Introduction
Burns disrupt the protective integrity of the skin. The ensuing generalised immune suppression allows micro-organisms to multiply. The burn wound surface is sterile immediately following injury; however, micro-organisms survive within the hair follicles and bacteria repopulate the wound bed within the first 48 hours. More virulent gram-negative organisms subsequently populate the wound after day 5 (Peral, Martinez and Valdez 2009). If left untreated, bacterial colonisation and infection can lead to impaired healing (Ousey and McIntosh 2009).

Bacteria maybe more successfully targeted through the use of topical antimicrobial dressings (Tadej et al 2009). Their use in isolation is recommended where the patient is able to mount a sufficient host response and has sustained a minor traumatic wound (Ousey and McIntosh 2009).

The ideal properties of antimicrobial dressings were described by Maillard and Denyer (2006). PHMB is a topical antimicrobial agent that fulfils this criteria. It is bactericidal and kills bacteria by destroying the bacterial cell membranes (Ousey and McIntosh 2009). Suprasorb® X+PHMB had already demonstrated positive results in patients with multiple co-morbidities and chronic non-healing wounds (Tadej et al 2009). Therefore in light of questions regarding the value of silver in preventing wound infection in burn wounds, Suprasorb® X+PHMB was chosen as a topical antimicrobial to treat patients with burn/scald and donor site wounds. (Storm-Versloot et al 2010).

Method
Seven patients with a variety of wounds were followed for differing time periods between January to April 2010. These patients wounds consisted of scald to thigh, leg donor site x 2, hand burn combined burn to hand and forearm, arm burn and finger burns. All wounds were treated with Suprasorb® X+PHMB sheet dressings, with dressing changes taking place between one and six days. The primary dressings were secured with gauze and bandages.

Results
The outcome for the seven patients were two completely healed, two almost healed, one hand burn went from sloughy to being suitable to receive a split skin graft and two patients were discontinued due to pain in one case and a reduction in wound exudate which resulted in primary dressing adhering to the wound bed in the second patient. Regular wound swabs were taken, with only one patient having a significant result which reported Staphylococcus aureus and mixed anaerobes however this wound went on to complete healing with 5 days of the swab result.

Discussion
This case series demonstrate the challenges of burn, scald and donor site wounds. Due to their clinical presentation, wound site and propensity for developing wound infection. Previous alternative antimicrobial dressings had been used in these seven patients with limited success.

Conclusion
It is hoped this case series will give clinicians working with this population the confidence to try Suprasorb® X+PHMB as a primary wound dressing. Although not a randomised clinical trial the experiences of the author demonstrate success and limitations when using this product. It is paramount that these wounds do not develop wound infections in what is an already compromised patient group. Therefore the antimicrobial wound dressing is a key part of the wound management plan.

Conflict of interest
The author received assistance from Activa Healthcare with the abstract and poster production.

References
Ousey K, McIntosh C (2009) Topical antimicrobial agents for the treatment of chronic wounds British Journal of Community Nursing (9) Wound Care: S6-15