

Putting NICE guidance into practice

**Costing report:
Implementing the NICE guidance on
nalmefene for reducing alcohol
consumption in people with alcohol
dependence (TA325)**

Published: November 2014

Additional text added to section 8 (Implications for commissioners) October 2015

This costing report accompanies the NICE Technology appraisal: ['Nalmefene for reducing alcohol consumption in people with alcohol dependence'](#).

Issue date: November 2014

This report is written in the following context

This report represents the view of NICE, which was arrived at after careful consideration of the available data and through consulting with healthcare professionals. It should be read in conjunction with the NICE guidance. The costing report is an implementation tool and focuses on the recommendations that were considered to have a significant impact on national resource utilisation.

Assumptions used in the report are based on assessment of the national average. Local practice may be different from this, and the impact should be estimated locally.

Implementation of the guidance is the responsibility of local commissioners and/or providers. Commissioners and providers are reminded that it is their responsibility to implement the guidance, in their local context, in light of their duties to have due regard to the need to eliminate unlawful discrimination, advance equality of opportunity and foster good relations. Nothing in this costing tool should be interpreted in a way that would be inconsistent with compliance with those duties

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1 Introduction

1.1 Technology appraisals cover the use of new and existing medicines and treatments within the NHS in England. The commissioners including clinical commissioning groups, NHS England and, with respect to their public health functions, local authorities are required to comply with the recommendations in this appraisal within 3 months of its date of publication.

1.2 This report is supported by a costing template. The template aims to help organisations in England, Wales and Northern Ireland plan for the financial implications of implementing the NICE guidance.

1.3 The providers are alcohol services including GP practices.

2 Background of the technology appraisal

2.1 Alcohol dependence is a central nervous system disorder and is associated with characteristic structural and functional changes in the brain of people with alcohol dependency that over time, leads to compulsive drinking (World Health Organisation).

2.2 The overall prevalence of alcohol dependence for adults in England is estimated to be around 6% (Fuller E, et al. 2007).

2.3 Alcohol dependence has a high probability of having a chronic and progressive course and has a large impact on individual health and on society, which rises with increasing alcohol consumption (Rehm J, et al. 2014).

3 Guidance

3.1 The guidance states that:

Nalmefene is recommended within its marketing authorisation, as an option for reducing alcohol consumption, for people with alcohol dependence:

- who have a high drinking risk level (defined as alcohol consumption of more than 60 g per day for men and more than 40 g per day for women, according to the [World Health Organization's drinking risk levels](#)) without physical withdrawal symptoms, and
- who do not require immediate detoxification.

The marketing authorisation states that nalmefene should:

- only be prescribed in conjunction with continuous psychosocial support focused on treatment adherence and reducing alcohol consumption, and
- be initiated only in patients who continue to have a high drinking risk level 2 weeks after initial assessment.

4 Assumptions made

4.1 The costing model makes the following assumptions:

- The prevalence of alcohol dependence in the population is expected to be 6% of adults (Fuller E, et al. 2007), of these [84%](#) are expected to have alcohol dependency without physical withdrawal symptoms and not requiring immediate detoxification, a proportion of this group will be consistent with the marketing authorisation of nalmefene (high risk drinking level).
- Of the eligible population, only [6%](#) are estimated to present annually to receive treatment.

- 90% of these people return for a 2 week follow-up appointment to confirm their alcohol dependence diagnosis and [50.9%](#) currently go onto have psychosocial intervention alone. In future, clinical expert opinion expects the proportion of people receiving psychosocial intervention alone to reduce to 20.4%. The remaining 30.5% will receive nalmefene plus psychosocial intervention. Both of these treatments are provided to reduce the likelihood of harmful alcohol consumption.
- Psychosocial intervention is expected to incur a cost of £951 per person, which consists of 12 sessions per year, costing £79.25 each.
- The annual cost of nalmefene has been calculated based on multiplying the cost listed in the [October 2014 electronic drug tariff](#) by the number of times per year it is estimated the patient will take the drug.
- Following psychosocial intervention alone, 54.6% of people who complete the treatment will continue to be in the high or very high drinking risk level group. This is expected to fall to 35.2% (Laramée P, et al. 2014) in people who have nalmefene plus psychosocial intervention rather than psychosocial intervention alone.
- A proportion of this group (the high or very high drinking risk level group) will not succeed in cutting down their alcohol consumption and could go on to receive naltrexone or acamprosate plus psychosocial intervention to try and achieve abstinence from alcohol.
- The costs of medically-assisted withdrawal using naltrexone or acamprosate and psychosocial intervention have been based on a weighted average of £1,044 per patient. This cost was taken from the guidance.

- It is estimated that following psychosocial intervention, 14.3% of people who complete the treatment will be in the medium drinking risk level group. This is expected to be lower (12.8%) in people who have nalmefene plus psychosocial intervention. It is assumed that this group will receive the same treatment a second time to try and reduce their alcohol consumption further, or else will receive no further treatment.
- It is estimated that following psychosocial intervention, 31.2% of people who complete the treatment will have a low drinking risk level or will abstain from drinking alcohol. This is expected to increase to 52% in people who have nalmefene plus psychosocial intervention. In this group, it is assumed that 19% will relapse, re-entering the high or very high drinking risk level group and go on to seek the same treatment they had before a second time, or receive no further treatment.

5 Costs over time

- 5.1 Table 1 below shows the cost impact of nalmefene over the next 5 years based on the prevalent population for England.
- 5.2 It has been estimated that uptake of nalmefene within this patient population will grow from 0% to 20% after year one. This will increase by 10% per year (30%, 40%, 50% and 60%) up to year 5.
- 5.3 From year 5 onwards a steady state will have been reached and costs are anticipated to continue annually at this level of uptake.

Table 1: Costs over time for the next 5 years per 100,000 population

	Year 1	Year 2	Year 3	Year 4	Year 5
	Cost (£000s)				
First line treatment	13.4	20.2	26.9	33.6	40.3
Second line treatment	1.6	2.4	3.2	3.9	4.7
Total	15.0	22.5	30.1	37.6	45.1

6 Costing summary

6.1 The annual cost associated with implementing the guidance is estimated as £45,100 per 100,000 population, based on the standard assumptions in the model. This is equivalent to £24 million for the population of England.

Table 2: Cost of implementation in year 5 per 100,000 population, using NICE assumptions

	Cost (£)
First-line treatment of nalmefene plus psychosocial support	40,300
Second-line treatment of nalmefene plus psychosocial support or naltrexone/acamprosate plus psychological support	4,700
Total cost (£)	45,100

7 Savings and benefits

7.1 The number of additional people who could enter the low drinking risk level and abstinence group as a result of receiving nalmefene plus psychosocial interventions instead of psychosocial interventions alone could increase by around 4,300 people per year for England (Laramée P, et al. 2014). This is equivalent to 8 per 100,000 population.

7.2 The estimated annual cost of alcohol harm to the NHS in England was estimated at £2.7 billion at 2006/07 prices. Costs included hospital inpatients and day visits, hospital outpatient visits, accident and emergency visits, ambulance services and GP consultations. In the same year it was estimated that 2.7 million adults were higher risk drinkers in England (Department of Health, 2008).

7.3 Using the figures in paragraph 7.2 the annual unit cost to treat someone with alcohol dependency is around £1,000. This is a broad estimate and does not take into consideration the large variance in the levels of NHS care needed by different people in this drinking group. Savings associated with use of nalmefene will therefore vary widely, but are likely to be significant at a national level.

- 7.4 Further potential benefits and savings relating to reducing the number of people who are alcohol dependent can be found in the costing report for clinical guideline 115 [Alcohol-use disorders: preventing harmful drinking](#).

8 Implications for commissioners

- 8.1 Nalmefene for reducing alcohol consumption in people with alcohol dependence falls under the programme budgeting category 5A mental health disorders – substance misuse.
- 8.2 Local services have raised a number of questions as to who is responsible for funding the cost of nalmefene and psychosocial interventions provided alongside the drug in order to achieve compliance with the technology appraisal guidance.
- 8.3 Local authorities' public health duties extend to the provision of alcohol services, and the public health funding granted to local authorities includes an amount for drug and alcohol services (<http://www.england.nhs.uk/wp-content/uploads/2012/07/fs-ccg-respon.pdf>). Therefore if a doctor or other prescribing healthcare professional providing a service commissioned by the local authority thinks that nalmefene is the right treatment for a patient, the local authority should fund that treatment in line with NICE's recommendations, together with psychosocial support as set out in NICE technology appraisal guidance on [nalmefene](#).
- 8.4 If a GP working in a NHS commissioned service prescribes nalmefene it is expected that the treatment will be funded by the NHS. Although it does not refer to alcohol services specifically, the [NHS England guidance Who Pays](#) is helpful for reference. It sets out 2 examples of who pays for a patient's treatment where public health issues are concerned (see paragraph 101). In each case, it is clear that primary care provided directly by a patient's GP is

funded by NHS England. Specialist treatment commissioned by a local authority is funded by the local authority.

9 Summary of sensitivity analysis

9.1 One of the most sensitive variables in the costing template is a change in the number of people with alcohol dependency (without physical withdrawal symptoms and not requiring immediate detoxification) seeking treatment. By varying the baseline assumption of 6% between 5.4% and 6.6% it results in a £9,000 change in the cost impact per 100,000 population.

9.2 Another variable which has been explored in the sensitivity analysis is the future proportion of people taking nalmefene. Changing the baseline assumption of 60% between 54% and 66% leads to a £9,000 change in cost impact per 100,000 population.

10 Conclusion

10.1 The annual resource impact expected as a result of implementing the recommendations in the guidance is estimated to be £45,100 per 100,000 population, based on the standard assumptions in the model, which are:

- Current practice is to treat this patient population by giving them psychosocial interventions alone.
- Future practice will be to give this patient population either psychosocial interventions alone or nalmefene plus psychosocial interventions.

This is equivalent to £24 million for the population of England. This annual cost is expected to be reached over a period of 5 years and continue in a steady state from year 5 onwards.

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