lanarkshire was prioritised. In particular, children and staff at one Lanarkshire school (Stanmore) had to be urgently vaccinated due to several clinical cases of H1N1 illness and Northern Ireland's experience of four deaths in children with additional needs. Subsequent lab tests confirmed H1N1 infection.

The lessons learned from that initial site were applied in the vaccination programme throughout the remaining schools. The vaccination programme was completed rapidly with strong support from school and public health nurses and North and South Education colleagues.

#### **B.5 Homelessness**

Close links were developed with the homelessness services team and dedicated clinics were run to offer H1N1 and seasonal flu vaccine to these 'at risk' people. Uptake was 60% for H1N1 vaccine and 50 % for seasonal flu vaccine in people registered with the homelessness service.

### **C. Phase 2 delivery**

#### **C.1 Method**

Phase 2 again depended on national negotiations with GP representatives. Ultimately, a national agreement was reached in December 2009 that Boards would draw up a local enhanced service arrangement with their GPs. A Lanarkshire LES was offered by NHSL to GP practices. Of the 98 practices in NHSL, 37 opted-in to the LES. For the patients registered with the remaining 61 practices, NHSL organised a schedule of centralised clinics to which patients were called using the Scottish Immunisation Recall System (SIRS) system.

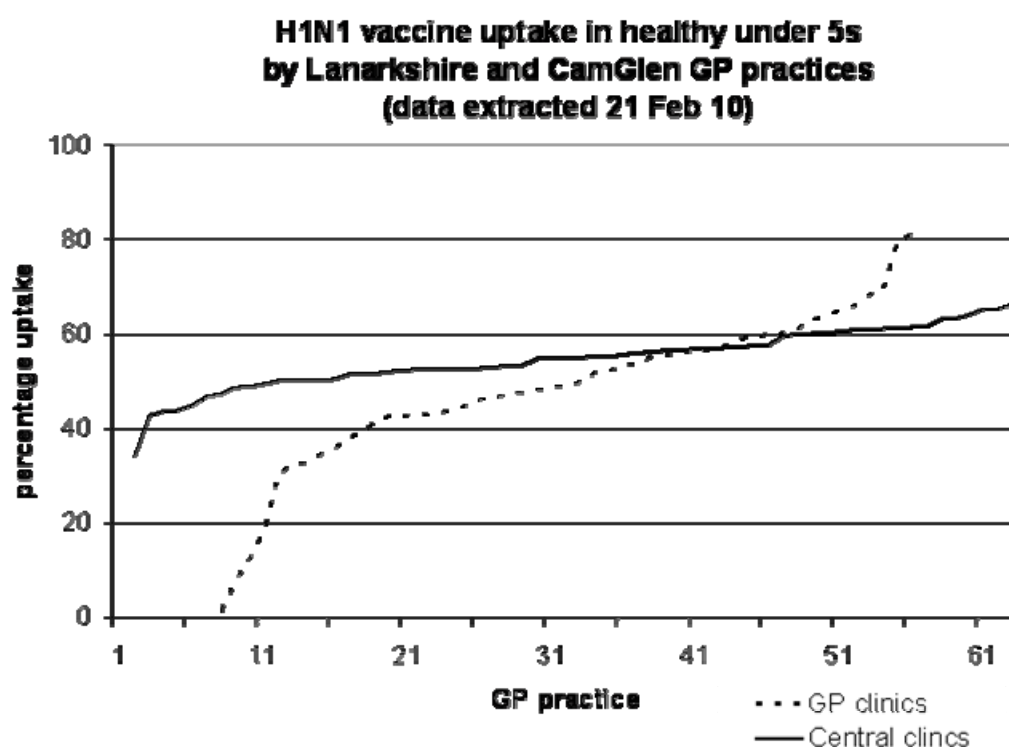
In addition, the practices based in the CamGlen and Northern Corridor areas had the option of opting-in to the NHS GG&C LES offered shortly after NHSL's LES. As a result, NHSL provided centralised clinics in those areas for the patients of another 9 (out of 17) practices, although they could not be called from the NHSL SIRS system and required manual invites based on NHS GG&C lists.

## C.2 Phase 2 uptake

The table (below) is the latest data from HPS on the uptake amongst NHS GP practices (including CamGlen and NC), although national data extracts are not yet validated and are unavailable for some practices.

Source and date of figures	Lanarkshire and CamGlen practices	No. of practices included	% practices responding	No. of healthy under 5s	No. of doses to healthy under 5s	% uptake - healthy under 5s
SIRS or GPASS and EMIS practices only - data to 21st Feb 2010	GP clinics	49	92.4	12,867	6,045	47.0
	Centralised clinics	62	100.0	18,908	10,477	55.4

The graph (below) shows the uptake rates by practice, demonstrating different ranges of uptake rates by GP practice depending on mode of delivery.



There is currently more detail available on the operation of the centralised clinics than GP practices at present. NHS Lanarkshire scheduled clinics, invited over 18,000 patients, from 11 January 2010 to 29 January 2010. Additional mop-up clinics were scheduled from 22 to 26 February 2010. Any parents seeking vaccination for their child beyond those dates are being offered vaccination in regular childhood immunisation sessions.

The uptake rates in centralised clinics, had a relatively narrow range in uptake; for nine NHS Lanarkshire localities uptake ranged from 45.9% to 65.0%

#### **D. Pharmacy**

Pharmacy staff were faced with the following key challenges:

- uncertainty as to when vaccine would arrive
- initial supplies that trickled through
- multiple sites to supply frequently
- multi-dose (10) dose vials and
- large amounts to subsequently store.

New systems of vaccine delivery, mechanisms to split and distribute packs and ordering mechanisms were created to cope with requirements of H1N1. Once the national supply of vaccine had outstripped demand, operational pressures eased for pharmacy staff.

In total, phase 1 and 2, NHSL was supplied with 199,000 doses of Pandemrix (the main vaccine used in the programme) of which 107,230 was supplied to GP practices.

#### **E. Costs**

Detailed costs for the vaccination programme are being compiled, and in some cases cannot be known until the final GP uptake rate is known to confirm payments under the DES and LES. However, the main areas of cost (and reimbursement) to the Board are as follows:

- Occupational Health – Both actual costs for overtime and bank aide support, as well as opportunity costs for SALUS employee time;
- Phase 1 GP costs – payments under the DES to GP practices per dose delivered;
- Phase 2 GP costs – as per Phase 1, except payment rate based on LES.
- Phase 2 Centralised Clinics costs – opportunity costs for NHSL nursing staff, and some costs for logistics, e.g. payments to local authorities for use of venues;
- Phase 2 income – payment per dose from SGHD to NHSL for vaccinations delivered at centralised clinics.

#### **F. Conclusions**

The H1N1 vaccination programme was a large scale and complex vaccination programme undertaken during a period of high NHS activity, mainly due to ongoing pandemic activity. The national H1N1 vaccination policy evolved considerably from June 2009 to the current date, as more information emerged on those most affected by H1N1 illness and vaccine availability and efficacy. Those particularly affected were the young, physically unwell and pregnant women.

NHS Lanarkshire responded very positively and effectively to the challenges and through hard work, dedication and a multi-disciplinary team approach successfully implemented the programme to the current date. The detailed plans that were drawn up were sufficiently robust and flexible to accommodate the national model that dictated phase 1 and the need for centralised delivery solutions in phase 2 model to back up GP provision.

NHS Lanarkshire uptake rates of H1N1 vaccine are on par with national averages. Notable successes have been in the support from maternity services and the high pregnancy uptake rates, support and encouragement for the homelessness services (again with high uptake), quickly responding to the additional needs school outbreak and rapid distribution of limited vaccine supplies in the early phases.

However, there was marked variability between recorded uptake of H1N1 vaccine depending on GP practice. This merits further investigation at both Lanarkshire and national levels to determine if this was simply a data recording and measurement issue or due to variation in provision of clinics and encouragement to attend.

Integration with the North and South Lanarkshire Councils worked well and this was reflected in the good will with respect to premises for centralised clinics and vaccination of social care staff by Salus staff. NHS and social care vaccine uptake was very encouraging.

This interim summary report highlights the current position and should reassure the Board that the programme was successfully implemented. Vulnerable members of the community and key health and social care staff, to a large extent, have protection against H1N1 illness.

## **G Recommendations**

The key recommendations are that:

- Lanarkshire NHS Board is asked to note the progress with H1N1 vaccination to date, and
- the H1N1 vaccination implementation group should undertake a detailed review of the H1N1 vaccination programme to learn lessons, measure costs and reimbursement and undertake advance planning, as far as possible, for similar scenarios that might occur in future.