THE COST IMPLICATIONS OF IMPLEMENTING WOUNDCHEK™ PROTEASE STATUS INTO CLINCIAL PRACTICE

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Introduction

Wounds, especially chronic represent a significant burden to the NHS both financially and in resource allocation. It is recognised that 70%-80% of community nursing time is spent on wound management[1], whilst estimates suggest that pressure ulcers alone, take up 4% of the annual NHS budget[2].

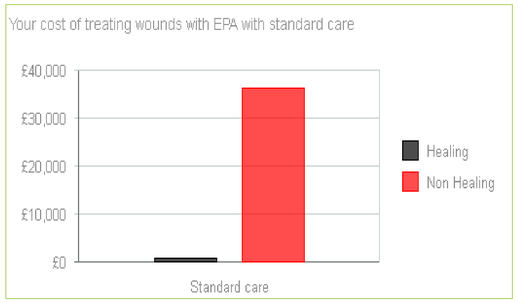
The presence of EPA creates an environment that is detrimental to wound healing. A recent clinical trial showed chronic wounds with EPA have a 90% probability of not healing without appropriate intervention and 28% of non-healing wounds have EPA[3].

Although EPA has been recognised as a marker for non-healing wounds[4] there are no visual cues to assess the level of protease activity[5]. However WOUNDCHEK™ Protease Status is a test for the assessment of protease activity in chronic wounds. The test helps clinicians establish within minutes which wounds may benefit from a protease modulating therapy, ensuring appropriate and targeted use of these therapies.

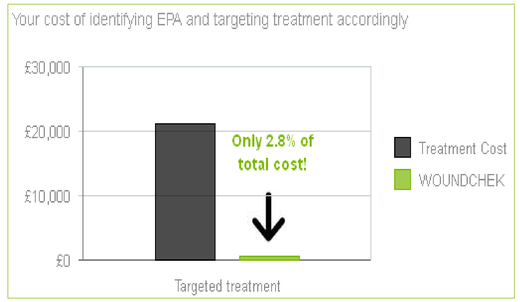
The primary objective of this review was to examine the potential financial benefits of implementing WOUNDCHEK™ Protease Status in clinical practice for chronic non-healing wounds and also the costs of maintaining current practice.

Financial benefits

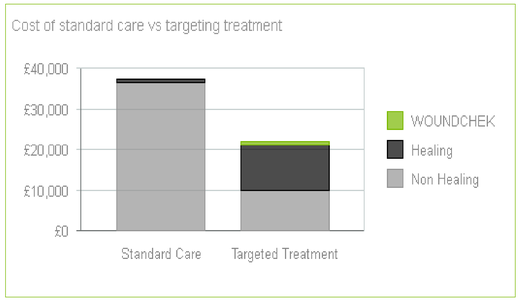
Potential financial benefits were based on 29 WOUNDCHEK™ Protease Status tests being carried out to identify 8 EPA wounds that would be suitable for a test and treat approach



Undetected and without appropriate treatment, chronic wounds with EPA only have a 10% chance of healing[3]. This means that 7 out of the 8 wounds with EPA were unlikely to heal without appropriate intervention, resulting in a potential wasted cost of care of £36,481 annually.



When EPA is identified and treatment is targeted appropriately, the likelihood of healing increases to 77%[8]. This means that 6 out of the 8 EPA wounds if treated appropriately would have a chance of healing at a cost of only £21,935. That's a 41% saving annually.



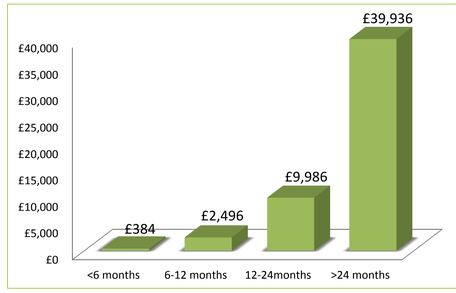
By testing for EPA and targeting treatments the potential saving for such a low number of wounds could have been £15,482, over the course of a year. That's a saving of £1,907 per EPA wound identified or 161 episodes of care. Considering that 50% of the EPA wounds identified had been present for longer than 2 years potential savings are conservative.

Retrospective costs

Retrospective estimated costs for the wound care management of the 8 chronic wounds with EPA.

Assumptions necessary due to the limited wound care history available for these individuals:

- No admissions to hospital for wound care
- No specialist wound care procedures/investigations carried out
- Duration of wound estimated at shortest possible period within the indicated category
- Wounds were reviewed weekly, throughout the duration on the wound
- Cost for each episode of care was estimated at £96 in line with the suggested figure in AQP venous leg ulcer implementation pack
- Wounds of less than 6 months, surmised to be at least 4 weeks old as deemed non-healing.



Retrospective cost of care for the 8 patients identified with EPA prior to carrying out WOUNDCHEK Protease status is £52,800.00 or approx 550 episodes of care. This figure is conservative as costs could increase to over £100,000.00 if wound dressings were changed twice weekly. Estimates were based on the lowest possible duration for each of the EPA wounds.

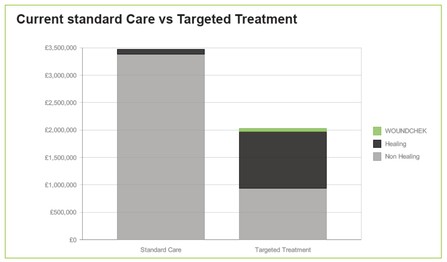
Methodology

Prevalence data from a small pilot study was utilised to populate a previously published economic model[6]. Potential financial benefits were based on 29 WOUNDCHEK™ Protease Status tests being carried out to identify 8 EPA wounds that would be suitable for a test and treat approach.

Furthermore, retrospective financial analysis was carried out on the 8 EPA wounds identified during the pilot study to establish the cost implications of not identifying these wounds earlier. Wound care costs identified in the recent AQP venous leg ulcer implementation pack[7] were utilised to determine the potential costs of managing these previously non healing wounds.

Financial benefits for Wiltshire CCG

Using estimated prevalence data based on published literature[9,10] it was estimated that for the total population of Wiltshire CCG, prevalence of chronic wounds could be 2430 . By testing for EPA and targeting treatment Wiltshire CCG (total population) could save an estimated total of £1,441,892 over 12 months.



- That's £1,914 per EPA wound identified
- Or have the ability to manage an additional 15,019 clinical episodes
- Healing an additional 505 wounds compared to standard care.

Savings are based on there being 2430 non healing chronic wounds treated with an estimated prevalence of EPA of 31% (753.3 patients with EPA).

Discussion and Conclusion

Across the NHS, clinicians are being asked to deliver the same or increased levels of care, with the same or reduced levels of resources. One way to do this is by introducing innovative technologies and approaches, which can save resources in terms of staff time and improved decision making. WOUNDCHEK™ Protease Status seems to tick both of these boxes as well as offering some real economic benefits.

References

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