NICE National Institute for Health and Care Excellence

Putting NICE guidance into practice

Costing statement:

Implementing the NICE guidance on the geko device for reducing the risk of venous thromboembolism (MTG19)

Published: June 2014

1 Introduction

1.1 NICE medical technology guidance on ‘the geko device for reducing the risk of venous thromboembolism’ (MTG19) supports use of the geko device in people who have a high risk of venous thromboembolism (VTE) and for whom other mechanical and pharmacological methods of prophylaxis are impractical or contraindicated.

1.2 The geko device is applied to the skin below the crease of the knee (or other application site) to stimulate the peroneal nerve. It creates muscular contractions to help blood return to the heart and reduces the risk of clots forming.

1.3 This technology is anticipated to be cost saving, with the cost impact predominantly affecting provider organisations. The additional costs from use of the device in secondary care are expected to be offset by savings from decreased rates of venous thromboembolism.

1.4 The savings will be from a reduction in the length of stay in hospital and conditions associated with venous thromboembolism.

2 Patient numbers affected

2.1 Expert opinion suggests the population for this technology is difficult to estimate but is likely to be small and should be assessed locally.

2.2 The technology is recommended for patients at high risk of venous thromboembolism for whom pharmacological and mechanical prophylaxis treatment options are contraindicated. This is currently an unmet need. Venous thromboembolism – reducing the risk (NICE clinical guideline 92) recommends that patients assessed as having risk factors for bleeding should not be offered pharmacological prophylaxis, unless the risk of VTE outweighs the risk of bleeding.

2.3 Anti-embolism stockings are the most common type of mechanical prophylaxis, but these can't be offered to people who have particular

existing or suspected medical conditions (see guidance for details). Alternative forms of mechanical prophylaxis include foot impulse devices and intermittent pneumatic compression devices.

3 Resource impact

3.1 Costs

3.1.1 The geko device has a list price of £22 per pair exclusive of VAT, and lasts for 24 hours. The typical period of treatment is estimated to be 6 days, giving a cost for procuring the device of £132 per treatment.

3.1.2 The guidance relates to use within secondary or specialist care, so the procurement costs are likely to affect acute trusts. In this setting, the average time needed by a healthcare professional to apply the device every 24 hours was estimated to be 1.5 minutes.

3.2 Savings and benefits

3.2.1 The potential savings associated with this technology are from a reduction in the length of stay in hospital, and treatment costs for VTE and associated conditions.

3.2.2 The Geko device offers a treatment option for a population who would not otherwise receive prophylaxis. The baseline risk of deep vein thrombosis for this patient group in the economic model was estimated to be 29% without prophylaxis, and 11% with the use of the Geko device.

4 Conclusion

4.1 The geko device for reducing the risk of venous thromboembolism (NICE medical technology guidance MTG19) fulfils an unmet medical need for a population who couldn't otherwise receive prophylactic treatment.

4.2 For a small investment in the device of £132 per treatment, savings may result from reduced rates of venous thromboembolism. Savings are anticipated for providers in secondary care as a result of lower treatment costs, and decreased bed days.

4.3 Expert opinion suggests the population for this technology is difficult to estimate but is likely to be small and therefore should be assessed