Wound Hygiene Challenge

Northamptonshire Healthcare NHS Foundation Trust

Georgina Ellis
Tissue Viability Nurse Lead, NHFT

22nd February 2023

ConvaTec

Wound Hygiene Project Northamptonshire

Wound Hygiene Challenge

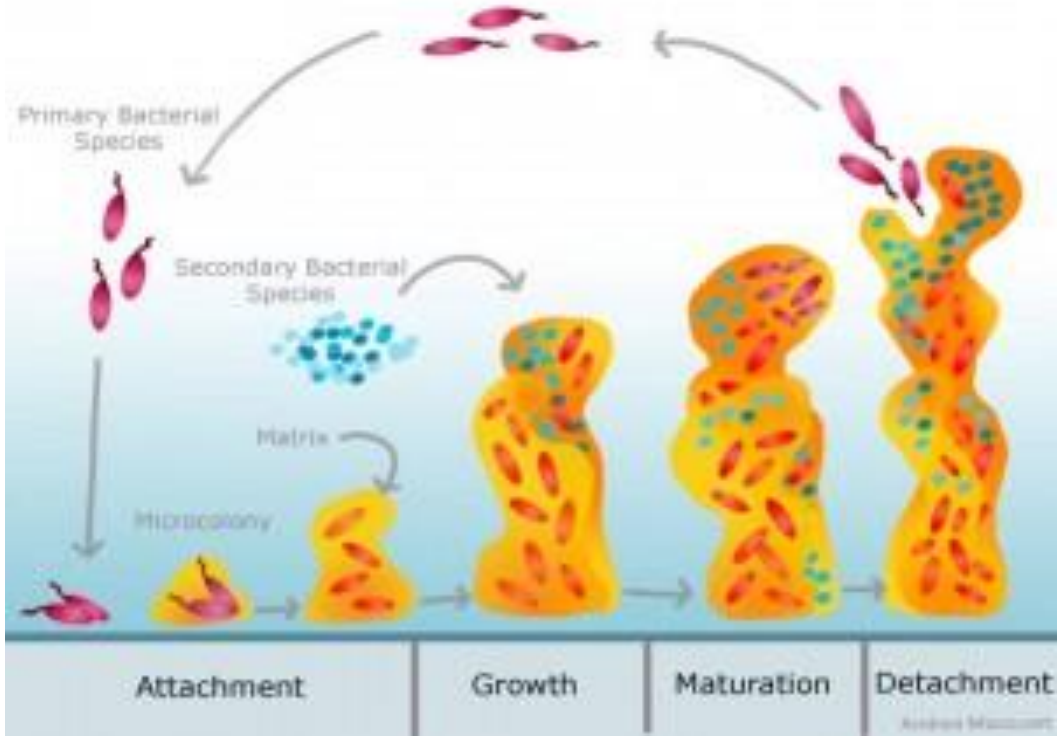
Overview 22.02.23

- Biofilms
- International Consensus Document – Antibiofilm Strategy
- What is Wound Hygiene?
- Patient Evaluations NHFT 2022
- Next Steps – Primary Care

ConvaTec

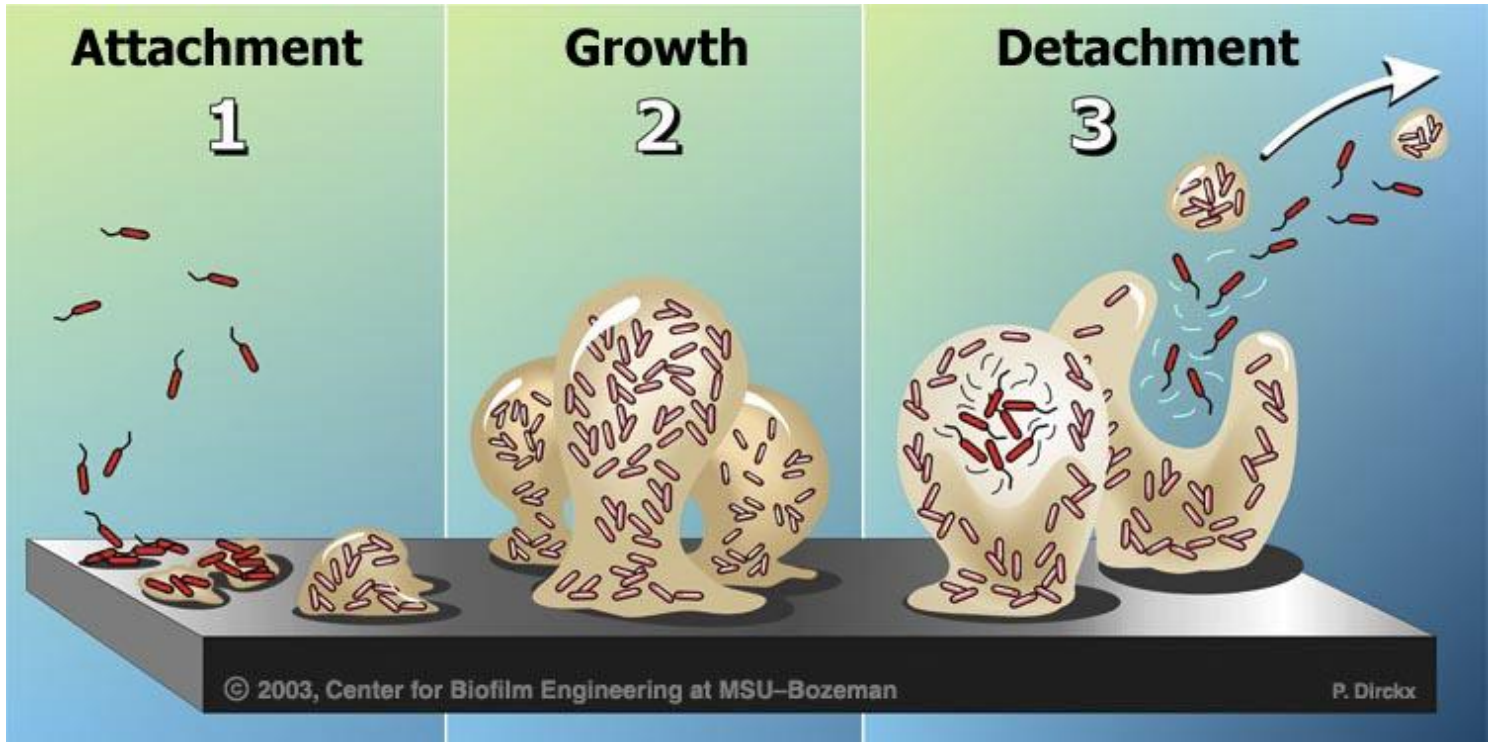
Biofilms

- Hard to heal wounds are polymicrobial
- Bacteria encase themselves in an extra cellular matrix which adheres to wound bed
- Biofilm colonies grow and communicate
- Increases resistance to antimicrobials and protect themselves from the host neutrophils (white blood cells)



Biofilms

- Often no signs & symptoms of infection / no host response
- Not identified by wound swab / subjective observation / advanced microscopy
- Delay wound healing



EVIDENCE:

- (2020) JWC International Consensus Document: Defying hard-to-heal wounds with an early antibiofilm intervention strategy: wound hygiene

- Supported by Convatec

Wound Hygiene Challenge

Wound Hygiene – 4 Step Process

Wound Hygiene Step:
STEP 1 – CLEANSE the wound and the peri-wound skin Cleanse the wound bed to remove devitalised tissue, debris and biofilm. Cleanse the peri-wound skin to remove dead skin scales and callus, and to decontaminate it.
STEP 2 – DEBRIDE Remove necrotic tissue, slough, debris and biofilm at every dressing change. ***Select method based on skill of clinician***
STEP 3 – REFASHION the wound edges Remove necrotic, crusty and/or overhanging wound edges that may be harbouring biofilm. Ensure the skin edges align with the wound bed to facilitate epithelial advancement and wound contraction. Select method based on skill of clinician
STEP 4 – DRESS the wound Address residual biofilm while preventing or delaying regrowth of biofilm by using dressings containing antibiofilm and/or antimicrobial agents.

ConvaTec

Octenillin Irrigation (available on ONPOS)

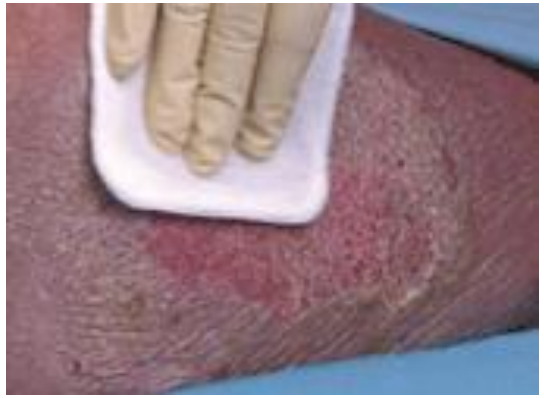
Wound Hygiene Challenge

- Wound irrigation solution for cleansing / disruption of suspected biofilms
- Particularly useful against MRSA and Pseudomonas
- Can be used long or short term
- Use within 8 weeks once bottle opened
- Bottle can be safely heated in warm water at each use

ConvaTec

Debrisoft (Mechanical Debridement)

Wound Hygiene Challenge

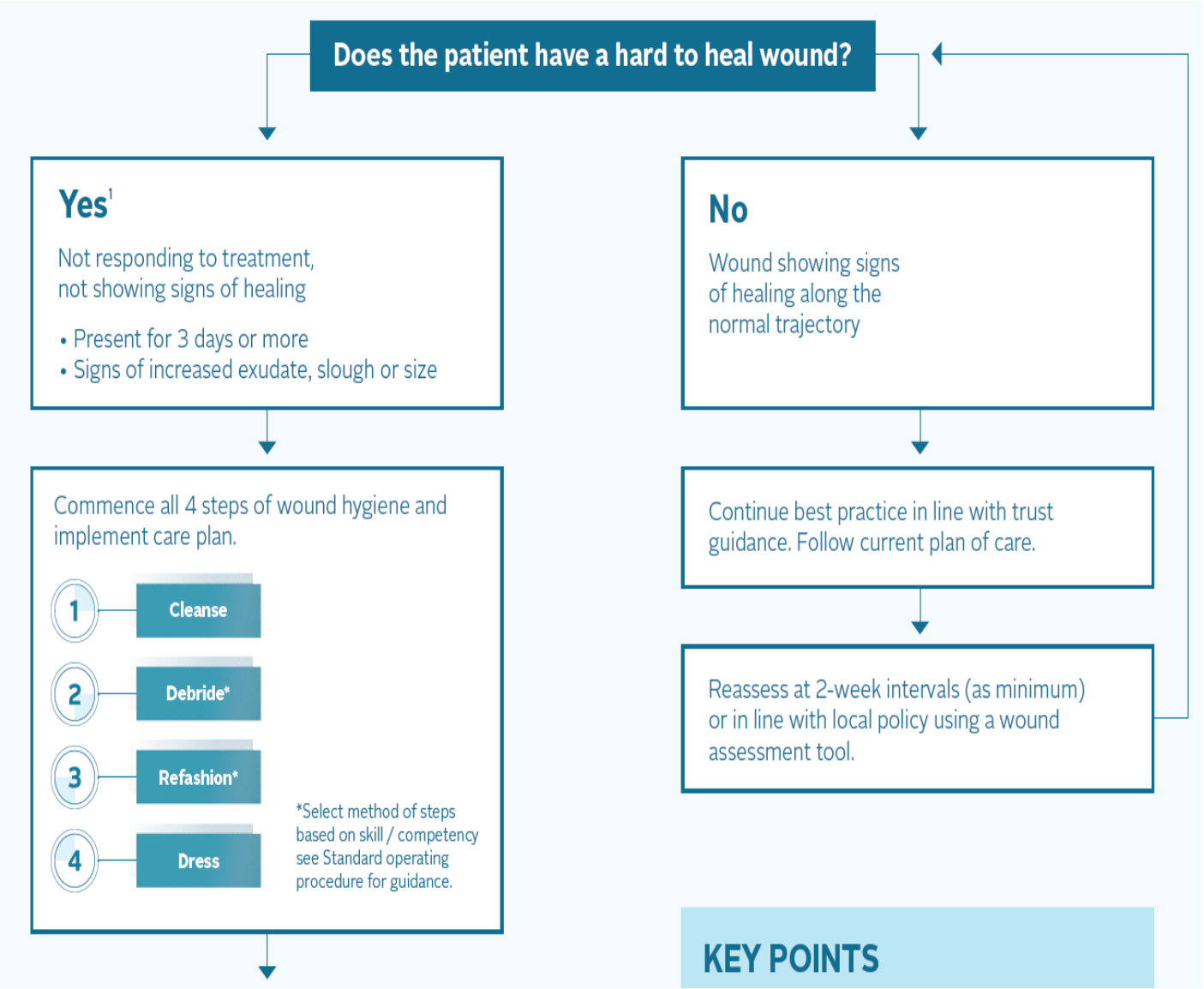


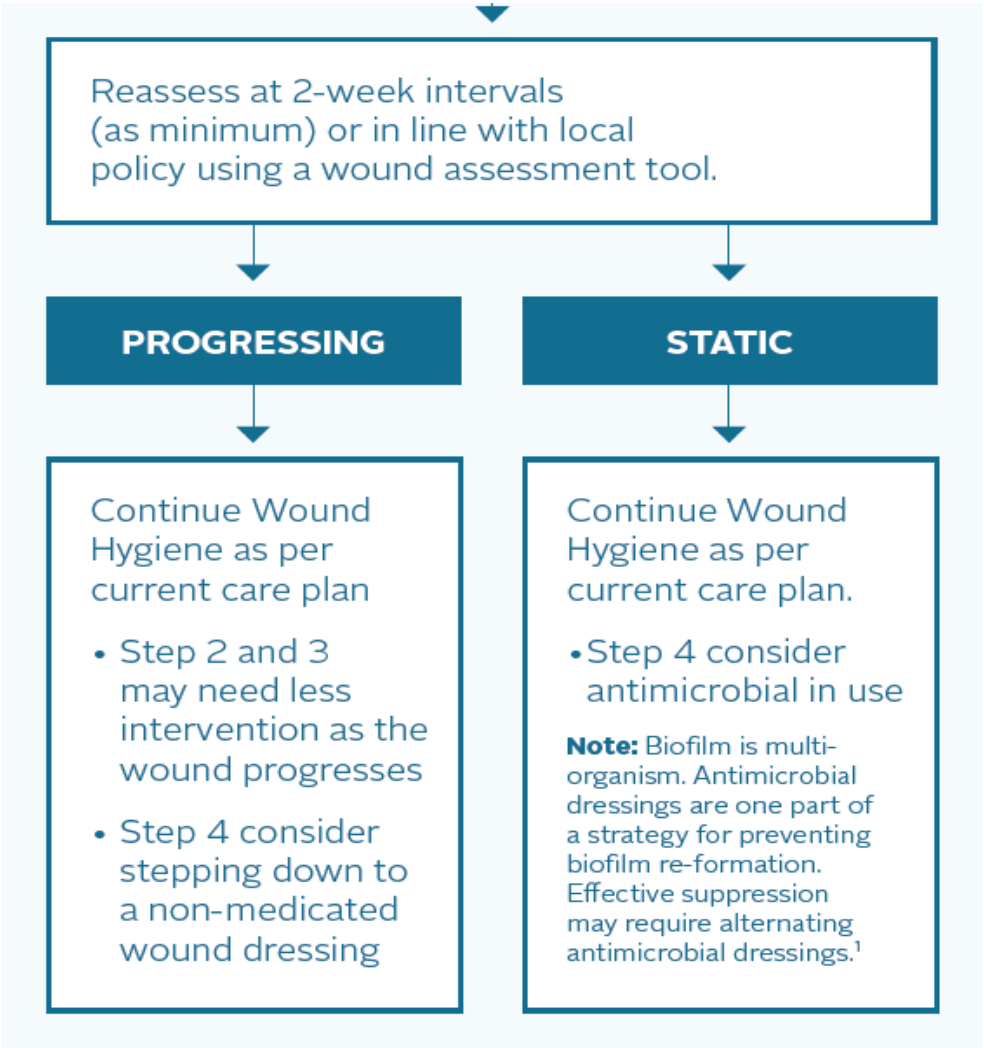
- Removal of hyperkeratosis (thick skin plaques), loose slough and suspected biofilm
- Caution in malignant, painful and / or bleeding wounds

10 x 10cm Debrisoft Lolly (for hard to reach areas)

ConvaTec

When to consider Wound Hygiene

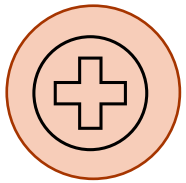




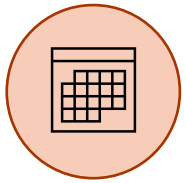
NHFT Patient Evaluations Summer 2022 (led by NHFT TVN Clare Hone)

Wound Hygiene Challenge

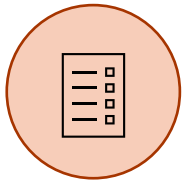
- Identified10 patients



- Early intervention for hard-to-heal wounds



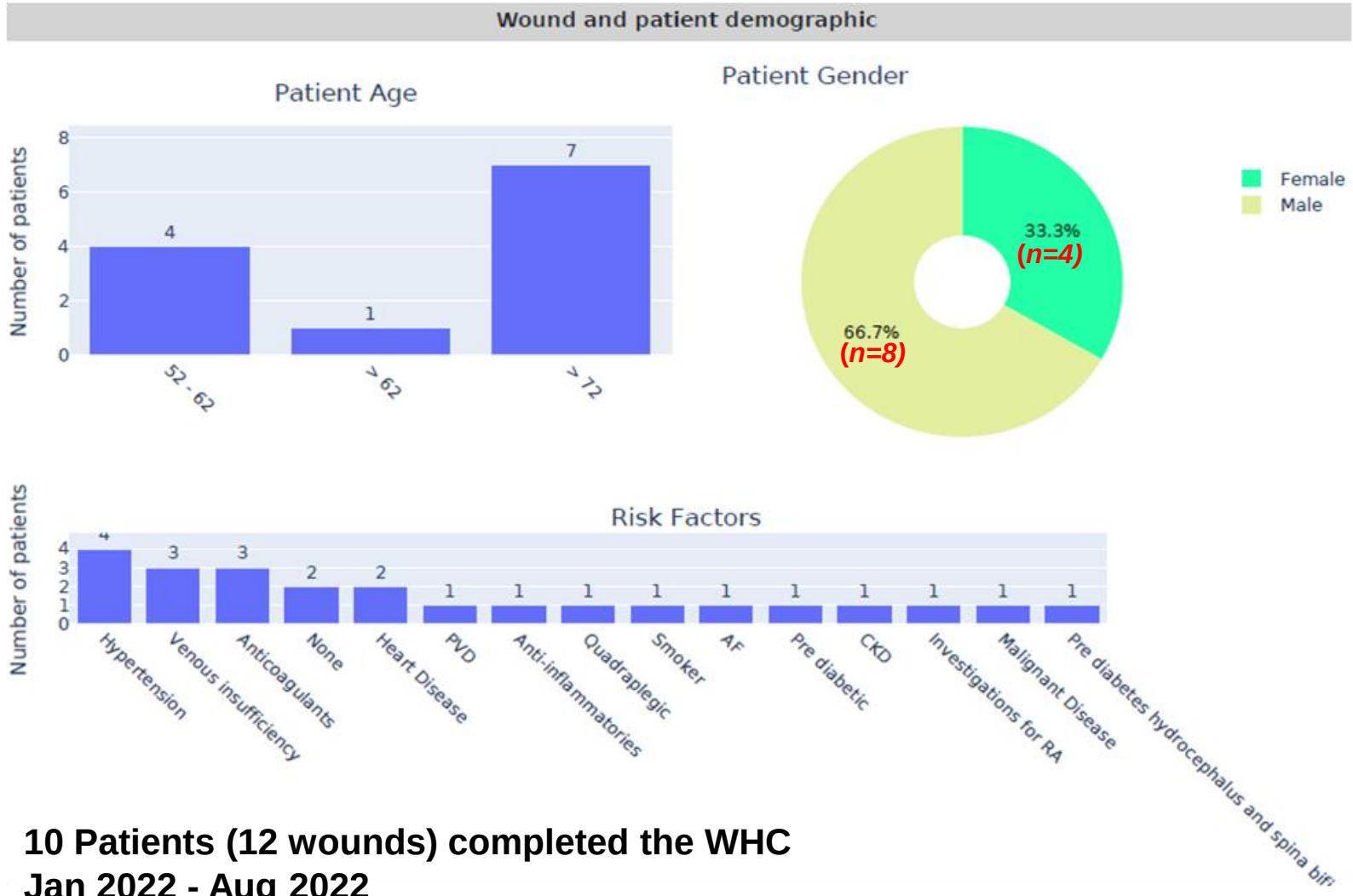
- Treatment period of 4 weeks per patient using the Wound Hygiene protocol with AQUACEL® Ag+ Extra dressings



- Part 1 of implementation form: anonymised patient and wound information
- After 2 weeks - check wound status
- After 4 weeks - complete Part 2 of implementation form

NHS
Northamptonshire Healthcare
NHS Foundation Trust

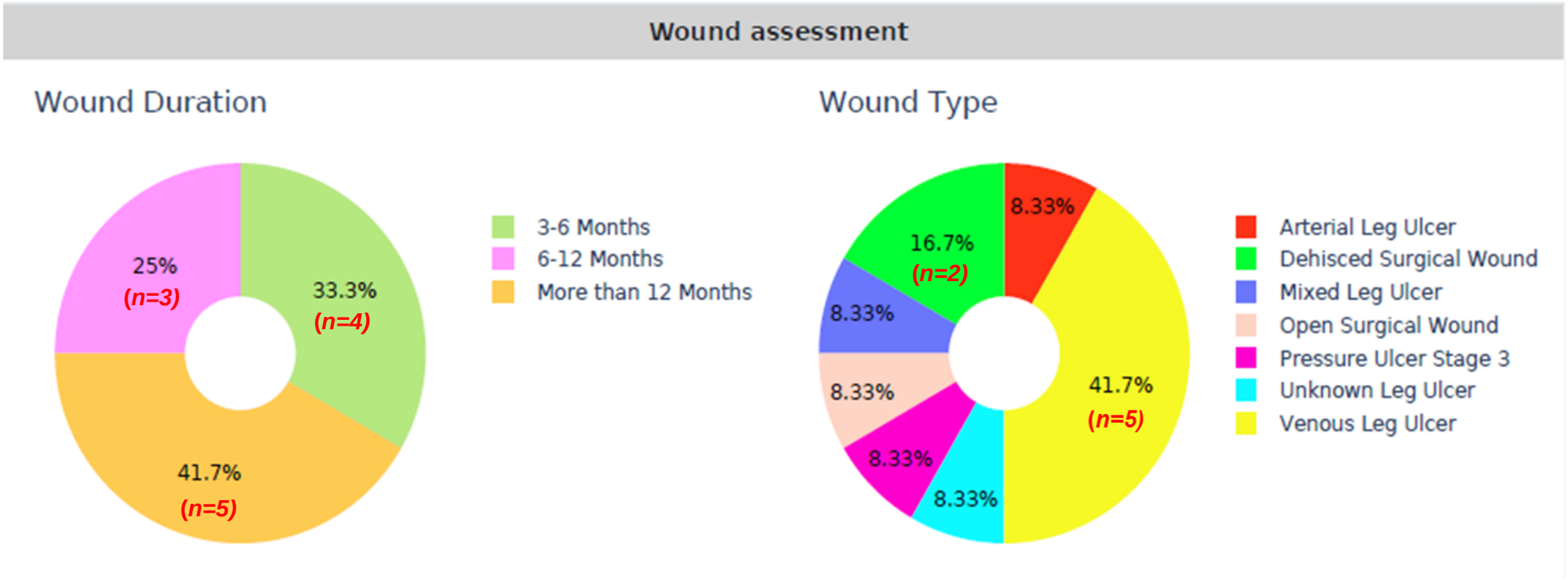
Patient demographics



10 Patients (12 wounds) completed the WHC
Jan 2022 - Aug 2022

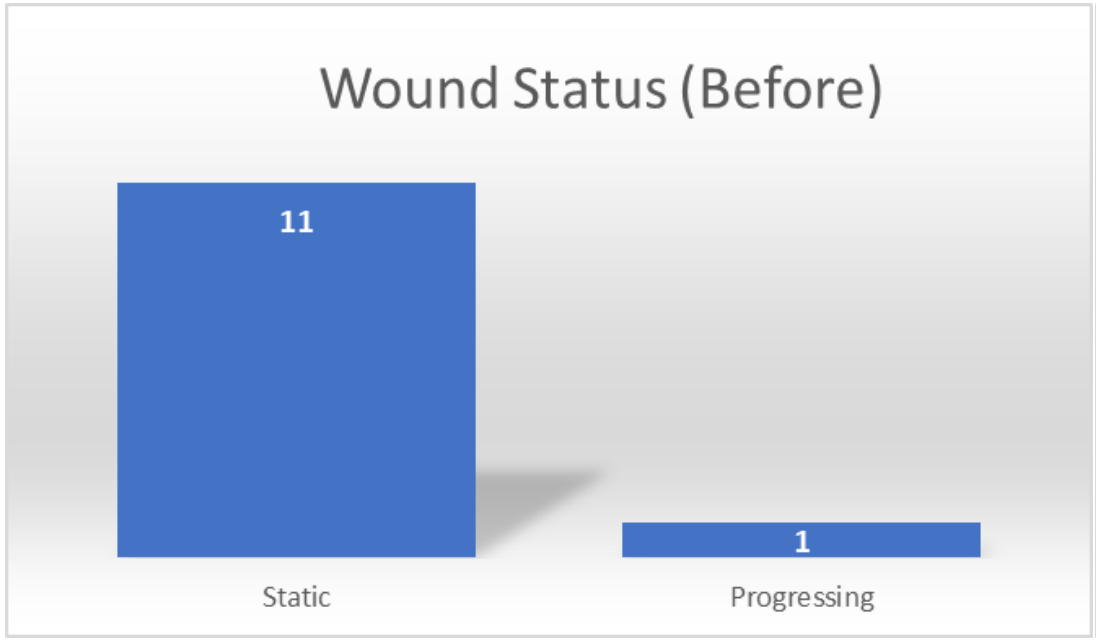
Wound Assessment

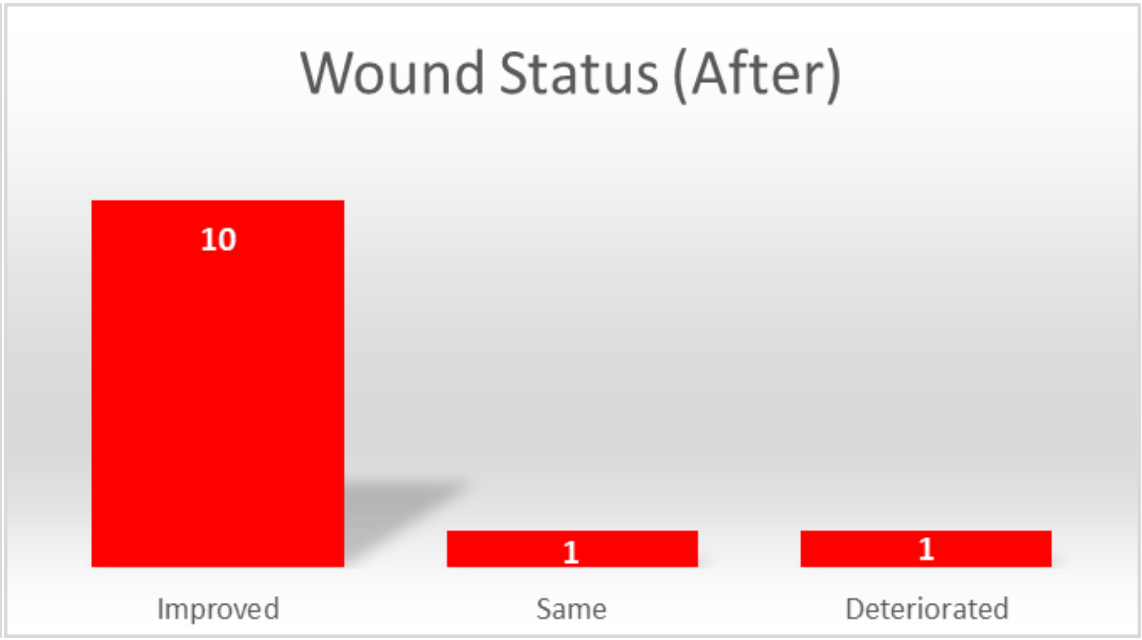
Wound Hygiene Challenge



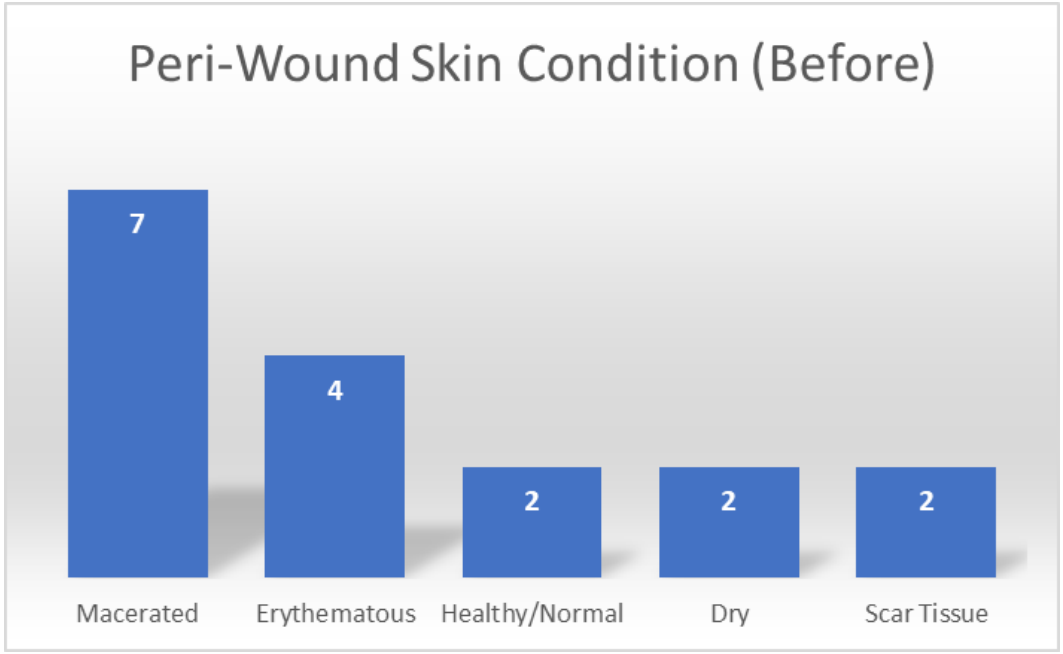
Wound status

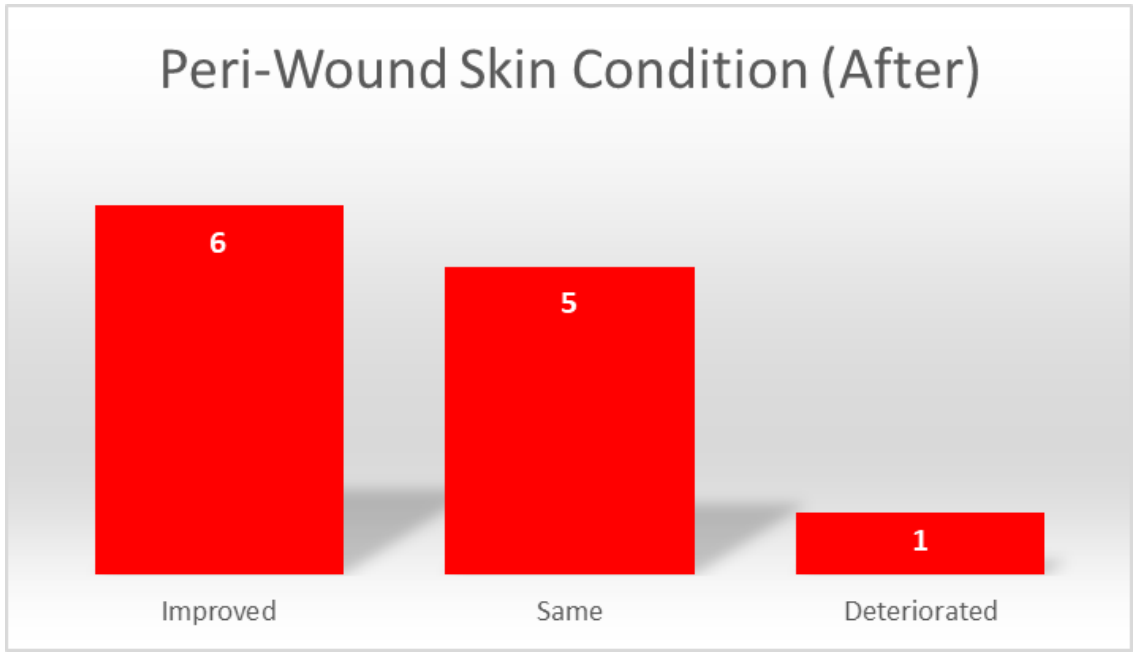
Wound Hygiene Challenge





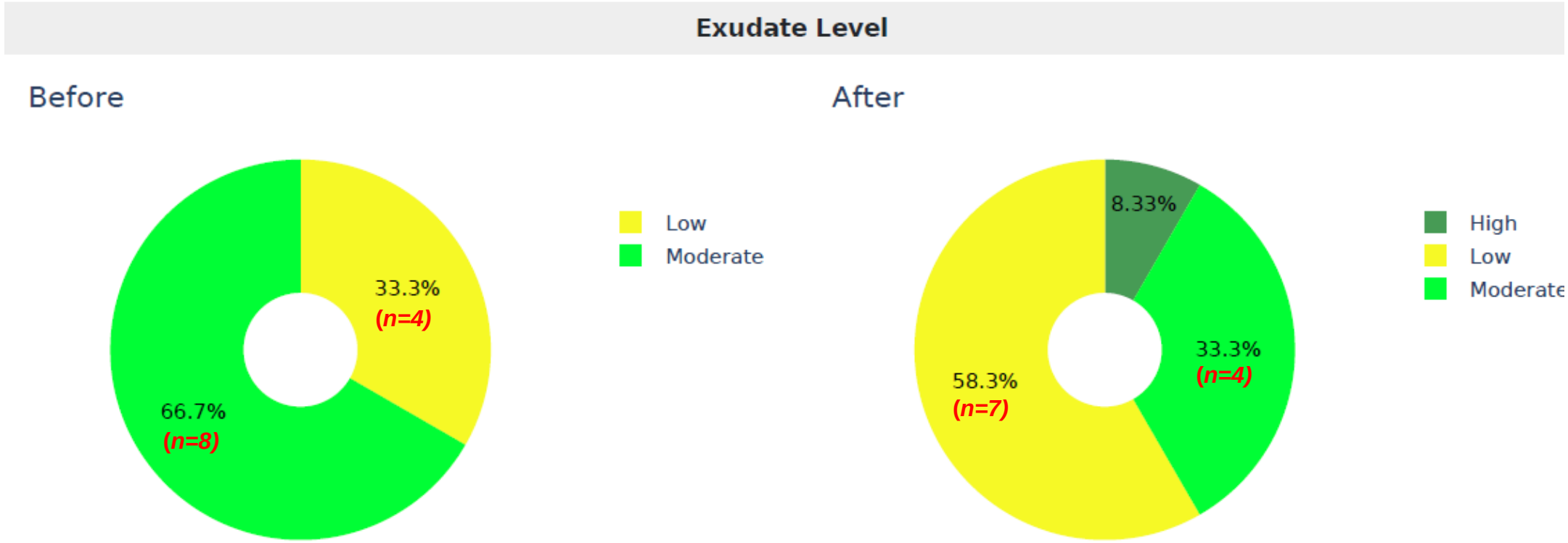
Peri-wound skin condition





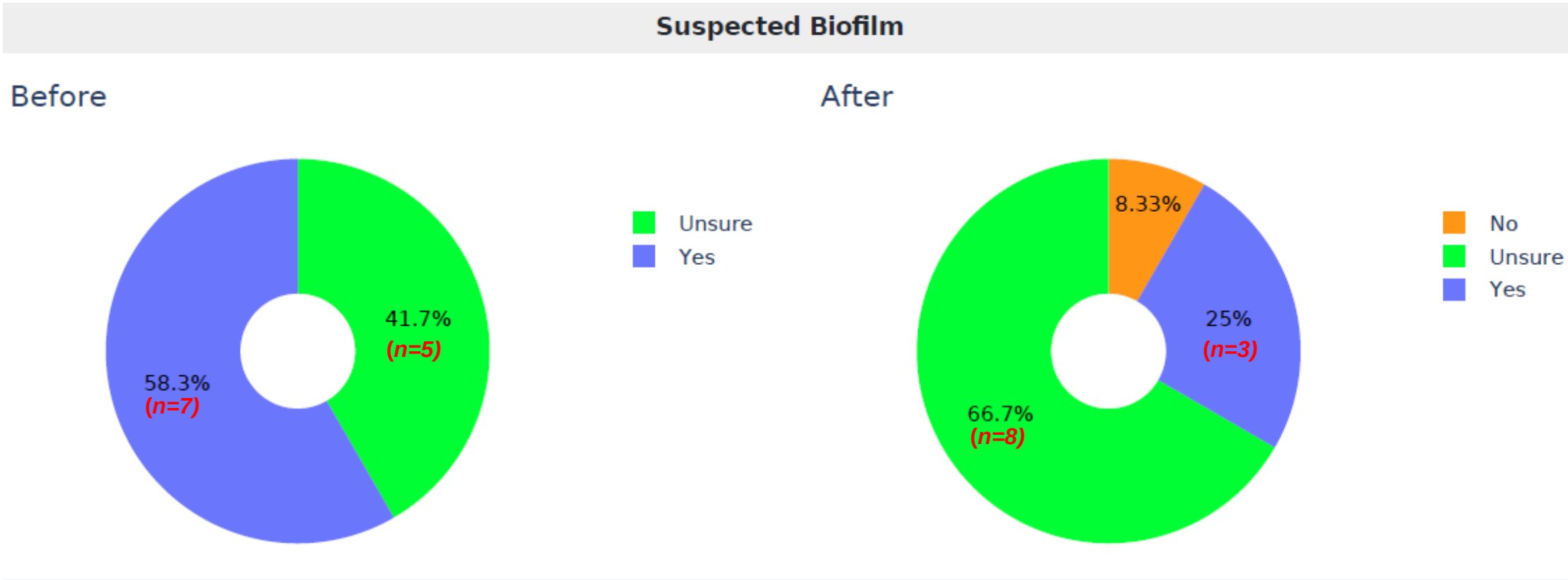
Exudate

Wound Hygiene Challenge



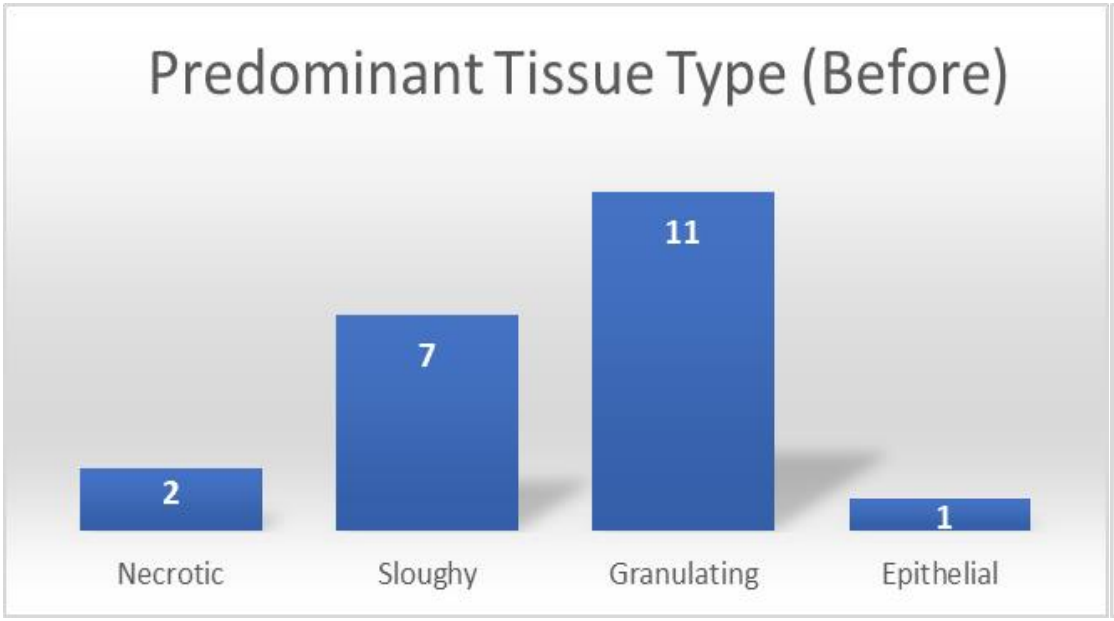
Biofilm suspected

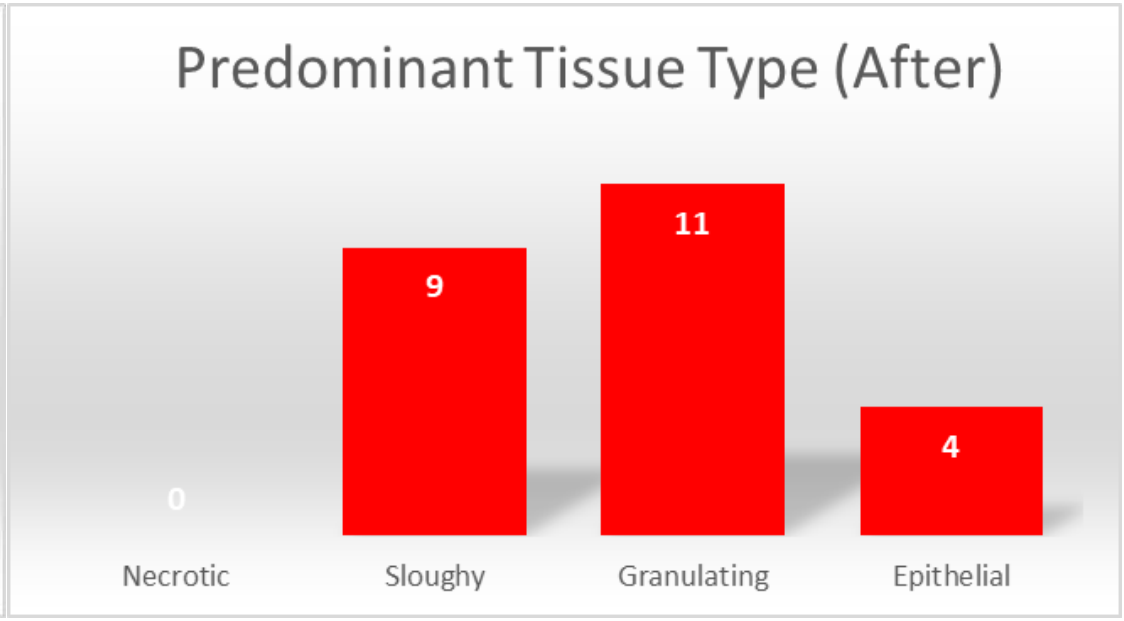
Wound Hygiene Challenge



Wound Tissue Type

Wound Hygiene Challenge





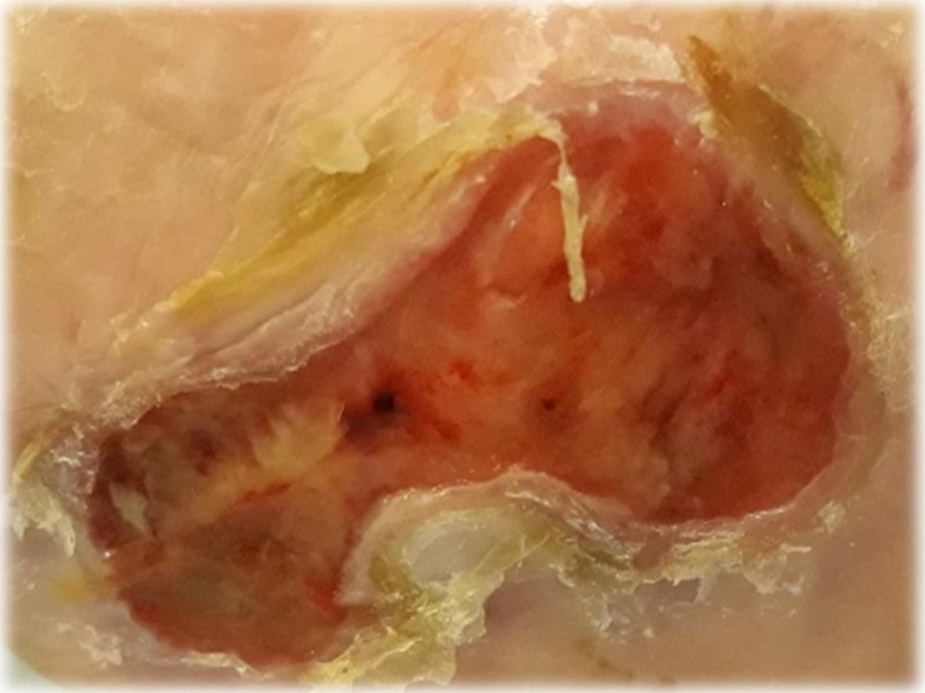
NHS
Northamptonshire Healthcare
NHS Foundation Trust

Clinical Example #1

Wound Hygiene Challenge

The patient:
88-Year-old, female. Frail, underweight, PVD with no surgical intervention. Osteoarthritis. No other Co-morbidities.
Lives in a nursing home, poor mobility and minimal standing/walking. Mostly bed bound.

The wound:
Wound to medial malleolus
12-month history
Superficial wound, increased in size. Very painful.
Repeated infections, antibiotics, short lived response.
Granulating wound bed, obvious biofilm over wound.
Thick dry crust to edge
The wound measures 52mm x 30mm, no depth.

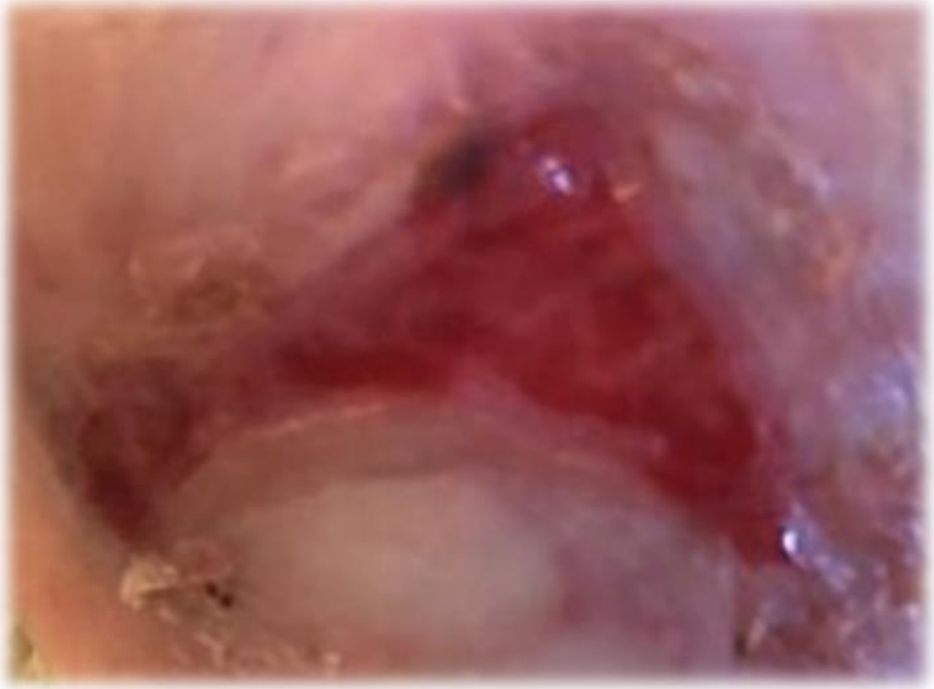


Clinical Example #1

Wound Hygiene Challenge

Wound Healing aims: The patients aim was to stop needing antibiotics and to help the pain in the wound. If the wound began to heal, then this would be optimal

Wound Healing plan:
Debrisoft and Octenilin irrigation solution.
Forceps to edges
5 minutes, twice a week
AQUACEL® Ag+ Extra™ used 4 weeks.

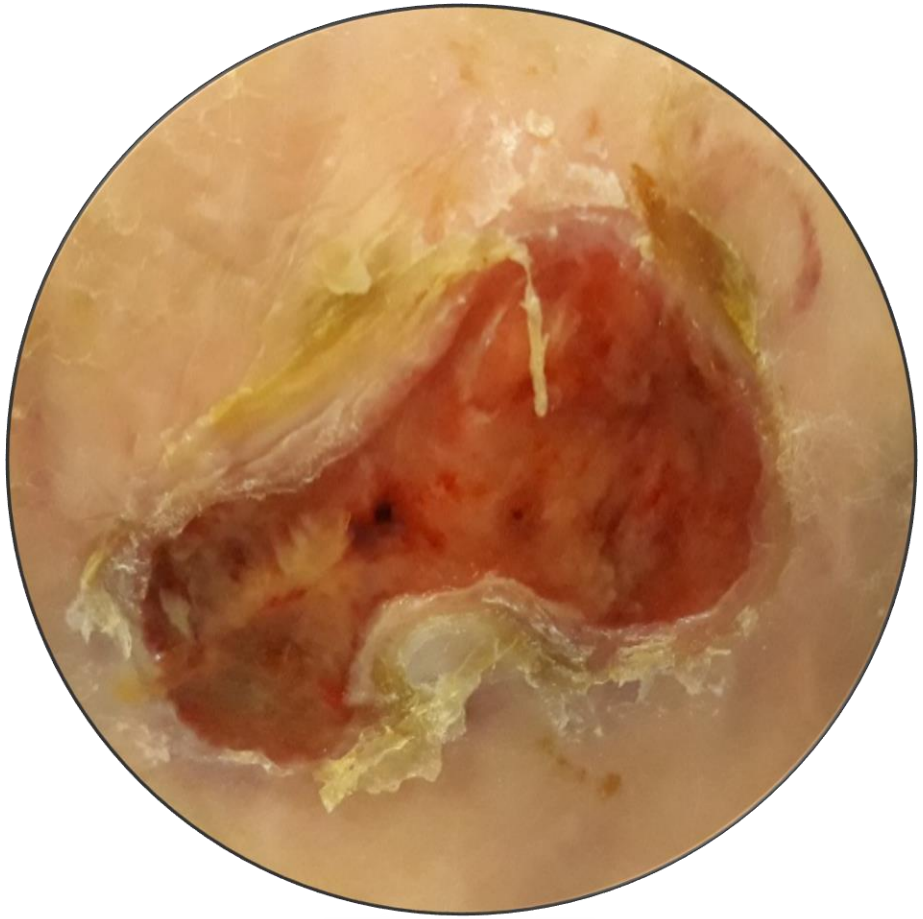


After 4 weeks:
Wound reduced in size to 35mm x 15mm.
No crusty dry edges.
No noticeable Biofilm.
Reduced exudate levels.
No further infections.

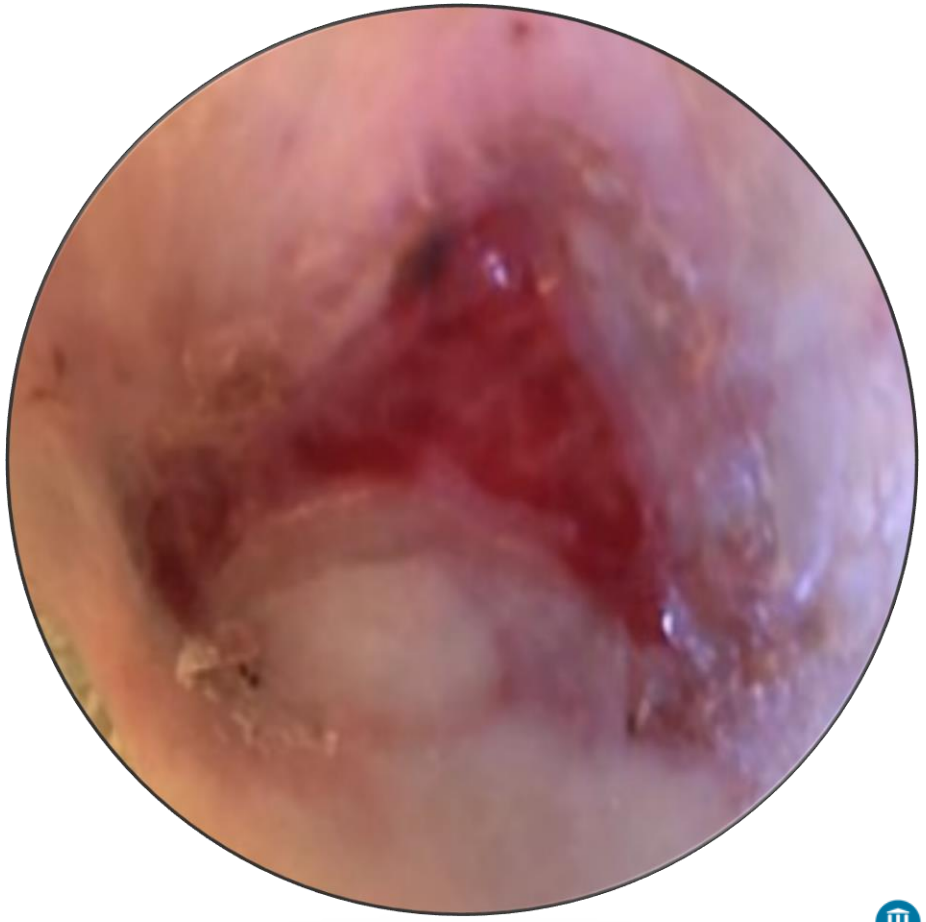
Clinical Example #1

Wound Hygiene Challenge

Initial assessment



Final assessment (Week 4)



ConvaTec

Clinical Example #2

Wound Hygiene Challenge

The patient:
85-Year-old, male patient. PMH - AF, Hypertension, undiagnosed heart failure, venous disease. Reduced mobility and walked with two sticks.
Still driving a car. Patient was on anticoagulants.

The wound:
Bilateral leg wounds to feet/ankles, medial aspect.
8 Month History, increase size, exudate, maceration, pain and repeat infections and antibiotics.
Obvious venous disease, unable to treat with compression.

Left heel:
Raised, dull granulation to wound bed.
Sloughy film covering.
Very wet and macerated surrounding skin.
Wound dimensions 65mm x 23mm, no depth.

Clinical Example #2

Wound Hygiene Challenge

Wound Healing aims:
The patients aim is to heal the wounds, to be free from dressings, pain and antibiotics. Do usual daily activities, free from fear and embarrassment.

Wound Healing plan:
Used Debrisoft and Octenilin irrigation solution.
Forceps removed dry edges.
5 minutes, each dressing change three times a week.
Clotrimazole cream to maceration.
AQUACEL® Ag+ Extra™, Kerramax, wool and K lite

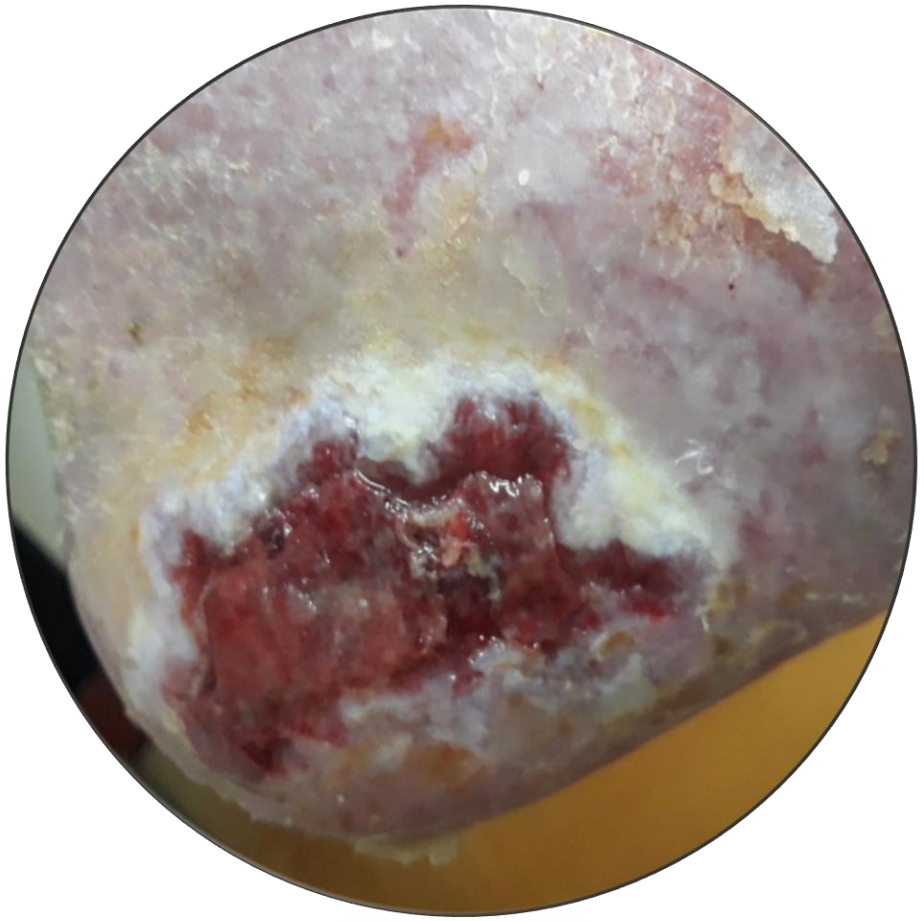
Left heel ulcer reduced in size to 50mm x 20mm.
The surrounding skin maceration and wetness resolved with flat wound edges.
Wound bed, some thick, granulation and sloughy tissue across the base but signs of healing noticeable.

NHS Northamptonshire Healthcare NHS Foundation Trust

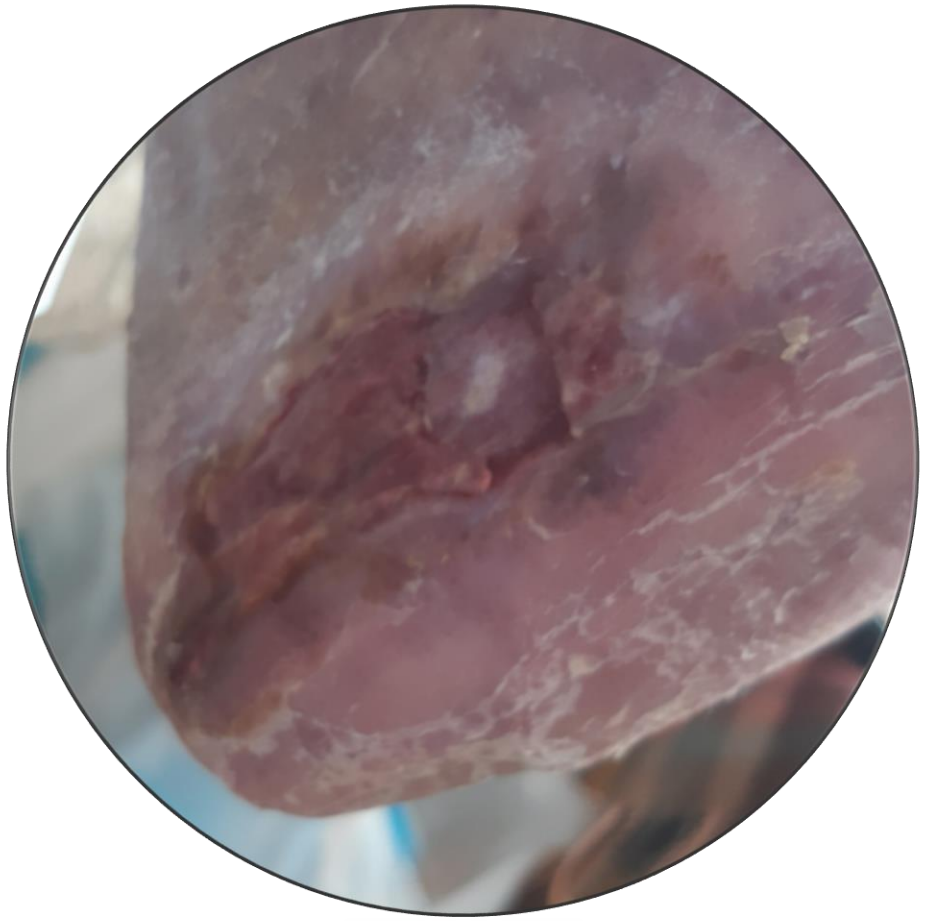
Clinical Example #2

Wound Hygiene Challenge

Left Heel - Initial assessment



Left Heel - Final assessment



ConvaTec

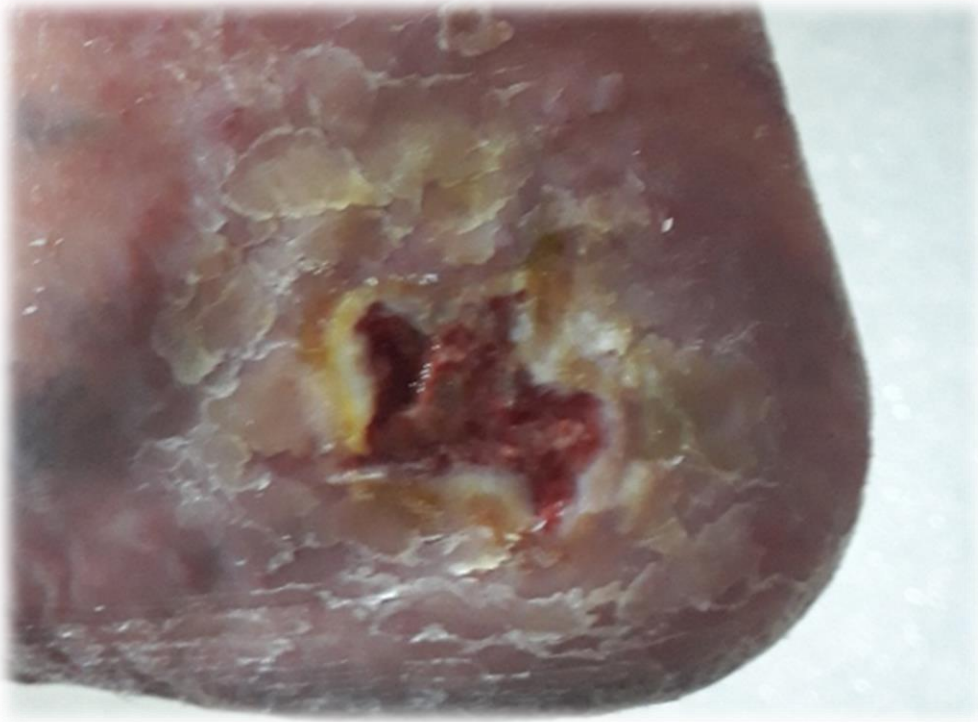
Clinical Example #2

Wound Hygiene Challenge

Right Heel -similar appearance with thick, granulating/sloughy tissue across the wound bed.

The edges were raised slightly with dry plaques around the edges.

Wound dimensions 26mm x 18mm, no depth.



Outcome:

Right heel ulcer also reduced in size of width but not the length - 29mm x 9mm.

Wound almost healed,

Signs of epithelisation to edges.

Granulation to wound bed.

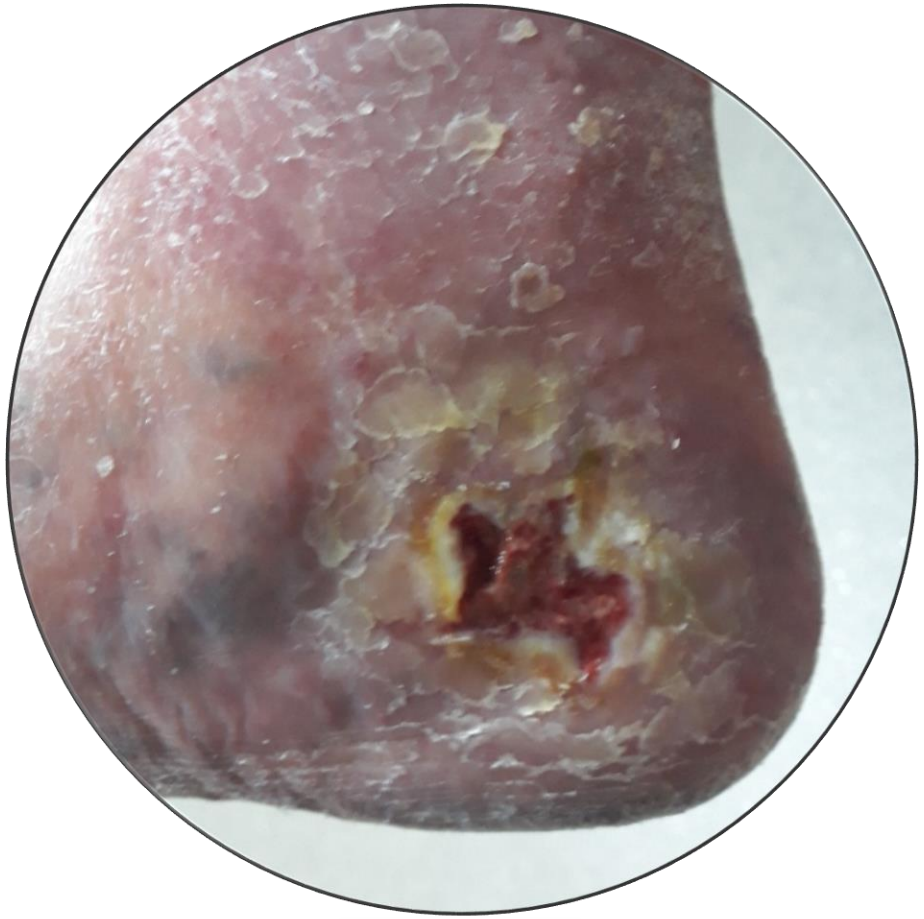
No maceration.

ConvaTec

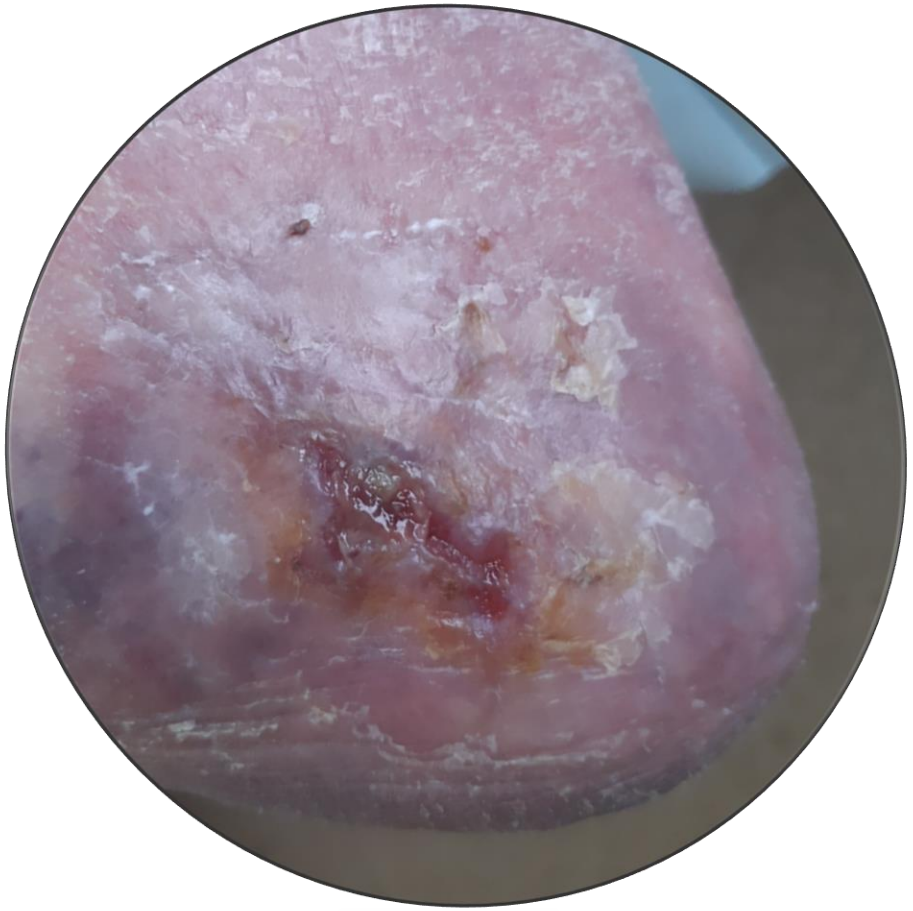
Clinical Example #2

Wound Hygiene Challenge

Right heel - Initial assessment



Right heel - Final assessment



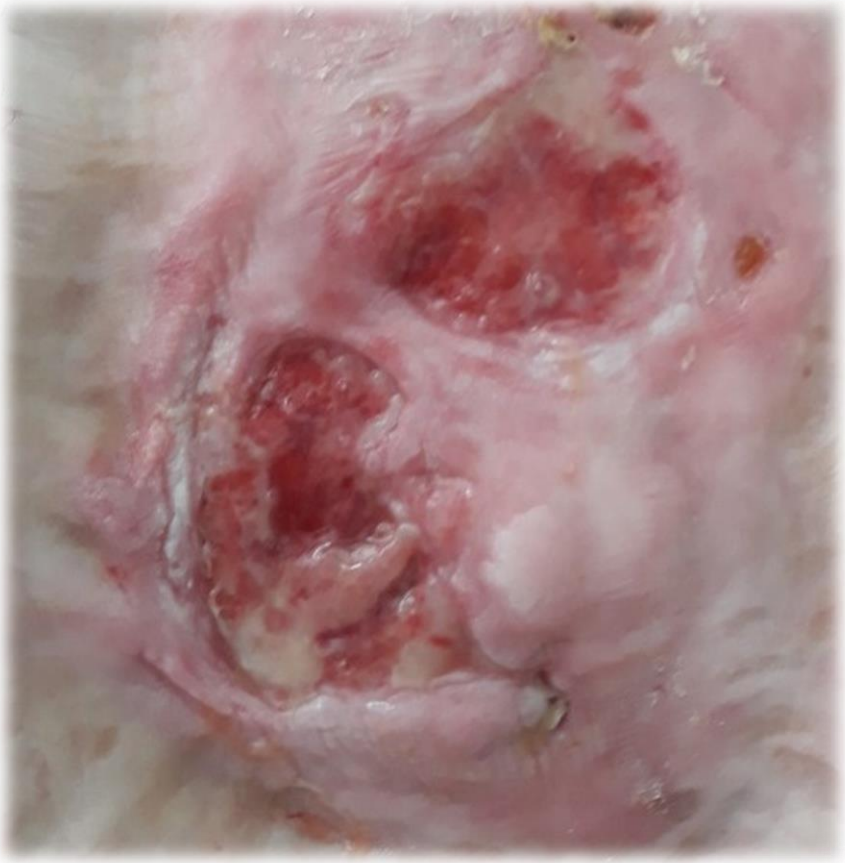
ConvaTec

Clinical Example #3

Wound Hygiene Challenge

The patient:
55-year-old, male. No significant past medical history, long term mental health problems, poor compliance with wound care.

The wound:
Post Surgical Abdo wounds, large area of scar tissue.
Wounds for 10 years +
Initial assessment – Wound A + B- Sloughy 20%, Granulating 80%.
No visible biofilm.
No pain, no infection. Wounds static.
Numerous dressings and antibiotics in the past.
Wound A – 38mm x 37mm
Wound B – 47mm x 34mm



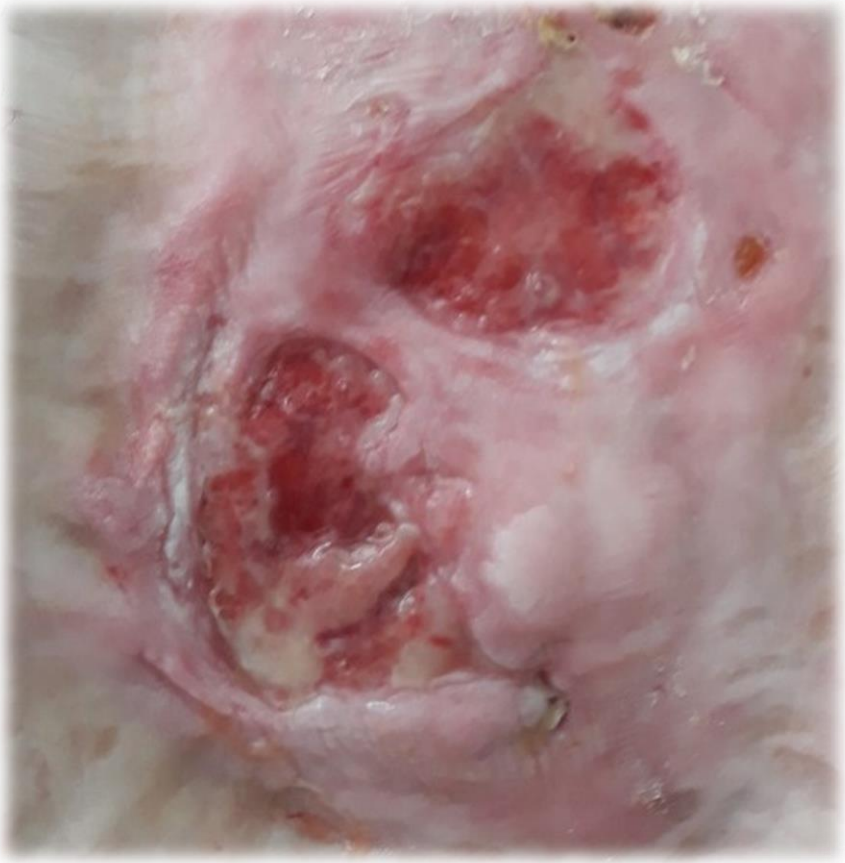
NHS
Northamptonshire Healthcare
NHS Foundation Trust

Clinical Example #3

Wound Hygiene Challenge

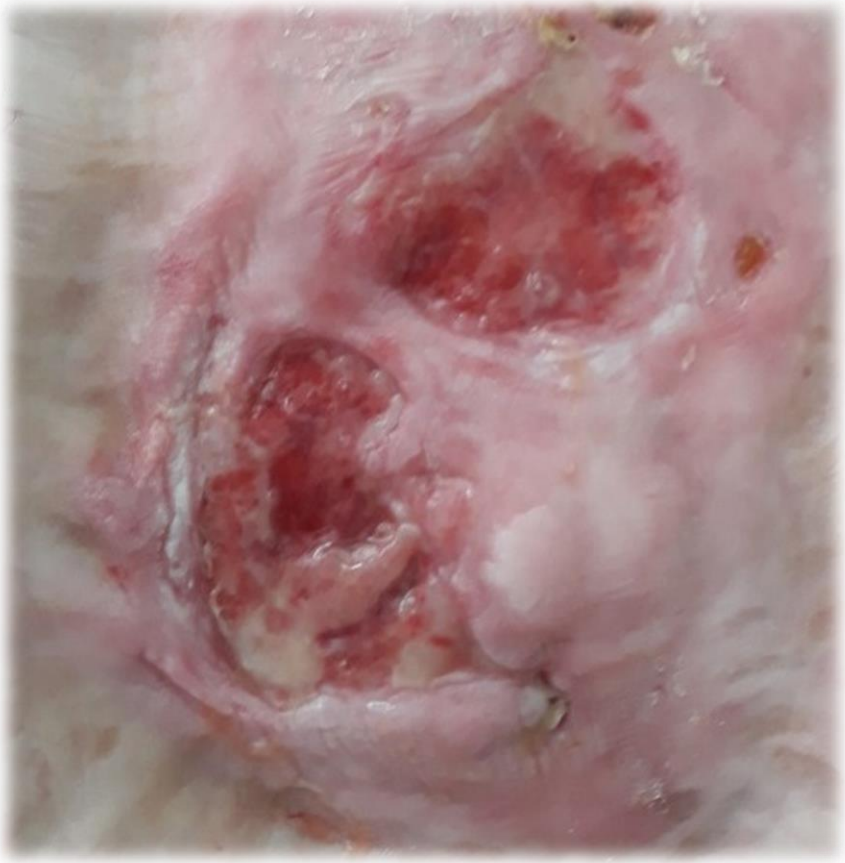
Wound Healing aims:
To heal the wound, try new dressings or techniques to heal wound.

Wound Healing plan:
Followed the 4 step Wound Hygiene process.
Supported nursing home staff, not always consistent in use.
Recommended AQUACEL® Ag+ Extra™ and secondary foam dressing
Slow progress in the first 4-weeks.



Clinical Example #3

At **4 weeks** – Wound A - 40mm x 38mm (increased size 2mm x 1mm)
Wound B - 43mm x 32mm (decrease size 4mm x 2mm)



At **12 weeks** – Wound A - 25mm X 20mm (decreased size 15mm x 18mm)
Wound B - 35mm x 25mm (decreased size 12mm x 9mm)

Wound Hygiene Challenge

Wound Hygiene – 4 Step Process

Wound Hygiene Step:
STEP 1 – CLEANSE the wound and the peri-wound skin Cleanse the wound bed to remove devitalised tissue, debris and biofilm. Cleanse the peri-wound skin to remove dead skin scales and callus, and to decontaminate it.
STEP 2 – DEBRIDE Remove necrotic tissue, slough, debris and biofilm at every dressing change. ***Select method based on skill of clinician***
STEP 3 – REFASHION the wound edges Remove necrotic, crusty and/or overhanging wound edges that may be harbouring biofilm. Ensure the skin edges align with the wound bed to facilitate epithelial advancement and wound contraction. Select method based on skill of clinician
STEP 4 – DRESS the wound Address residual biofilm while preventing or delaying regrowth of biofilm by using dressings containing antibiofilm and/or antimicrobial agents.

ConvaTec

Next Steps

- Approved by NHFT IG & Research Teams
- Comms for all staff
- NHFT Roll out of Wound Hygiene from Jan 2023
- NHFT Pilot site Northampton Leg Ulcer Clinic 12.01.23, followed by Community Nurse Teams & Inpatient areas (staged roll out).
- Education & support from Convatec & TVN team
- NHFT - Process to be integrated onto SystmoneWound Management template – how can we do this in Primary Care? Posters? Electronic Guidance?
- Anticipated outcome: improved healing rates, reduction in number of patient visits required
- How can we audit improvement in patient outcomes in Primary Care?

- Questions ????

Contact Details:

Wound Hygiene Challenge

NHFT Tissue Viability Team

nhft.tissueviability@nhs.net

Phone 0300 027 2289

(TVN Referral Form required for patient referrals)

Sian Bruce

Healthcare Development Manager

Mobile: 07443 755076

sian.bruce@convatec.com

ConvaTec