



# One-piece closed bags for colostomies [GID-HTE10045]

## External assessment group response to consultation comments addendum

<b>Produced by</b>	Peninsula Technology Assessment Group (PenTAG) University of Exeter Medical School
<b>Authors</b>	Caroline Farmer <sup>1</sup> Val Santo <sup>1</sup> Alan Lovell <sup>1</sup> Maxwell S. Barnish <sup>1</sup> Ahmed Abdelsabour <sup>1</sup> Jemma Perks <sup>1</sup> Jenny Lowe <sup>1</sup> Edward C.F. Wilson <sup>1</sup> G.J. Melendez-Torres <sup>1</sup> Dawn Lee <sup>1</sup> <sup>1</sup> Peninsula Technology Assessment Group (PenTAG), University of Exeter Medical School, Exeter
<b>Correspondence to</b>	Caroline Farmer 3.09 South Cloisters, St Luke's Campus, Heavitree Road, Exeter, EX1 2LU; <a href="mailto:c.farmer@exeter.ac.uk">c.farmer@exeter.ac.uk</a>
<b>Date completed</b>	01/04/2025
<b>Source of funding</b>	This report was commissioned by the National Institute for Health and Care Excellence (NICE) as work package GID-HTE10045
<b>Declared competing interests of the authors</b>	None
<b>Acknowledgments</b>	The authors acknowledge the administrative support provided by Mrs Sue Whiffin (PenTAG).



## Author contributions

<i>Caroline Farmer</i>	Clinical evidence lead and project manager. Input into the writing of assessment documents.
<i>Val Santo</i>	Health economist with responsibilities for the assessment of economic evidence and the development of the economic analysis. Input into the writing of assessment documents.
<i>Alan Lovell</i>	Information Specialist responsible for developing and conducting evidence searches. Clinical evidence review and appraisal. Input into the writing of assessment documents
<i>Maxwell S Barnish</i>	Clinical reviewer with responsibilities for conducting the evidence review and analysis of clinical effectiveness and safety evidence. Input into the writing of assessment documents.
<i>Ahmed Abdelsabour</i>	Health economist with responsibilities for the assessment of economic evidence and the development of the economic analysis. Input into the writing of assessment documents.
<i>Jemma Perks</i>	Statistician providing support to the clinical and economic reviewers. Responsibilities included data extraction, interpretation and report writing.
<i>Jenny Lowe</i>	Document management expert with responsibilities for supporting the conduct of evidence searches. Administrative support throughout the project.
<i>Edward C.F. Wilson</i>	Health economist with responsibilities for the assessment of economic evidence and the development of the economic analysis. Input into the writing of assessment documents.
<i>G.J. Melendez-Torres</i>	Statistician and clinical evidence reviewer. Responsibilities for conducting analyses of clinical effectiveness evidence. Input into the writing of assessment documents.
<i>Dawn Lee</i>	Project director, economic evidence lead, and guarantor of the EAG assessment. Input into the writing of assessment documents.

This report is associated with the external assessment group (EAG) final assessment report, which can be referenced as follows: Farmer et al. One-piece closed bags for adults with a colostomy [GID-HTE10045]: a late-stage assessment. Peninsula Technology Assessment Group (PenTAG), 2025.

The views expressed in this report are those of the authors and not necessarily those of the National Institute of Health and Care Excellence (NICE). Any errors are the responsibility of the authors. Copyright 2025, PenTAG, University of Exeter.

## Table of Contents

1.	Additional economic analysis	6
1.1.	Scenario analysis: use of Brady (2025) for utilities for PSC and leakage	6
1.2.	Scenario analysis: impact of leaks if left unresolved	8
1.3.	Impact of increased reference bag costs	9
1.3.1.	Base case using alternative basic bag price	9
1.3.2.	Scenario analysis using alternative basic bag price	16
1.4.	Concluding remarks	23
2.	References	24

## List of tables

Table 1: Utility data from Brady 2025	7
Table 2: Scenario analysis - impact of new utility data from Brady (2025) on economic model results	8
Table 3: Impact on leakage of not seeking support to resolve leaks	8
Table 5: Economic analysis results - 100% improvement	11
Table 6: Economic analysis results - 50% improvement	13
Table 7: Maximum eJP for a bag that reduces the rate of all complications	15
Table 8: Scenario analysis results – Flat Bag	17
Table 9: Scenario analysis results – Convex Bag	20

## 1. ADDITIONAL ECONOMIC ANALYSIS

---

The following sections present three additional analyses conducted by the EAG in response to consultation comments: 1) scenario analysis using a newly identified UK study which provides EQ-5D utilities for peristomal skin complications (PSC) and leakage, 2) scenario analysis demonstrating the impact of not seeking support for leakage and 3) analysis using bags with at least a 5% market share as the basic bag for calculation of the economically justifiable price (eJP).

### 1.1. Scenario analysis: use of Brady (2025) for utilities for PSC and leakage

In response to comments related to the lack of use of published sources to estimate resource use for leakages and PSCs, the EAG conducted a rapid, targeted search in Google Scholar (on 28 March 2025, using the terms “stoma” and “bag” and “leakage” and “peristomal skin complication” and “resource use”). One new and potentially relevant study was retrieved, Brady (2025),<sup>1</sup> a cross-sectional study sponsored by Coloplast in three UK hospitals that investigated the pattern of PSCs and leakages over the preceding year. The study population consisted of 88% ileostomy patients, who are known to have a higher risk of experiencing leakages and PSCs compared with people with a colostomy (which is acknowledged in the paper). Additionally, the population included people who have had their stoma for less than 12 months and have been self-managing their stoma care products for at least 14 days. According to the paper authors, time since surgery was not found to be predictive for quality of life but is highly likely to be predictive of resource use. Due to this, the EAG did not use the resource use aspect of this publication. However, the publication did present utility values for four PSC health states and three leakage health states based upon observations taken from patients using the EQ-5D-5L. This represented an improvement on previous data sources which came either from vignettes, which were constructed to represent a generic mixed stoma population, or the SF-6D (for PSCs) from a mixed population (see Table 22 of the EAG report). The EAG therefore presented scenario analysis using this new source of utility data. No additional data sources for resource use were found and none were supplied by commentators in response to the consultation.

For PSC, the publication presented Decision Tree (DT) scores ranging from 0 to 3 using the validated Ostomy Skin Tool v2.0. A DT score of 0 indicates no PSC, a score of 1 indicates mild PSC, a score of 2 indicates moderate PSC, and a score of 3 indicates severe PSC. A disutility of -0.0478 was multiplied by each DT score to estimate the utility of each PSC health state.

Information on the impact of PSC according to individual DT scores was not presented, only the impact of a one-point increase in DT score and therefore the change in quality of life between mild, moderate and severe skin complications had to be assumed to be equal. For leaks, three categories were included in the Brady paper: no leaks in the last 2 weeks, 1 leak in the last 2 weeks,  $\geq 2$  leaks in the last 2 weeks. The EAG aligned the data to the categories that most broadly matched the definitions used in the economic model for resource use as no alternative source of resource use data was available to match the definitions used in Brady 2025. The 1 leak in the last 2 weeks was assumed to broadly align with the moderate category previously presented for the purposes of resource use (once monthly) and the  $\geq 2$  leaks in the last 2 weeks was assumed to broadly align to severe (4 x monthly).

Table 1 presents the utility data taken from the publication for use in this additional scenario analysis.

**Table 1: Utility data from Brady 2025**

Health state	Impact on quality of life
<i>Peristomal skin complications</i>	
Mild	-0.0478 (disutility); Table 3 regression provides the impact of a one-point change in DT
Moderate	-0.0956 (disutility); one-point change multiplied by 2
Severe	-0.1434 (disutility); one-point change multiplied by 3
<i>Leakage outside of the baseplate</i>	
No leakage	0.813 (utility); Figure 1B
1 leakage	0.656 (utility); Figure 1B
$\geq 2$ leakages	0.623 (utility); Figure 1B

Table 2 demonstrates that use of this alternative source of utility data resulted in a similar total eJP for PSC at the original basic bag price (£4.26 vs previous estimate of £4.24 for a flat bag with a 100% improvement) and a slightly larger impact for leakage at the original basic bag price (£2.99 vs £2.81 for a bag which resolves a “moderate” level of leaks [note defined differently in the two analyses] and £3.08 vs £3.07 for a bag which resolves a “severe” level of leaks [again defined differently]).

**Table 2: Scenario analysis - impact of new utility data from Brady (2025) on economic model results**

Intervention bag efficacy	Scenario	PSC	Leakage: 1 leak per 2 weeks	Leakage $\geq 2$ leaks per 2 weeks
100%	eJP per flat bag	£4.26	£2.99	£3.08
	eJP per convex bag	£4.70	£3.43	£3.52
50%	eJP per flat bag	£3.01	£2.37	£2.37
	eJP per convex bag	£3.45	£2.81	£2.81

Abbreviations: eJP, economically justifiable price

Note: there was no difference at 2 decimal places between the total eJP for 1 leak per 2 weeks and  $\geq 2$  leaks per 2 weeks as the increased cost reduction associated with treating more leaks was offset near perfectly by the difference in QALYs associated with the more severe leak frequency

## 1.2. Scenario analysis: impact of leaks if left unresolved

Consultation comments queried why the economic model resulted in a higher eJP for resolving leakage events happening twice a year compared to more frequently. This was based on the assumption that patients would not seek healthcare professional (HCP) support if they were only experiencing two leaks a year. To understand the impact of uncertainty around support seeking behaviour, the EAG explored the impact of assuming that patients do not seek support for more frequent leaks in scenario analysis (Table 3). As expected, this new assumption resulted in an eJP which increased with greater leak frequency (for example, for a flat bag which resulted in a 100% improvement the eJP for patients experience leakage 2 x yearly and not seeking support was £3.43 compared to £4.77 for monthly and £6.98 for 4 x monthly). This emphasised the importance of clinical nurse specialist (CNS) in stoma care involvement in supporting patients to resolve issues in preventing additional costs to the NHS and in improving quality of life for people with a colostomy.

**Table 3: Impact on leakage of not seeking support to resolve leaks**

Intervention bag efficacy	Scenario	Leakage monthly	Leakage 4 x monthly
100%	eJP per flat bag	£4.77	£6.98
	eJP per convex bag	£5.21	£7.43
50%	eJP per flat bag	£3.27	£3.72
	eJP per convex bag	£4.39	£4.84

Abbreviations: eJP, economically justifiable price



### **1.3. Impact of increased reference bag costs**

The original analysis presented in the EAG report added the eJP for resolving different types of complication to the cost of the cheapest bag included in the evaluation (Alliance Pharmaceutical's bag Opus NaturFit). This yielded a maximum price the NHS should be willing to pay for a bag that claims to resolve a complication.

Consultation comments noted that the bag selected has a very low market share and that the proposals for updating Part IX of the Drug Tariff consultation<sup>2</sup> provides a definition which may be considered to be a reasonable minimum market share for the purposes of pricing. This is discussed as follows:

*"The lowest price product may be a product that represents at least 5% of a category prescription volume to avoid the risk of a non-moving/ slow-moving product distorting the price score for a category. The minimum volume will also take into consideration the characteristics of the category, for example if it is a highly concentrated market the 5% volume of prescriptions may not be applicable."*

Based upon this the EAG presented a scenario which used the cheapest bag with at least a 5% market share as an alternative for consideration. Using this alternative definition for a basic bag, and based upon the April 2024 Tariff, the cheapest bags meeting this definition were:

- Flat: Nova colostomy bag, 8% market share, weighted average price £2.80
- Convex: Confidence natural soft convex, 5% market share, weighted average price £3.26

#### **1.3.1. Base case using alternative basic bag price**

The incremental eJPs for fully preventing a particular complication in those who would otherwise experience it ranged from 37p (odour) to £2.39 (PSC). The corresponding total eJPs (i.e. maximum willingness to pay for a bag) increased in line with the increased basic bag cost to £3.17 (odour) and £5.19 (PSC) for people using flat bags, while for people using convex bags the eJPs were £3.63 (odour) and £5.65 (PSC). This dropped from £2.96 to £3.95 and £3.42 to £4.41 for flat and convex bags, respectively, for a bag that reduced the chance of complications by 50%. These prices compare to a current average bag price (for all bags included in the evaluation) of £3.02 and a cost of £2.80 for the cheapest flat bag with a market share of at least 5% and £3.26 for the cheapest convex bag with a market share of at least 5%. Whether the prices currently being charged represented value for money depended on their effectiveness at

resolving complications, which was for the large part unknown. No additional evidence was provided by stakeholders in response to consultation comments.

Table 4 and Table 5 show updated eJP results for a 100% complication resolution and 50% complication resolution, respectively.

**Table 4: Economic analysis results - 100% improvement**

Comp	Trt	Total costs	Total QALYs	Inc. costs	Inc. QALYs	eJP per year (inc)	Inc. eJP per bag	Total eJP per bag*		% of people**	Features designed to reduce chance / impact
								Flat	Conv		
PSC	Comparator	£1,197	0.721							44%	Baseplate additives Baseplate shape Baseplate adhesive Convex, concave, flat and size options
	Intervention	£104	0.732	-£1,093	0.011	£1,312	£2.39	£5.19	£5.65		
Leakage 2 times yearly	Comparator	£499	0.785							53%	Baseplate shape Baseplate adhesive Convex, concave, flat and size options
	Intervention	£69	0.807	-£430	0.022	£868	£1.58	£4.38	£4.84		
Leakage monthly	Comparator	£531	0.804								
	Intervention	£69	0.807	-£462	0.003	£526	£0.96	£3.76	£4.22		
Leakage 4 x monthly	Comparator	£609	0.801								
	Intervention	£69	0.807	-£540	0.007	£670	£1.22	£4.02	£4.48		
Pancaking	Comparator	£450	0.728							48%	Type of filter Baseplate shape Convex, concave, flat and size options
	Intervention	£69	0.731	-£381	0.004	£457	£0.83	£3.63	£4.09		
Ballooning	Comparator	£354	0.728							39%	Type of filter
	Intervention	£69	0.731	-£285	0.003	£352	£0.64	£3.44	£3.90		
Odour	Comparator	£175	0.727							28%	Type of filter
	Intervention	£69	0.731	-£106	0.005	£201	£0.37	£3.17	£3.63		

Comp	Trt	Total costs	Total QALYs	Inc. costs	Inc. QALYs	eJP per year (inc)	Inc. eJP per bag	Total eJP per bag*		% of people**	Features designed to reduce chance / impact
Discreetness, Appearance and Comfort	Comparator	£236	0.727							NR	Bag shape Baseplate shape Baseplate adhesive Bag materials Flushable disposable Convex, concave, flat and size options
	Intervention	£69	0.731	-£167	0.004	£256	£0.47	£3.27	£3.73		

Abbreviations: comp, complication; conv, convex; eJP, economically justifiable price; Inc, incremental; NR, not reported; PSC, peristomal skin complications; trt, treatment; QALY, quality-adjusted life-year

Notes:

\* Total eJP is calculated by adding the addition of the WTP for complications to the price of the cheapest bag

\*\* Survey data from Colostomy UK's patient organisation submission. Survey carried out between December 2023 and March 2024 with 3,742 responses from a mixed population of people with a stoma

**Table 5: Economic analysis results - 50% improvement**

Comp	Trt	Total costs	Total QALYs	Inc. costs	Inc. QALYs	eJP per year (inc)	Inc. eJP per bag	Total eJP per bag*		% of people**	Features designed to reduce chance / impact
								Flat	Conv		
PSC	Comparator	£1,197	0.721							44%	Baseplate additives Baseplate shape Baseplate adhesive Convex, concave, flat and size options
	Intervention	£677	0.726	-£519	0.005	£629	£1.15	£3.95	£4.41		
Leakage 2 times yearly	Comparator	£499	0.785							53%	Baseplate shape Baseplate adhesive Convex, concave, flat and size options
	Intervention	£310	0.796	-£189	0.011	£409	£0.75	£3.55	£4.01		
Leakage monthly	Comparator	£531	0.804								
	Intervention	£319	0.806	-£212	0.002	£244	£0.44	£3.24	£3.70		
Leakage 4 x monthly	Comparator	£609	0.801								
	Intervention	£352	0.804	-£257	0.003	£323	£0.59	£3.39	£3.85		
Pancaking	Comparator	£450	0.728							48%	Type of filter Baseplate shape Convex, concave, flat and size options
	Intervention	£276	0.730	-£174	0.002	£212	£0.39	£3.19	£3.65		
Ballooning	Comparator	£354	0.728							39%	Type of filter
	Intervention	£231	0.730	-£123	0.002	£157	£0.29	£3.09	£3.55		
Odour	Comparator	£175	0.727							28%	Type of filter
	Intervention	£135	0.729	-£40	0.002	£87	£0.16	£2.96	£3.42		
Discreetness, Appearance and Comfort	Comparator	£236	0.727							NR	Bag shape Baseplate shape

Comp	Trt	Total costs	Total QALYs	Inc. costs	Inc. QALYs	eJP per year (inc)	Inc. eJP per bag	Total eJP per bag*		% of people**	Features designed to reduce chance / impact
	Intervention	£153	0.729	-£84	0.002	£128	£0.23	£3.03	£3.49		Baseplate adhesive Bag materials Flushable disposable Convex, concave, flat and size options

Abbreviations: comp, complication; conv, convex; eJP, economically justifiable price; Inc, incremental; NR, not reported; PSC, peristomal skin complications; trt, treatment; QALY, quality-adjusted life-year

Notes:

\* Total eJP is calculated by adding the addition of the WTP for complications to the price of the cheapest bag

\*\* Survey data from Colostomy UK's patient organisation submission. Survey carried out between December 2023 and March 2024 with 3,742 responses from a mixed population of people with a stoma

The results presented in Table 4 and Table 5 considered each complication in isolation. However, as previously discussed, the EAG was aware that some complications overlap and the impact of the combination of complications on both health state utility and NHS cost will be less than the sum of their parts. For example, PSC, leaks, and pancaking would be likely to co-occur, but a person would likely not seek assistance for each issue separately. Therefore, the eJP for a feature that prevented all three of these would be less than the sum of the three eJPs if considered individually.

To better understand the effect of additive complications, the EAG explored two different approaches using a hypothetical example of a bag that addressed all the complications considered (Table 6). Two methods are presented. In method 1, the eJP was additive across all the complications (i.e. this approach assumed no overlap in HRQoL or cost impact between complications). In method 2, the eJP for the complication with the maximum effect only was used. The EAG considered that both these approaches were implausible, though considered that the appropriate eJP would likely lie somewhere between the two results. The results showed that for bags that impact on multiple complications, the method used to account for the impact across them all makes a large difference. Future economic studies should consider the impact of bags across complications where possible, rather than focussing specifically on one area.

**Table 6: Maximum eJP for a bag that reduces the rate of all complications**

% Reduction in complications	Total eJP per bag assuming complications are additive		Total eJP per bag assuming only the benefit from the maximum impact complication applies	
	Flat	Convex	Flat	Convex
100%	£8.47	£8.93	£5.19	£5.65
75%	£6.96	£7.42	£4.57	£5.03
50%	£5.46	£5.92	£3.95	£4.41
25%	£3.95	£4.41	£3.32	£3.78
10%	£3.05	£3.51	£2.95	£3.41

Incremental net monetary benefit breakdowns are not represented as these were not impacted by the change in basic bag price.

### **1.3.2. Scenario analysis using alternative basic bag price**

Scenario analysis results (Table 7 and Table 8) demonstrated. As expected, the scenarios with the most impact on the eJP remained the same as the basic bag price did not impact on the incremental eJP per bag. Of the new scenarios tested only the assumptions around whether or not support is sought to find a solution to leaks with existing products had a major impact on the total eJP. This scenario demonstrates the importance of CNS services in finding the most appropriate solution for people with a stoma.



**Table 7: Scenario analysis results – Flat Bag**

Scenario label	Complication	eJP per bag 100% improvement	eJP per bag 50% improvement	Difference vs base case 100% improvement	Difference vs base case 50% improvement
<b>Base Case</b>	PSC	<b>£5.19</b>	<b>£3.95</b>		
	Leakage	<b>£3.73</b>	<b>£3.21</b>		
	Pancaking	<b>£3.63</b>	<b>£3.19</b>		
	Odour	<b>£3.17</b>	<b>£2.96</b>		
	Ballooning	<b>£3.44</b>	<b>£3.09</b>		
	Discreteness	<b>£3.27</b>	<b>£3.03</b>		
Cost-effectiveness threshold £8,000	PSC	£4.95	£3.83	-£0.24	-£0.12
Mockford for PSC RU costs	PSC	£4.38	£3.54	-£0.82	-£0.41
Martins for PSC RU costs	PSC	£3.92	£3.31	-£1.27	-£0.64
Rolls 2022 for PSC utilities	PSC	£5.60	£4.15	£0.41	£0.21
Berger 2018 for PSC utilities	PSC	£5.25	£3.98	£0.06	£0.03
Scheffel 2023 for PSC utilities	PSC	£5.14	£3.92	-£0.05	-£0.02
Time to resolution from patient survey	PSC	£4.58	£3.64	-£0.61	-£0.31
Mean price of a bag- £2.62 (mean price in Scotland)	PSC	£5.14	£3.93	-£0.06	-£0.02
Bags per day: no complications - 2	PSC	£4.52	£3.62	-£0.67	-£0.32
New scenario: Brady 2025 for PSC utilities	PSC	£5.21	£3.96	£0.02	£0.01
Cost-effectiveness threshold £8,000	Leakage	£3.66	£3.18	-£0.07	-£0.03
De Fries Jensen for leakage RU costs	Leakage	£3.65	£3.17	-£0.08	-£0.04

Scenario label	Complication	eJP per bag 100% improvement	eJP per bag 50% improvement	Difference vs base case 100% improvement	Difference vs base case 50% improvement
Scheffel 2023 for leakage utilities	Leakage	£3.72	£3.21	-£0.01	£0.00
Mean price of a bag- £2.62 (mean price in Scotland)	Leakage	£3.81	£3.25	£0.08	£0.04
Bags per day: no complications - 2	Leakage	£3.73	£3.21	£0.00	£0.00
New scenario: Brady 2025 for leakage utilities	Leakage	£3.94	£3.32	£0.21	£0.21
New scenario: Leaks monthly – no support to change bag	Leakage	£5.72	£4.72	£1.99	£1.51
Cost-effectiveness threshold £8,000	Pancaking	£3.55	£3.15	-£0.08	-£0.04
Time to Resolution - 1 week	Pancaking	£3.48	£3.11	-£0.15	-£0.08
Time to Resolution - 5 weeks	Pancaking	£3.79	£3.26	£0.15	£0.08
Mean price of a bag- £2.62 (mean price in Scotland)	Pancaking	£3.63	£3.19	£0.00	£0.00
Bags per day: no complications - 2	Pancaking	£3.43	£3.09	-£0.20	-£0.10
Bags per day: no complications - 3	Pancaking	£3.23	£2.99	-£0.40	-£0.20
Cost-effectiveness threshold £8,000	Odour	£3.06	£2.91	-£0.10	-£0.05
Time to Resolution - 1 week	Odour	£3.05	£2.90	-£0.11	-£0.06
Time to Resolution - 5 weeks	Odour	£3.28	£3.02	£0.11	£0.06
Mean price of a bag- £2.62 (mean price in Scotland)	Odour	£3.17	£2.97	£0.01	£0.01
Bags per day: no complications - 2	Odour	£3.06	£2.91	-£0.10	-£0.05

Scenario label	Complication	eJP per bag 100% improvement	eJP per bag 50% improvement	Difference vs base case 100% improvement	Difference vs base case 50% improvement
Cost-effectiveness threshold £8,000	Ballooning	£3.37	£3.05	-£0.07	-£0.04
Time to Resolution - 1 week	Ballooning	£3.32	£3.02	-£0.12	-£0.06
Time to Resolution - 5 weeks	Ballooning	£3.56	£3.15	£0.12	£0.06
Mean price of a bag- £2.62 (mean price in Scotland)	Ballooning	£3.44	£3.09	£0.00	£0.01
Bags per day: no complications - 2	Ballooning	£3.26	£3.00	-£0.18	-£0.09
Cost-effectiveness threshold £8,000	Discreteness	£3.17	£2.99	-£0.10	-£0.05
Time to Resolution - 1 week	Discreteness	£3.21	£3.01	-£0.05	-£0.03
Time to Resolution - 5 weeks	Discreteness	£3.27	£3.03	£0.00	£0.00
Bags per day: no complications - 2	Discreteness	£3.15	£2.98	-£0.12	-£0.06

Abbreviations: eJP, economically justified price; PSC, peristomal skin complications

Note: leakage results are presented for monthly leaks only

**Table 8: Scenario analysis results – Convex Bag**

Scenario label	Complication	eJP per bag 100% improvement	eJP per bag 50% improvement	Difference vs base case 100% improvement	Difference vs base case 50% improvement
<b>Base Case</b>	PSC	<b>£5.65</b>	<b>£4.41</b>		
	Leakage	<b>£4.19</b>	<b>£3.67</b>		
	Pancaking	<b>£4.09</b>	<b>£3.65</b>		
	Odour	<b>£3.63</b>	<b>£3.42</b>		
	Ballooning	<b>£3.90</b>	<b>£3.55</b>		
	Discreteness	<b>£3.73</b>	<b>£3.49</b>		
Cost-effectiveness threshold £8,000	PSC	£5.41	£4.29	-£0.24	-£0.12
Mockford for PSC RU costs	PSC	£4.84	£4.00	-£0.82	-£0.41
Martins for PSC RU costs	PSC	£4.38	£3.77	-£1.27	-£0.64
Rolls 2022 for PSC utilities	PSC	£6.06	£4.61	£0.41	£0.21
Berger 2018 for PSC utilities	PSC	£5.71	£4.44	£0.06	£0.03
Scheffel 2023 for PSC utilities	PSC	£5.60	£4.38	-£0.05	-£0.02
Time to resolution from patient survey	PSC	£5.04	£4.10	-£0.61	-£0.31
Mean price of a bag- £2.62 (mean price in Scotland)	PSC	£5.60	£4.39	-£0.06	-£0.02
Bags per day: no complications - 2	PSC	£4.98	£4.08	-£0.67	-£0.32
New scenario: Brady 2025 for PSC utilities	PSC	£5.67	£4.42	£0.02	£0.01
Cost-effectiveness threshold £8,000	Leakage	£4.12	£3.64	£0.07	£0.03

Scenario label	Complication	eJP per bag 100% improvement	eJP per bag 50% improvement	Difference vs base case 100% improvement	Difference vs base case 50% improvement
De Fries Jensen for leakage RU costs	Leakage	£4.11	£3.63	£0.08	£0.04
Scheffel 2023 for leakage utilities	Leakage	£4.18	£3.67	£0.01	£0.00
Mean price of a bag- £2.62 (mean price in Scotland)	Leakage	£4.27	£3.71	-£0.08	-£0.04
Bags per day: no complications - 2	Leakage	£4.19	£3.67	£0.00	£0.00
New scenario: Brady 2025 for leakage utilities	Leakage	£4.40	£3.78	£0.21	£0.11
New scenario: Leaks monthly – no support to change bag	Leakage	£6.18	£4.68	£1.99	£1.01
Cost-effectiveness threshold £8,000	Pancaking	£4.01	£3.61	£0.08	£0.04
Time to Resolution - 1 week	Pancaking	£3.94	£3.57	£0.15	£0.08
Time to Resolution - 5 weeks	Pancaking	£4.25	£3.72	-£0.15	-£0.08
Mean price of a bag- £2.62 (mean price in Scotland)	Pancaking	£4.09	£3.65	£0.00	£0.00
Bags per day: no complications - 2	Pancaking	£3.89	£3.55	£0.20	£0.10
Bags per day: no complications - 3	Pancaking	£3.69	£3.45	£0.40	£0.20
Cost-effectiveness threshold £8,000	Odour	£3.52	£3.37	£0.10	£0.05
Time to Resolution - 1 week	Odour	£3.51	£3.36	£0.11	£0.06
Time to Resolution - 5 weeks	Odour	£3.74	£3.48	-£0.11	-£0.06

Scenario label	Complication	eJP per bag 100% improvement	eJP per bag 50% improvement	Difference vs base case 100% improvement	Difference vs base case 50% improvement
Mean price of a bag- £2.62 (mean price in Scotland)	Odour	£3.63	£3.43	-£0.01	-£0.01
Bags per day: no complications - 2	Odour	£3.52	£3.37	£0.10	£0.05
Cost-effectiveness threshold £8,000	Ballooning	£3.83	£3.51	£0.07	£0.04
Time to Resolution - 1 week	Ballooning	£3.78	£3.48	£0.12	£0.06
Time to Resolution - 5 weeks	Ballooning	£4.02	£3.61	-£0.12	-£0.06
Mean price of a bag- £2.62 (mean price in Scotland)	Ballooning	£3.90	£3.55	£0.00	-£0.01
Bags per day: no complications - 2	Ballooning	£3.72	£3.46	£0.18	£0.09
Cost-effectiveness threshold £8,000	Discreteness	£3.63	£3.45	£0.10	£0.05
Time to Resolution - 1 week	Discreteness	£3.67	£3.47	£0.05	£0.03
Time to Resolution - 5 weeks	Discreteness	£3.73	£3.49	£0.00	£0.00
Bags per day: no complications - 2	Discreteness	£3.61	£3.44	£0.12	£0.06

Abbreviations: eJP, economically justified price; PSC, peristomal skin complications

Note: leakage results are presented for monthly leaks only

#### **1.4. Concluding remarks**

Following consultation, it remains the case that no data has been identified that allowed for reliable quantification of the cost-effectiveness of either specific features or specific types of bags. Additional analysis has been presented which demonstrated the results were relatively insensitive to the new EQ-5D utility data identified for PSCs and leaks. Scenario analysis looking at the impact of leaks if support was not sought demonstrated the importance of CNS involvement in supporting patients to resolve issues in preventing additional costs to the NHS and in improving quality of life for people with a stoma. Finally, the EAG conducted additional analysis using a bag with a market share of at least 5% as the basic bag from which to calculate the eJP of bags which reduce the chance of complications. The cheapest flat bag with at least a 5% market share was the Nova colostomy bag, which had a weighted average price of £2.80 (compared to £1.85 for Alliance Pharmaceutical's bag Opus NaturFit). A bag that improves all complications by 10% relative to the Nova colostomy bag would be able to justify a similar price to the average bag in 2023 (£3.02) [Table 6]; provided the price of the Nova colostomy bag was itself justified.

It remained the case that there were several bags for which the current pricing cannot be explained relative to the cheapest bag available on the tariff, based on the impact on health-related quality of life and resource use alone.

## 2. REFERENCES

---

1. Brady RRW, Sheard D, Howard K, Vestergaard M, Boisen EB, Mather R, et al. The Prevalence of Leakage, Peristomal Skin Complications and Impact on Quality of Life in the First Year Following Stoma Surgery. Nurs Rep [Internet]. 2025; 15(3).
2. Department of Health and Social Care. Medical Devices in Primary Care. Proposals for updating Part IX of the Drug Tariff – medical devices available for prescribing in primary care. Consultation v1.0 Final. Issued: 06 October 2023. London: Department of Health and Social Care; 2023.