

Putting NICE guidance into practice

Resource impact report: UrgoStart for treating diabetic foot ulcers and leg ulcers (MTG42)

Published: January 2019

Summary

NICE has recommended UrgoStart dressings for treating diabetic foot ulcers and venous leg ulcers. We estimate:

- there may be savings from treating diabetic foot ulcers with UrgoStart ranging from £5.5m to £19.1m for England.
- the current uptake of UrgoStart dressings in this population (people with diabetic foot ulcers) is estimated by the manufacturer to be around 5% of the eligible population.
- UrgoStart is likely to be cost saving for treating venous leg ulcers, but the size of the saving is less certain from the evidence available.
- for both types of ulcers, potential cost savings mainly come from better healing with UrgoStart dressings and from the saving in the number of amputations avoided.

The future uptake of UrgoStart dressings for people with diabetic foot ulcers is uncertain. We have therefore modeled 3 scenarios of future uptake of 25%, 50% and 75% of the eligible population using UrgoStart dressings. The forecast savings are shown in table 1.

Table 1 Estimated annual saving of implementing the guidance for diabetic foot ulcers for England.

Scenario	Per 100,000 population (£)	In England (£)
Scenario 1 - Future uptake of UrgoStart 25%	9,900	5,455,000
Scenario 2 - Future uptake of UrgoStart 50%	22,200	12,273,000
Scenario 3 - Future uptake of UrgoStart 75%	34,500	19,091,000

This technology is commissioned by clinical commissioning groups, complex lower limb amputations are commissioned by NHS England. Providers are NHS hospital trusts and community providers.

1 UργοStart

- 1.1 Evidence supports the case for the NHS adoption of [UργοStart](#) dressings to treat diabetic foot ulcers and venous leg ulcers because they are associated with increased wound healing compared with non-interactive dressings.
- 1.2 UργοStart is an advanced dressing for treating chronic wounds. The Innovative aspects are a technology lipido-colloid (TLC) nano-oligosaccharide factor (NOSF) layer. The TLC-NOSF is a combination of the patented TLC technology, which is intended to create a moist protective wound healing environment, and the NOSF, which inhibits protease activity, specifically matrix metalloproteinases, and this is designed to accelerate healing.
- 1.3 Clinical experts advised that new and novel dressings are usually incorporated into local care pathways through their inclusion in dressing formularies. This report compares UργοStart to standard care of non-interactive dressings only.
- 1.4 UργοStart dressings should therefore be considered as an option for people with diabetic foot ulcers or venous leg ulcers once any modifiable factors such as infection have been treated.
- 1.5 Cost modelling shows that, compared with standard care, using UργοStart dressings to treat diabetic foot ulcers is cost saving after 1 year. It also shows that UργοStart dressing are likely to be cost saving for treating venous leg ulcers, but this is less certain from the evidence available.
- 1.6 For both types of ulcers, potential cost savings mainly come from better healing with UργοStart dressings.

2 **Resource impact of the guidance**

- 2.1 This resource impact report looks only at the saving for diabetic foot ulcers because of the uncertainty around the size of saving of UrgoStart dressings for people with venous leg ulcers.
- 2.2 The resource impact template does however allow data to be added at a local level, to estimate the resource impact of using UrgoStart dressing for venous leg ulcers.
- 2.3 Implementation of the guidance for diabetic foot ulcers may lead to savings from:
- improvements in healing rates.
 - reduction in amputations.
- 2.4 We estimate that around 130 people per 100,000 population would be eligible for treatment for diabetic foot ulcers with UrgoStart dressings. This is equivalent to 70,600 people in England.
- 2.5 It is anticipated that there will be around 20 amputations avoided per 1,000 people with diabetic foot ulcers that are treated using UrgoStart dressings rather than non-interactive dressings. This is based on the external assessment centre's health economic model.
- 2.6 The manufacturer of UrgoStart estimates that current uptake of UrgoStart dressings is around 5% of eligible people with diabetic foot ulcers.
- 2.7 The future uptake of UrgoStart dressings for people with diabetic foot ulcers is uncertain. We have therefore modelled 3 scenarios for an indicative increase in the use of UrgoStart dressings at 25%,

50% and 75%¹ of the eligible population with diabetic foot ulcers. The estimated savings for this population are shown in table 2.

2.8 In the scenario that is modelled in the template, it is estimated that future uptake will be 50% of the eligible population. In this scenario it is estimated that the savings for England would be around £12,273,000 or £22,200 per 100,000 population.

¹ Commissioners are expected to review their local circumstances and use the resource impact template to calculate costs and savings at a local level. The 50% of referrals modelled in the template, is indicative and should not be taken as the cost of implementing this guidance at a local level.

Table 2 Estimated annual saving from improved healing and a reduction in the number of amputations using UrgoStart

	Per 100,000 population	In England
Scenario 1 - Future uptake of UrgoStart 25%		
Population using UrgoStart dressings for diabetic foot ulcers each year	32	17,700
Saving from improvements in healing rate (£)	7,100	3,932,000
Saving from reduction in amputations (£)	2,800	1,523,000
Saving impact each year for people with diabetic foot ulcers (£)	9,900	5,455,000
Scenario 2 - Future uptake of UrgoStart 50%		
Population using UrgoStart dressings for diabetic foot ulcers each year	64	35,300
Saving from improvements in healing rate (£)	16,700	9,235,000
Saving from reduction in amputations (£)	5,500	3,038,000
Saving impact each year for people with diabetic foot ulcers (£)	22,200	12,273,000
Scenario 3 - Future uptake of UrgoStart 75%		
Population using UrgoStart dressings for diabetic foot ulcers each year	96	53,000
Saving from improvements in healing rate (£)	26,200	14,531,000
Saving from reduction in amputations (£)	8,300	4,560,000
Saving impact each year for people with diabetic foot ulcers (£)	34,500	19,091,000

3 Implications for commissioners

3.1 This technology is commissioned by clinical commissioning groups, complex lower limb amputations are commissioned by NHS England. Providers are NHS hospital trusts and community providers.

3.2 For venous leg ulcers, the evidence shows that UrgoStart dressings increase the rate of wound healing in the short term

compared with non-interactive dressings when used with standard care, but the impact on complete wound healing is less certain. The committee accepted that use of UrgoStart dressings is likely to be cost saving but considered any estimates to be less certain.

3.3 UrgoStart dressings for diabetic foot ulcers falls within the programme budgeting category 04A Diabetes.

4 How we estimated the resource impact

The population - diabetic foot ulcers

4.1 Diabetes can affect blood flow in the feet and legs. This can lead to a loss of feeling in the feet. As a result, around 5% of people with diabetes are likely to develop a foot ulcer each year. The population with diabetes who develop a foot ulcer and may be eligible for treatment with UrgoStart dressings is highlighted in table 3.

Table 3 Number of people with diabetic foot ulcers eligible for treatment

Population	Proportion of previous row (%)	Per 100,000 population	In England
Adult population		78,700	43,482,800
People with diabetes ¹	7.13	5,600	3,100,000
People with diabetes who develop diabetic foot ulcers per year ² (incidence)	5.00	280	155,000
Total number of people eligible for treatment with UrgoStart dressings ³	45.57	130	70,600
People from the incident population whose diabetic foot ulcer is infected ⁴	42.50	55	30,000
People from the incident population whose diabetic foot ulcer is not infected ⁴	57.50	75	40,600

¹ Source: Diabetes prevalence rates for 2017 from Diabetes UK.
² Source: Number of people who develop a diabetic foot ulcer each year, from the National diabetic foot care audit third annual report.

³ Source: People who have chronic foot ulcers, from the National diabetic foot care audit third annual report.

⁴ Source: Jia L, Parker CN, Parker TJ, et al. Incidence and risk factors for developing infection in patients presenting with uninfected diabetic foot ulcers. Jan Y-K, ed. PLoS ONE. 2017;12(5):e0177916. doi:10.1371/journal.pone.0177916. Treatment with UrgoStart ceases for the period of infection.

Assumptions

4.2 The resource impact template assumes that:

- the average cost per person of treating a diabetic foot ulcer for UrgoStart and non-interactive dressings is £330 and £280 respectively. Please note the cost of both UrgoStart and non-interactive dressings vary based on the size and type of the dressing. The range of costs for UrgoStart and non-interactive dressings can be found in table 4.

Table 4 Cost of UrgoStart dressing and non-interactive dressings

Type of dressing	Cost range (£)	Weighted average cost per dressing (£)	Average number of dressings per person	Average cost per person (£)
UrgoStart dressing ¹	3.03 – 14.79	4.28	77	330
Non-interactive dressing ²	1.40 – 7.91	2.38	118	280

1 UrgoStart dressing costs are from the Drug Tariff pricing, average cost per patient is based on External Assessment Centre (EAC) usage assumptions.
 2 Non-interactive dressing costs are from the Drug Tariff pricing, average cost per patient is based on EAC usage assumptions.

- the cost of treating diabetic foot ulcers is based on the manufacturer’s model adjusted by the External Assessment Centre (EAC) with the costs to GP practices removed, as set out in table 5.
- the costs to GP practices are removed because these costs will be incurred whether current practice changes or not.

Table 5 Average cost of treating a person with a diabetic foot ulcer

Description	Average cost per person of treating a diabetic foot ulcer (£)
Hospital outpatient	290
Podiatrist appointment	30
District nurse	2,080
Antibiotics	10
Analgesia	70
Primary dressing (UrgoStart)	330
Secondary dressing (non-interactive))	60
Bespoke orthoses	30
Amputation	90
UrgoStart dressing¹	2,990
Hospital outpatient	340
Podiatrist appointment	40
District nurse	2,410
Antibiotics	10
Analgesia	90
Primary dressing (non-interactive)	280
Bespoke orthoses	40
Amputation	170
Non-interactive dressing²	3,380
1 Costs of treatment with UrgoStart dressings are based on the EAC costs of treatment.	
2 Costs of treatment with non-interactive dressings are based on the EAC costs of treatment.	

- around 18% more diabetic foot ulcers would be completely healed after 1 year when using UrgoStart dressings compared to non-interactive dressings, based on the EAC.
- around 20 fewer amputations per 1,000 diabetic foot ulcers after 1 year using UrgoStart dressings rather than non-interactive dressings, based on the EAC.
- The template has 5% as current practice based on information from the company. Local organisations are advised to use local data in the template.

- when a diabetic foot ulcer being treated with UrgoStart dressings becomes infected, non-interactive dressings would be used while the infection is treated.
- the average treatment period for an infected diabetic foot ulcer is estimated at 2 weeks.
- UrgoStart dressings would be used when the infection has been resolved.
- savings from a reduction in amputations are calculated using national tariff.
- the national tariff for single, amputation stump or partial foot amputation procedure for diabetes ranges from £1,692 to £12,767, and is shown in table 6 and table 7.

Table 6 National tariff prices for major amputation procedures related to diabetes

Code	Description	Cost (£)	Activity	Weighted cost (£)
YQ23A	Multiple, Amputation Stump or Partial Foot Amputation Procedures, for Diabetes or Arterial Disease, with CC Score 8+	10,259	280	1,020
YQ24A	Single, Amputation Stump or Partial Foot Amputation Procedure, for Diabetes or Arterial Disease, with Other Open Blood Vessel Procedure, with CC Score 8+	12,767	250	1,140
YQ25A	Single, Amputation Stump or Partial Foot Amputation Procedure, for Diabetes or Arterial Disease, with Imaging Intervention, with CC Score 8+	11,107	320	1,260
YQ26A	Single, Amputation Stump or Partial Foot Amputation Procedure, for Diabetes or Arterial Disease, with CC Score 8+	5,086	1,960	3,550
Major amputations weighted average cost				6,970

Table 7 National tariff prices for minor amputation procedures related to diabetes

Code	Description	Cost (£)	Activity	Weighted cost (£)
YQ23B	Multiple, Amputation Stump or Partial Foot Amputation Procedures, for Diabetes or Arterial Disease, with CC Score 0-7	3,438	280	210
YQ24B	Single, Amputation Stump or Partial Foot Amputation Procedure, for Diabetes or Arterial Disease, with Other Open Blood Vessel Procedure, with CC Score 0-7	8,749	230	430
YQ25B	Single, Amputation Stump or Partial Foot Amputation Procedure, for Diabetes or Arterial Disease, with Imaging Intervention, with CC Score 0-7	5,178	240	260
YQ26B	Single, Amputation Stump or Partial Foot Amputation Procedure, for Diabetes or Arterial Disease, with CC Score 5-7	2,529	1,580	840
YQ26C	Single, Amputation Stump or Partial Foot Amputation Procedure, for Diabetes or Arterial Disease, with CC Score 0-4	1,692	2,420	860
Minor amputations weighted average cost				2,600

- the estimated saving from reduced amputations is around £4,200 as per table 8. This has been used to calculate the saving for this guidance.

Table 8 Weighted average national tariff prices for amputation procedures related to diabetes

Description	Weighted cost (£)	Weighted cost (£)
Major amputations weighted average cost	6,970	
37% of amputations as a result of diabetic foot ulcers are major amputations		2,580
Minor amputations	2,600	
63% of amputations as a result of diabetic foot ulcers are minor amputations		1,640
Weighted average cost of amputations related to diabetic foot ulcers		4,220

The population - venous leg ulcers

4.3 The precise incidence and prevalence of venous leg ulcers in England is currently unclear. Chronic venous leg ulceration has an estimated prevalence of between 0.1% and 0.3% in the United Kingdom ([Scottish Intercollegiate Guidelines Network \(SIGN\) 120 Management of chronic venous leg ulcers](#)). This is between 43,000 and 130,000 venous leg ulcers in England. Although there is uncertainty around the size of the savings from venous leg ulcers, this can be estimated at a local level by inputting local data into the resource impact template.

About this resource impact report

This resource impact report accompanies the NICE guidance on [UrgoStart for treating diabetic foot ulcers and leg ulcers](#) and should be read with it.

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