

## Case Study

NHS Dumfries & Galloway  
Formulary Implementation  
Project



### Objective...

Spending approximately £661,000 a year on blood glucose (SMBG) and ketone strips, NHS Dumfries and Galloway undertook a review of blood glucose monitoring systems for people with Type 1 diabetes with a view to saving money that could be used to address other priorities.

### The Situation...

Prior to the review, patients were using two separate meters to test for blood glucose and ketone levels. Already having a relationship with Spirit, whose CareSens N system was used across secondary care in the area, NHS Dumfries and Galloway invited them to be part of this project.



### Spirit's Response...

Spirit worked closely with NHS Dumfries and Galloway to implement a change programme from July 2017, switching type 1 diabetes patients to CareSens Dual, a meter that tests both blood glucose and ketone levels. Spirit's Implement team engaged with the larger practices and ran clinics to help support people through the change in systems, offering training on their new blood glucose monitoring system.



Not only did Spirit feel like it would best suit patients' needs, the company was also very accommodating in being able to support active implementation of the formulary by offering staff and patient training as we needed.



The change to CareSens Dual  
**REDUCED THE UNIT COST OF BOTH**  
blood glucose and ketone strips

Around

**70%**

of eligible patients  
were changed

In year savings  
produced by  
the change were

**£66,000**

and by year 2 should  
release over

**£100,000**

in savings



Patients find  
**CARESENS DUAL**  
**METERS EASIER**  
to use than the  
systems they  
replaced.

## The Results...

The 12 months that followed implementation saw:

- A reduction in SMBG strips mean unit cost from £15.72 to £11.78.
- Actual savings of £41,873 on SMBG strips and £24,247 on ketone strips delivering total savings for NHS Dumfries and Galloway of £66,120.
- A reduction in ketone strips mean unit cost from £20.95 to £13.15.

Annualised savings by the end of year two are on track to exceed over £100,000.

Critically, patients both gave positive feedback on the training they were given and preferred their new meter to their previous, more costly one.

67 patients were asked their opinion on the quality of the training they received on their new meter, the adequacy of the meter for its fitness of purpose versus their previous system and also its ease of use versus their previous system.

Overall patients had adequate training on how to use their meter and accessed a blood glucose and monitoring system that was both easier to use and better met their testing needs than their previous systems.

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### Q1. How well or poorly did the training meet your needs to be able to test your blood glucose with the CareSens Dual meter?

Q1	Very well	Well	Satisfactory	Poorly	Very poorly	Unable to answer
Responses	48	16	2	1	0	0
Percentages	72%	24%	3%	1%	0%	0%
Better or Worse		98.5%		1.5%		

The scores for the training met the criteria for patients being able to use the system to test their blood glucose in 98.5% of patients. The highest response was “very well” with 48 responses (72%). The second highest response was “well” with 16 responses (24%).

### Q2. How well or badly does the CareSens Dual meter appear to meet your testing needs compared to your previous blood glucose meter?

Q2	Very well	Well	Satisfactory	Poorly	Very poorly	Unable to answer
Responses	20	31	12	1	0	3
Percentages	29.9%	46.3%	17.9%	1.5%	0.0%	4.5%
Better or Worse		76.1%		1.5%		

The highest number of responses, 31 (46.3%) were that the meter met the patients’ testing needs “well” and the second highest response 20 (29.9%) was “very well” compared to their previous meter. Overall the percentage supporting that the meter met their testing needs “well” or “very well”, 51 (76.1%) surpassed the number for whom it met their needs “poorly” or “very poorly”, 1 (1.5%) versus their previously used system; mean difference, 74.6%,  $p < 0.001$ .

References: 1. data on file Spirit Healthcare, December 2017.