National Institute for Health and Clinical Excellence

Multiple Technology Appraisals

Colistimethate sodium powder and tobramycin powder for inhalation for the treatment of pseudomonas lung infection in cystic fibrosis [ID342]

Royal College of Nursing

Introduction

The Royal College of Nursing (RCN) was invited to review the Appraisal Consultation Document (ACD) for Multiple Technology Appraisala (MTA) of the use of Colistimethate sodium powder and Tobramycin powder for inhalation for the treatment of pseudomonas lung infection in cystic fibrosis [ID342].

Nurses caring for people with cystic fibrosis reviewed the documents on behalf of the RCN.

Appraisal Consultation Document – RCN Response

The Royal College of Nursing welcomes the opportunity to review this document. The RCN's response to the four questions on which comments were requested is set out below:

i) **Has the relevant evidence been taken into account?**

The ACD is very comprehensive and thorough. We consider that the available evidence seem to have been taken into account accordingly.

ii) **Are the summaries of clinical and cost effectiveness reasonable interpretations of the evidence?**

The summaries of clinical and cost effectiveness appear to have been reasonably interpreted. We note the statements in section 4.1.14 that the evidence provided by the two manufacturers was not of a very high quality ("poor to moderate") and that some of the answers required were not available (i.e. the comparator for the study for colistimethate was nebulised tobramycin, whereas nebulised colistimethate would have been more appropriate). We also note the committee's comments that the models used for some of the cost analysis were not up to date or very accurate and as a result that it was difficult for the committee make fully informed comments.

iii) **Are the provisional recommendations sound and a suitable basis for guidance to the NHS?**

We welcome the committee's recommendation that Tobramycin dry powder for inhalation can be used as an option for treating chronic pulmonary infection caused by *Pseudomonas aeruginosa* in people with cystic fibrosis (CF).

We are however, disappointed to note that colistimethate dry powder for inhalation has not been recommended for use in the NHS for treating chronic pulmonary infection caused by *Pseudomonas. aeruginosa* in people with cystic fibrosis.

Some CF patients tolerate nebulised tobramycin better than colistimethate and vice versa so it has always been appropriate to prescribe the medication that "suits" the patient best in the past.

In future, CF clinicians will not have the option of deciding between two medications to treat people with P. aeruginosa with CF. It is understood that *nebulised* colistimethate may still be used, but it is anticipated the

dry powder inhalation preparations will be much preferred by patients for ease of use and better adherence.

In the limited interpretation of results for both these medications, it would appear that neither appeared to have a statistically significant benefit over the other and it remains uncertain as to whether this is the case.

Further long term trials with appropriate comparators are required.

Although neither medication has definitively been proven to be more effective than the equivalent nebulised medication, it is anticipated that many patients will prefer to take the dry powder inhalation preparation over nebulisation for the reasons stated above. The dry powder inhalation medication will also eliminate the need for nebuliser machines and the sundry equipment required to use the machine, thereby reducing costs significantly. Although this was mentioned briefly in the ACD, it does not appear to have been taken into account (4.2.12). This cost saving could have been taken more fully into account (for both medications).

iv) **Are there any aspects of the recommendations that need particular consideration to ensure we avoid unlawful discrimination against any group of people on the grounds of gender, race, disability, age, sexual orientation, religion or belief?**

None identified.

v) **Are there any equality-related issues that need special consideration that are not covered in the appraisal consultation document?**

We are not aware of any specific issue at this stage. We would ask that any guidance issued should show that an equality impact analysis has been considered and that the guidance demonstrates an understanding of issues relating to all the protected characteristics where appropriate.