Nottingham City NHS
Primary Care Trust

HEALTH TECHNOLOGY APPRAISAL: PREGNANCY – ROUNTINE ANTI-D PROPHYLAXIS FOR RHESUS NEGATIVE WOMEN (review of TA41)

Nottingham City PCT is a designated PCT consultee for the review of the clinical and cost effectiveness of the use of routine antenatal anti-D prophylaxis for RhD-negative women, which was issued in May 2002. This report acts as the submission from Nottingham City PCT, detailing our view of the technology appraisal and the implications if it were to be recommended by NICE.

1. To what extent is the technology being used in Nottingham City PCT?

The PCT is already using this technology. As part of improving patient services, Nottingham University Hospitals Trust in April 2007 reviewed its anti-D programme for antenatal prophylaxis. As a result of this review, the decision was taken to change from giving 500IU anti-D immunoglobulin at weeks 28 and 34 of gestation to a single dose of 1500IU at 28 weeks gestation only. This regime was recommended within the NICE guidelines in 2002 and is within the final scope of the current review.

2. What is the impact of the current use of the technology on resources?

It is anticipated that the change in regime from 2 dose to 1 dose will result in an approximate decrease in the number of injections from 1066 to 533 per annum, assuming 100% compliance. This is calculated using the following statistics:

Number of registered births in Nottingham City PCT = 3809 (Jan-Dec 2005)

Number RhD negative women in Nottingham City @ 14.8% prevalence = 533

The difference in cost of the injection between 2x500IU (£36) and 1x1500IU (£30) is £6. If all RhD negative women are to receive routine antenatal prophylaxis in Nottingham (actual uptake numbers are unknown) then the cost saving would be £3198 per annum (533x6=3198). Injections are transported as part of the current routine transport rounds therefore there are no implications for transport costs whether 1 or 2 injections are used. One injection will result in a reduction in laboratory and midwife administration time.

The single dose regimen is therefore less costly than the two-dose regimen.

3. What is the outcome of any evaluations or audits of the use of the technology?

No audit results of the current regime (single dose) are available as the change of regimen has only being introduced very recently, in June 2007. The previous 2-dose regimen was reviewed in December 2004. The system was deemed to be working well with a few operational issues that needed to be resolved. An audit was then carried out over the period of 1st April and December 2004. This audit estimated some variance in the number of actual injections compared to the expected number of injections, explained by the number of women who declined the offer for the anti-D prophylaxis.

4. What is your opinion on the appropriate use of the technology?

This is not a new therapy and is already included within the previous NICE recommendations. The change in regimen has already been approved and implemented in Nottingham City PCT since June 2007.

5. What impact would the guidance have on the delivery of care for patients with this condition?

Patient care should improve. The number of patients who may have had an incomplete course of Anti D prophylaxis (under the 2 dose regimen) will automatically receive a full course. In addition, the single dose subjects the patient to only one injection and hence, one clinical exposure to a blood product. It is assumed that a single dose, compared to a 2 dose, would be easier to deliver, thus is likely to have a greater uptake from patients. In addition, it is likely to be simpler and less prone to errors and omissions.

6. Would any additional resources be required (for example, staff, support services, facilities or equipment)?

No. Question 2 shows that the single dose regimen is in fact less costly and the only requirement for additional resources would be if there was a higher percentage of RhD negative women who wish to have the anti-D prophylaxis, than previously under the 2 dose regimen.

7. Can you estimate the likely budget impact?

See question 2.

8. Would implementing this technology have resource implications for other services?

This new therapy requires only a modification of current delivery of services and has no impact on the current pathway of care. There are no direct or indirect costs transferred to the patient or other agencies.

9. Would there be any need for education and training of NHS staff?

Minimal training of staff required. It is only necessary to inform midwives of the change of protocol.