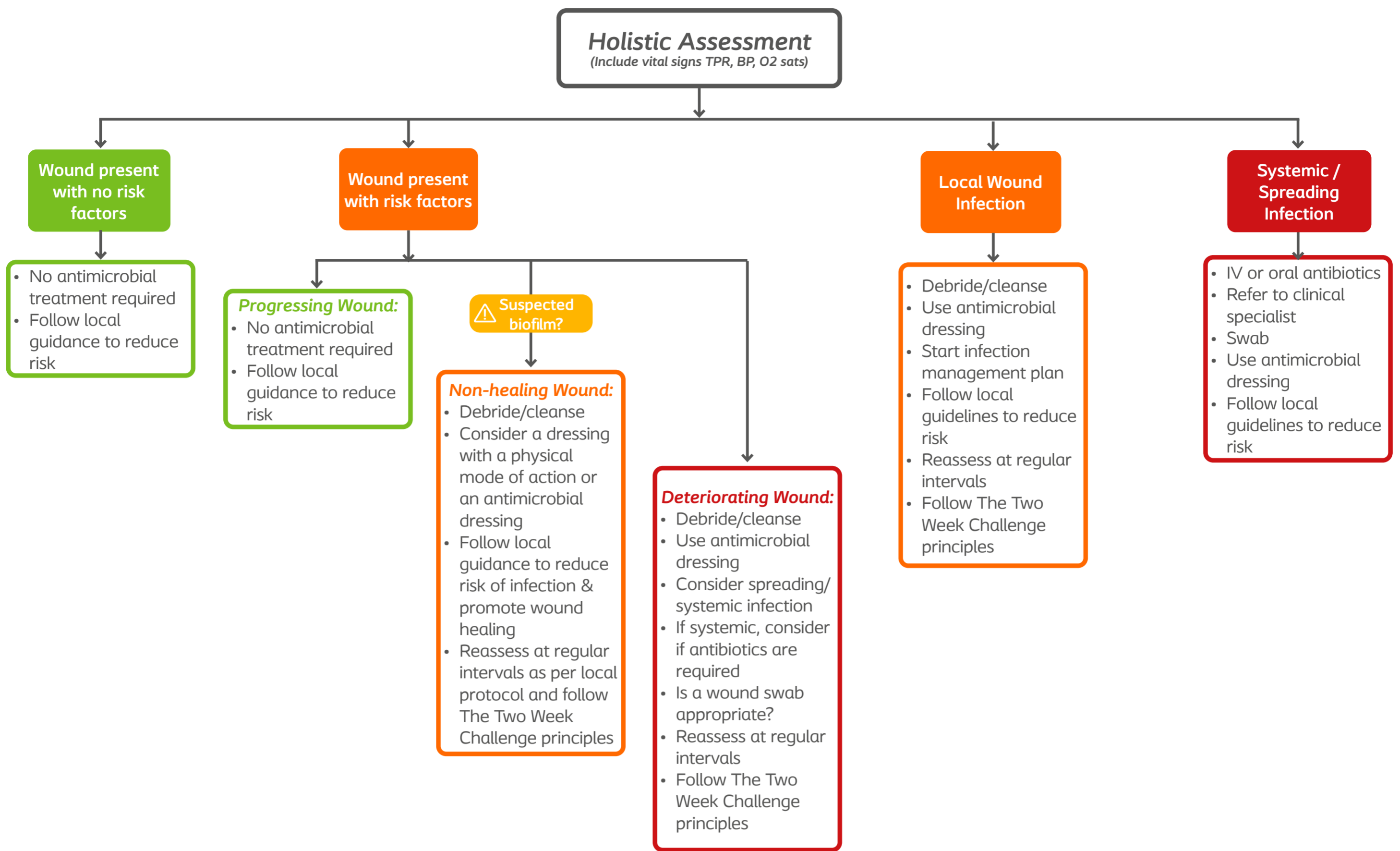


Antimicrobial Stewardship Pathway

The term 'Antimicrobial Stewardship' is defined as 'an organisational or healthcare-system-wide approach to promoting and monitoring judicious use of antimicrobials to preserve their future effectiveness'.



This pathway was created in collaboration with Humber NHS Foundation Trust, South West Yorkshire Foundation Trust, Barnsley CCG and County Durham and Darlington NHS Foundation Trust referencing the recent Wounds UK (2020) Best Practice Statement: Antimicrobial stewardship strategies for wound management¹

Risk Factors to Consider:

- Diabetes
- Prior surgery
- Radiation therapy/ chemotherapy
- Conditions associated with hypoxia and/or poor tissue perfusion
- Immune system disorders
- Inappropriate antibiotic use
- Malnutrition
- Alcohol, smoking and drug abuse
- Presence of significant lymphoedema, skin conditions, haematoma, seroma, abscess, fistula²
- Self-harm
- A carrier or infected with a multi-drug resistant organism (i.e. 'alert organism')
- Recent travel abroad/between multiple care settings
- Mental capacity

Infection Signs & Symptoms

Local	Spreading
<ul style="list-style-type: none"> • Hypergranulation (excessive 'vascular' tissue) • Bleeding, friable granulation tissue • Epithelial bridging and pocketing in granulation tissue • Wound breakdown and enlargement • Delayed wound healing beyond expectations • New or increasing pain • Increasing malodour • Erythema • Local warmth • Swelling • Purulent discharge 	<ul style="list-style-type: none"> • Extending in duration +/- erythema • Lymphangitis • Crepitus • Wound breakdown/dehiscence with or without satellite lesions • Malaise/lethargy or nonspecific general deterioration • Loss of appetite • Swelling of lymph glands

The Two Week Challenge³

It has been recommended to do a 'Two Week Challenge' to determine the clinical efficacy of silver dressings. Thereafter, the wound, the patient and the management approach should be re-evaluated. If there is improvement in the wound, but continuing signs of infection, treatment with silver dressing can be continued with regular reviews. If the wound has improved and the signs and symptoms of wound infection are no longer present, the silver dressing can be discontinued. If there is no improvement after 2 weeks, the silver dressing should be discontinued and consideration given to changing to a different antimicrobial agent, using a systemic antibiotic and/or re-evaluate possible untreated comorbidities

Consider swabbing when:

- Current therapy not working
- Wound deterioration
- Signs of spreading/systemic infection

The 5 rights of Topical Antimicrobial Use

1. Right diagnosis
2. Right delivery mode
3. Right time to initiate
4. Right dose.
5. Right duration



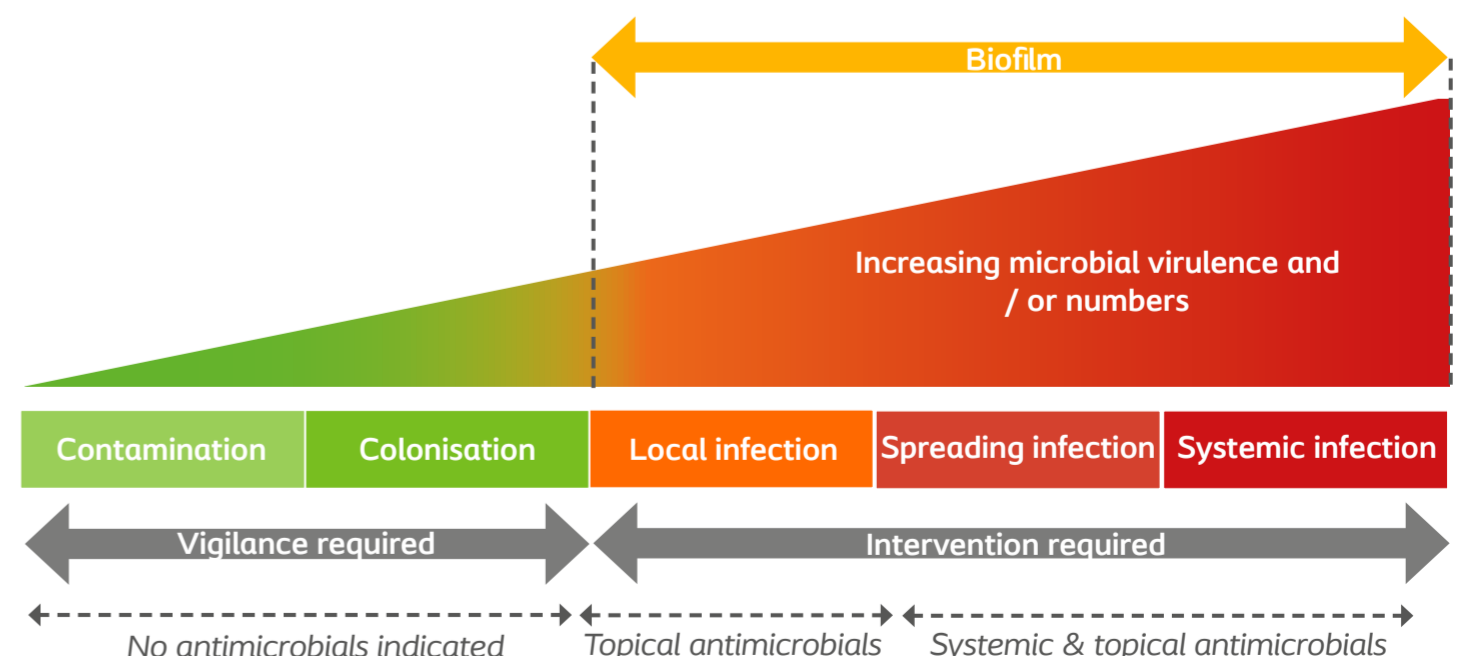
Definition:

A biofilm is a community of slow-growing bacteria that are tolerant to host defences and to antimicrobial treatment⁴

Clinical indicators of a biofilm:

- Failure to respond to antibiotic/antimicrobial treatment
- Recurrence of delayed healing on cessation of antibiotic/antimicrobial treatment
- Increased exudate/moisture
- Low-level chronic inflammation
- Low-level erythema
- Poor granulation/friable hypergranulation
- Wound breakdown and enlargement

Wound Infection Continuum⁵



Reproduced from the International Wound Infection Institute (IWII) Wound infection in clinical practice document 2016.

References

1. Wounds UK (2020) Best Practice Statement: Antimicrobial stewardship strategies for wound management. Wounds UK, London. Available to download from: www.wounds-uk.com.
2. Beekman D et al (2020) Best practice recommendations for holistic strategies to promote and maintain skin integrity. Wounds International, London. Available at: <https://www.woundsinternational.com/resources/details/best-practice-recommendations-holistic-strategies-promote-and-maintain-skin-integrity>.
3. International consensus. Appropriate use of silver dressings in wounds. An expert working group consensus. London: Wounds International, 2012.
4. Schultz et al. Consensus guidelines for the identification and treatment of biofilms in chronic nonhealing wounds. Wound Rep Reg (2017) 25 744–757.
5. International Wound Infection Institute (IWII) Wound infection in clinical practice. Wounds International 2016