

National Wound Care Strategy Programme

Excellence. Every Patient. Every Time.

Wounds UK 2021 8th November 2021

Dr Una Adderley, PhD, RN, DN, QN

Director of the National Wound Care Strategy Programme

Interested in wound care? Sign up at: www.nationalwoundcarestrategy.net

Twitter: #NatWoundStrat

Background

Sept 2018 – 2020

- Commissioned from AHSN by NHS England - Nursing Directorate
- £250K pa

2020 -2025

- Long Term Plan funding
 - 5 year programme
 - £900K pa
 - 2021-2022 – Additional £1 million NHS X funding for digitalisation

To scope and deliver a wound care national strategy for England that focuses on improving care relating to:

- Lower limb ulcers
 - 37% of all wounds and 71% of NHS spend on wound care¹
- Pressure ulcers
 - 5% of all wounds and 7% of NHS spend on wound care¹
- Surgical wounds
 - 14% of all wounds and 7% of NHS spend on wound care¹

To work with key partners to:

- Establish the underlying clinical and economic case for change,
- Identify the desirable improvements in patient care and
- Describe and deliver the necessary changes and interventions required to deliver these improvements.

1. Guest, J.F., G.W. Fuller, and P. Vowden, *Cohort study evaluating the burden of wounds to the UK's National Health Service in 2017/2018: update from 2012/2013*. BMJ Open, 2020. **10**(12): p. e045253.

The current situation in the UK

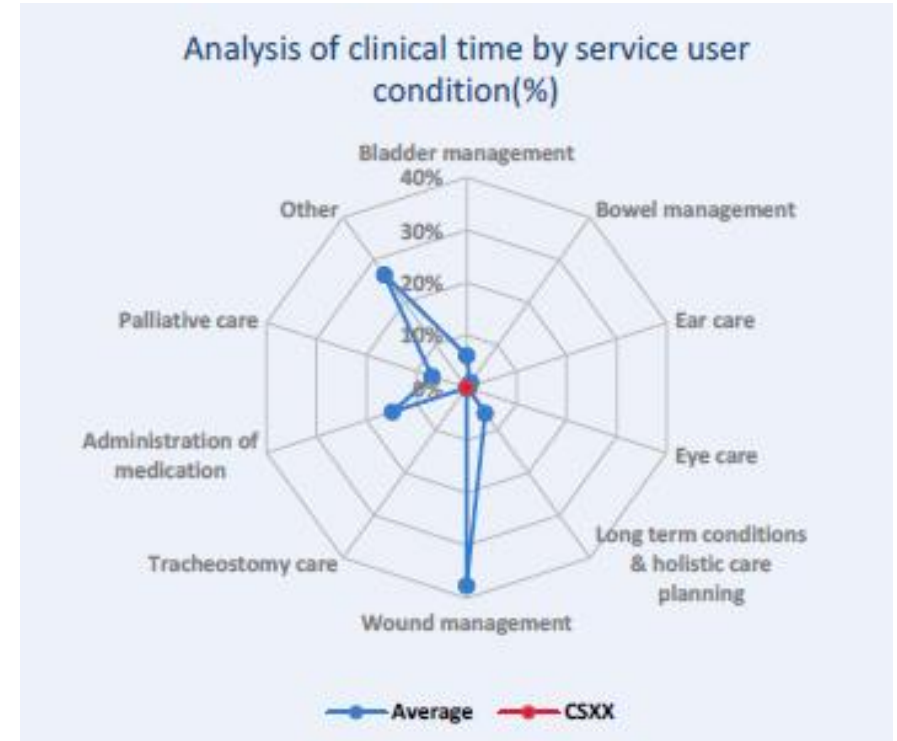
Burden of Wounds Update

Between 2012/2013 and 2017/2018:

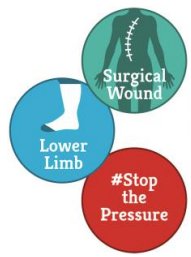
- Annual prevalence of wounds increased by 71%.
 - Est £7.9-£8.3 billion pa
- Patient management costs increased by 48%
 - 81% of total NHS cost incurred in community
 - District Nurse visits increased by 399%
 - GP visits increased by 164%
 - Practice Nurse visits increased by 51%

Guest, J.F., G.W. Fuller, and P. Vowden, *Cohort study evaluating the burden of wounds to the UK's National Health Service in 2017/2018: update from 2012/2013*. BMJ Open, 2020. **10**(12): p. e045253.

Community/district nursing teams

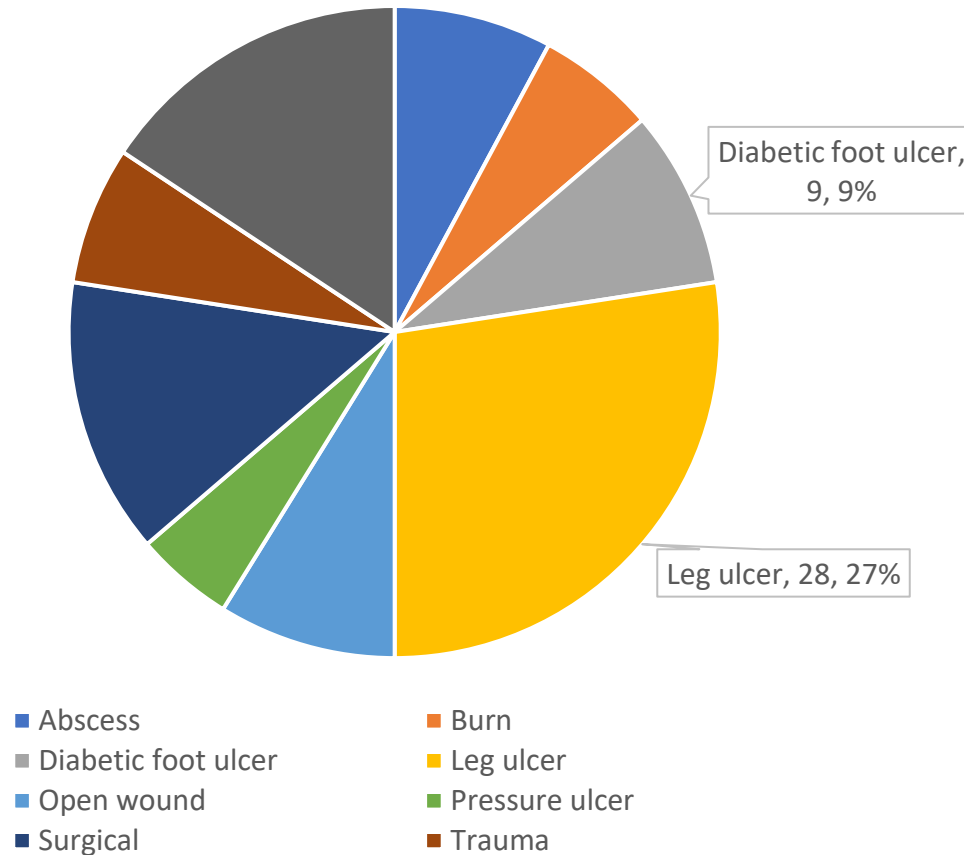


NHS Benchmarking Network: Generic
Community Services Report 2019/2020

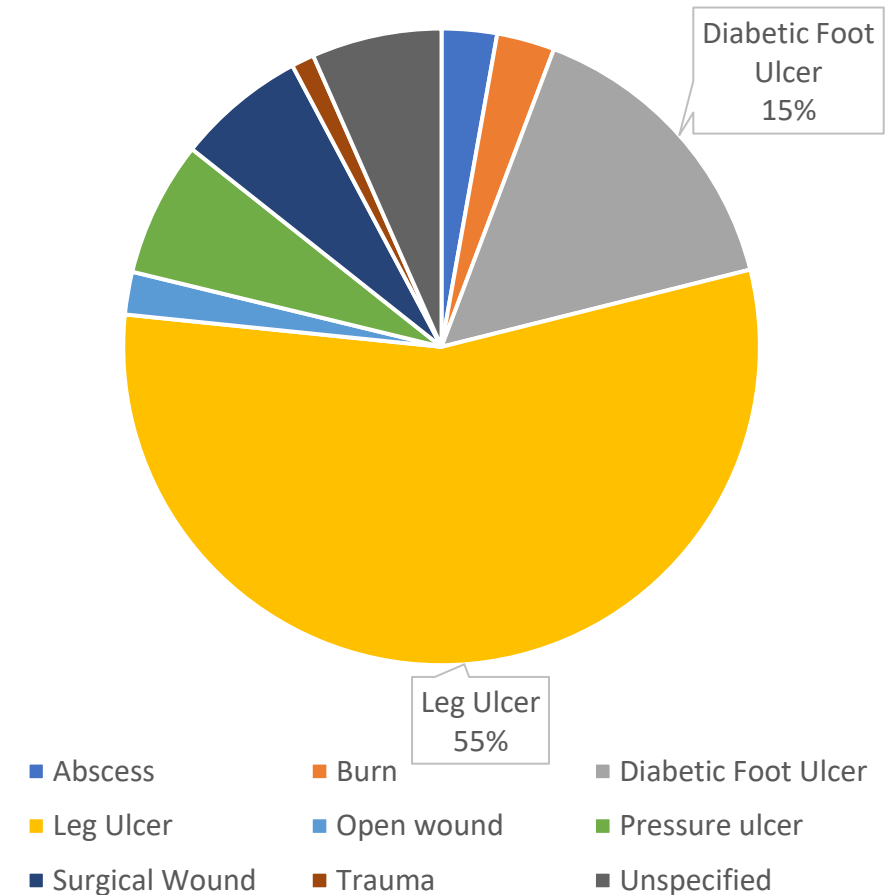


Different Wound Types

Prevalence



£ Spend



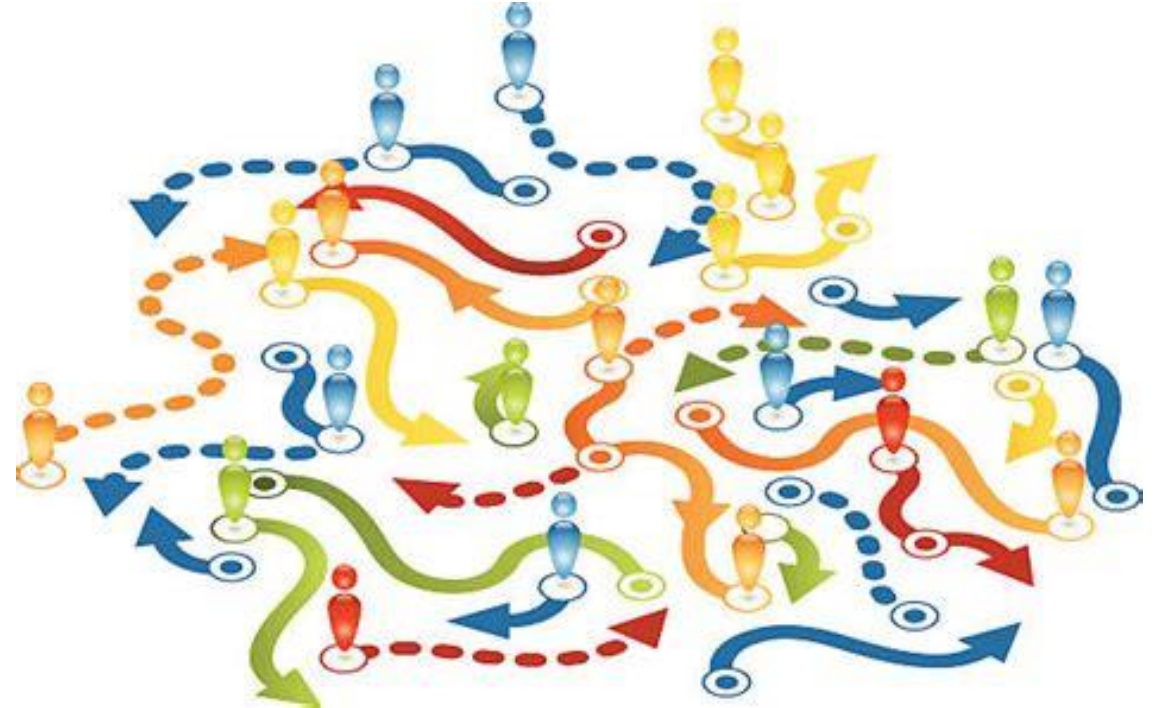
Why?

1. Unwarranted variation

- Under-use of evidence-based care
- Over-use of ineffective interventions

2. Poorly organised care

3. Lack of data and information to inform quality improvement





Lower Limb - recommendations for care

For further information, please refer to the full NWCSP Lower Limb Recommendations at NationalWoundCareStrategy.net



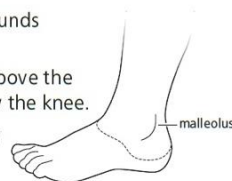
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Immediate and Necessary Care

For people with one or more wounds below the knee.

Leg wound- originating on or above the malleolus (ankle bone) but below the knee.

Foot wound - originating below the malleolus.



RED FLAGS

- 🚩 Acute infection of leg or foot (e.g. increasing unilateral redness, swelling, pain, pus, heat).
- 🚩 Symptoms of sepsis.
- 🚩 Acute or chronic limb threatening ischaemia.
- 🚩 Suspected deep vein thrombosis (DVT).
- 🚩 Suspected skin cancer.
- Treat infection.
- Immediately escalate.
- For people in the last few weeks of life, seek input from their other clinicians.

Immediate care

- Cleaning and emollient.
- Simple low-adherent dressing.
- Leg wounds, first line mild graduated compression.
- Supported self-care (when appropriate).

Assessment times for diagnosis and treatment

- In hospital with diabetic foot wound - refer to MDT **within 24 hours**.
- Any other type of foot wound - refer to MDT **within 1 working day**.
- Leg wounds - **assess within 14 days**.

Wounds on the Foot

One or more wounds below the malleolus

Diagnosis and treatment

1 Assess and identify contributing causes for non-healing

2. Diagnose cause of non-healing and formulate treatment plan

People with confirmed or suspected diabetic foot ulceration

- Refer to diabetic foot team.
- Provide care in line the [NICE Guideline for Diabetic Foot Problems](#).

People with confirmed or suspected peripheral arterial disease

- Refer for vascular surgical opinion.
- Provide care in line the [NICE Guideline for Peripheral Arterial Disease](#).

Ongoing care and review

Review at each dressing change and at weekly intervals

- Monitor healing at **4-week intervals** (or more frequently if concerned).
- If unhealed at **12 weeks**, reassess.

Wounds on the Leg

One or more wounds above the malleolus

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Leg wounds with an adequate arterial supply and no aetiology other than venous insufficiency

- Refer for venous surgical/endovenous interventions.
- Strong compression therapy.

Leg wounds with signs of arterial disease

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Leg wounds of other or uncertain aetiology

- Refer for dermatology opinion (or other specialist depending on symptoms and service arrangements).
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Lymphoedema

- Refer for expert diagnosis and advice about lymphoedema.

Ongoing care and review

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Monitor healing at 4-week intervals (or more frequently if concerned)

- If deteriorating or no significant progress towards healing, escalate.

If unhealed at 12 weeks, reassess

- If progressing to healing but still unhealed, undertake comprehensive re-assessment.
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Following healing

Venous Leg Ulceration

- Compression hosiery.
- 6-monthly review for replacement of compression garments and ongoing advice.
- If changes in lower limb symptoms or skin problems relating to hosiery, undertake comprehensive re-assessment.



Preventing and Improving Care of Chronic Lower Limb Wounds Implementation Case

Page 1 of 122

Model of Care Provision

Moving care to dedicated services staffed by clinicians with appropriate time, knowledge and skills and established referral routes to specialist services



Data and Information

Support clinical care and quality improvement through effective data capture and reporting



Evidence-based Care

Increase delivery of clinical and cost-effective care that delivers better health outcomes at a lower cost.



Education for clinicians delivering chronic lower limb wound care

Roll-out of dedicated chronic lower limb wound care services

Education and materials to support self care

Roll-out of point of care **NHS-compliant mobile digital technology**.

Establishment of **information feedback systems** to inform business and clinical needs.

Education for clinicians delivering chronic lower limb wound care

Access to materials and equipment for delivery of compression therapy

Agreed funding and pathways for referral for vascular services/ podiatry/ dermatology



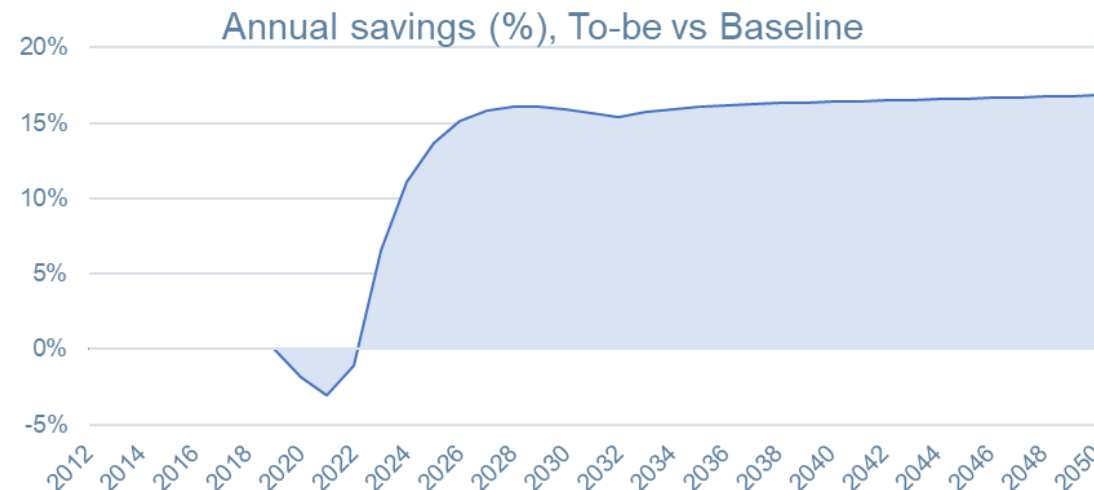
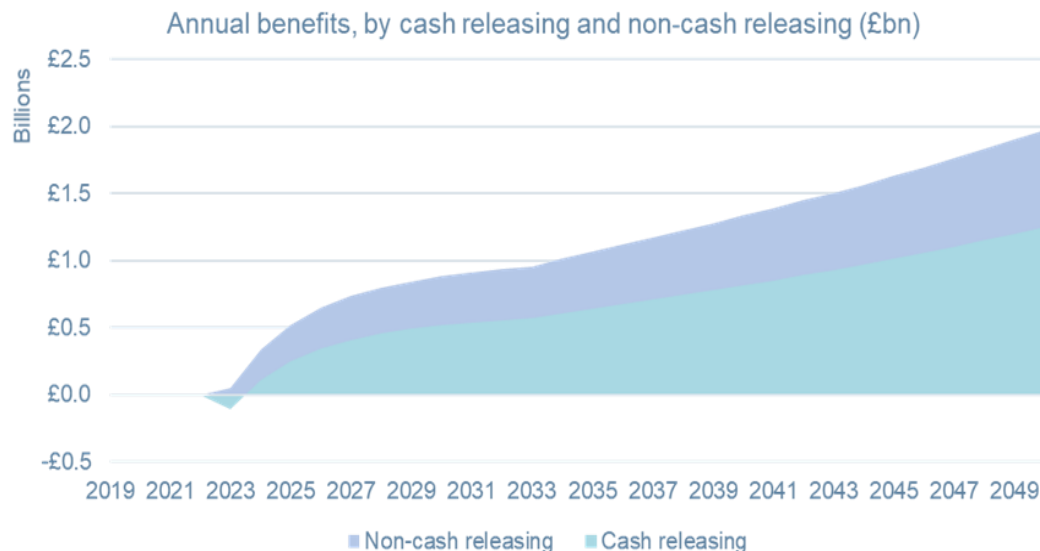
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Estimated savings

Calculated in line with treasury guidance and include:

- Costs of implementation
- 30% optimism bias
- Financial Scrutiny - NHS England and NHS Improvement



Cash releasing savings

- Drug prescriptions,
- hospital admissions,
- Wound care products

Workforce productivity gain

- Reduction in proportion of staff time spent on wound care

- 2 year implementation period

- NPV: 433m

- Benefit cost ratio: 10.0

- Payback period: 5 years

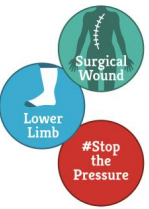
- 9% net cash releasing savings

(annual, including implementation costs)

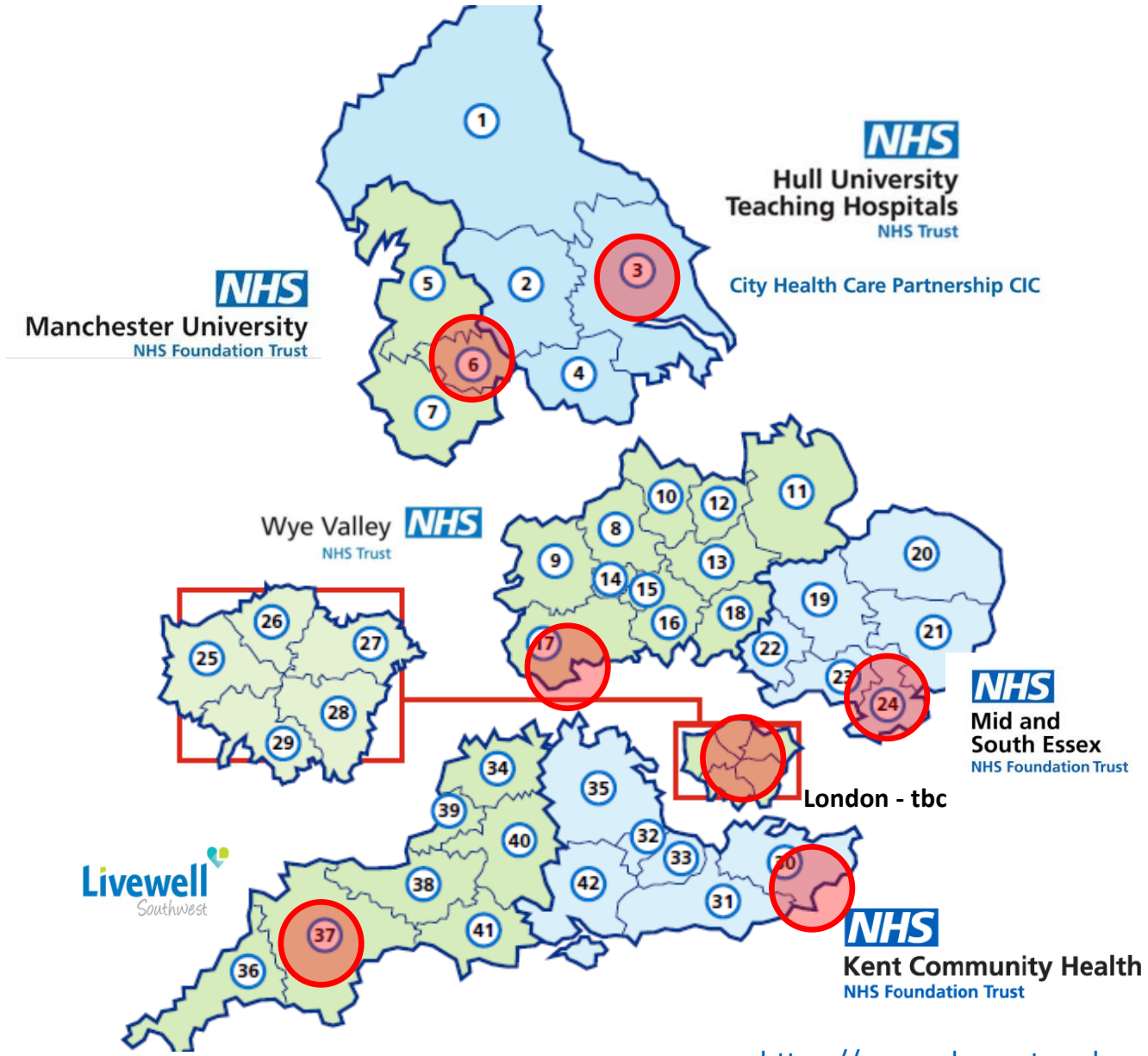
Patient benefits

- Improved well being and quality of life for people with lower limb wounds
 - Greater mobility
 - More time for work and leisure activities
 - Less social isolation
 - No smell
 - Less pain
 - Better sleep
 - Less anxiety
- Improved morale and job satisfaction for health and care professionals





First Tranche Implementation Sites



Aims

- Test the assumptions of the business case
- Develop a blueprint for implementation
 - Clinical pathways
 - Wound management
 - Digital Systems
- Evaluate implementation

Lower Limb Forum

We are establishing a Lower Limb Forum, where we can:

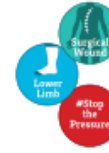
- Share the NWCSP Lower Limb work with NHS staff seeking to implement in their organisations
- enable Q & A's
- Enable discussion





Surgical Wounds - recommendations for care

For further information, please refer to the full NWCSP Recommendations at NationalWoundCareStrategy.net



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Pre-Surgery Assessment and Information

Delayed healing can be due to:

- Lifestyle factors.
- Pre-existing co-morbidities.
- Psychological and social factors.
- Cultural and ethnicity factors.

Before surgery, as part of assessment, discuss:

- Lifestyle factors.
- Recent travel history.
- Current MRSA/VRE status or need for screening.
- Current medical conditions.

And address any modifiable issues.

Patients undergoing elective surgery should:

- Be assessed to stratify risk of SSI/SWD.
- Receive written information specific to type of surgery.

Pre-Operative Phase (24 hours before surgery)

Address any cultural/ethnic/religious factors that may impact on care

- Shower or bathe before surgery.
- Nasal decolonisation.
- Avoid routine hair removal: if necessary, use clippers, not razors.
- Avoid routine mechanical bowel preparation.
- Follow NICE advice for antibiotic prophylaxis.

Intra-Operative Phase

Key recommendations

- Appropriate theatre wear for patients.
- Specific non-sterile theatre wear for all theatre staff.
- Hand decontamination.
- Avoid routine use of non-iodophor-impregnated incise drapes.
- Sterile gowns for the operating team.
- Two pairs of sterile gloves, if high risk of glove perforation.
- Minimise movement in and out of operating area.
- Follow NICE advice for antiseptic skin preparation.
- Do not use diathermy for surgical incision.
- Seek to maintain patient homeostasis.
- Do not use wound irrigation or intracavity lavage to reduce the risk of SSI.
- Only apply antiseptics/antibiotics as part of a clinical research trial.
- Use digital wound imaging.
- Cover surgical incisions with an appropriate interactive dressing.

Post-Operative Phase

Key recommendations

- Aseptic non-touch technique for dressing changes.
- Monitor pain and offer appropriate analgesia.
- Base wound assessment on NWCSP minimum data criteria.
- Digital wound imaging.
- Sterile saline for wound cleansing for 1st 48 hours, then potable tap water/showering.
- Do not use topical antimicrobial agents for surgical wounds healing by primary intention.
- Monitor for signs of surgical site infection (SSI) / Surgical Wound Dehiscence (SWD).
- Report SSI/ SWD up to 30 days after surgery (or up to 90 days after surgery in patients receiving implants).
- Provide patients/carers and clinicians with:
 - Detailed written information about received and ongoing care.
 - When and how to seek advice from the surgical team.
 - Dressings for one week.
 - Name of person responsible for overseeing ongoing care.
- Use a structured approach to improve care that involves specialist wound care services.

Ongoing Care after Transfer from Care of the Surgical Team

RED FLAGS

Treat as an emergency situation

- Haemorrhage/Catastrophic dehiscence.
 - 'burst abdomen' with visible internal organs.

Arrange for immediate review by the senior clinical decision maker

- Systemic signs of infection/sepsis.
 - Follow [NICE Guideline for Sepsis: Recognition, Diagnosis and Early Management](#).

Seek review by surgical team within 24 hours

- Spreading cellulitis, or
- Dehiscence if:
 - Surgery involved implants (e.g. mesh, prosthesis).
 - Aesthetically or functionally important surgical site (e.g. face or joints).

Seek review by surgical team within 72 hours

- Dehiscence exposing subcutaneous layers and fascia.
- Suspected sinus/fistula/tunnelling.
- Stoma within wound boundaries.

Other failures to heal

- **Seek review** by clinician with surgical wound expertise who can escalate directly to surgical team as needed.

Suspected Wound Infection (without red flag symptoms)

- Wound swab for microbiology.
 - Bloods for full blood count and C-reactive protein (CRP).
 - Digital wound image.
- If concerned, **seek review** by surgical team within 72 hours.
 - Only commence antibiotic therapy following consultation with the surgical team.



Stop the Pressure: Pressure Ulcer Surveillance

Aims

To develop a surveillance system that uses pressure ulcer data captured at the point of care (i.e routine data collection) rather than requiring additional data collection which require additional resource. This will:

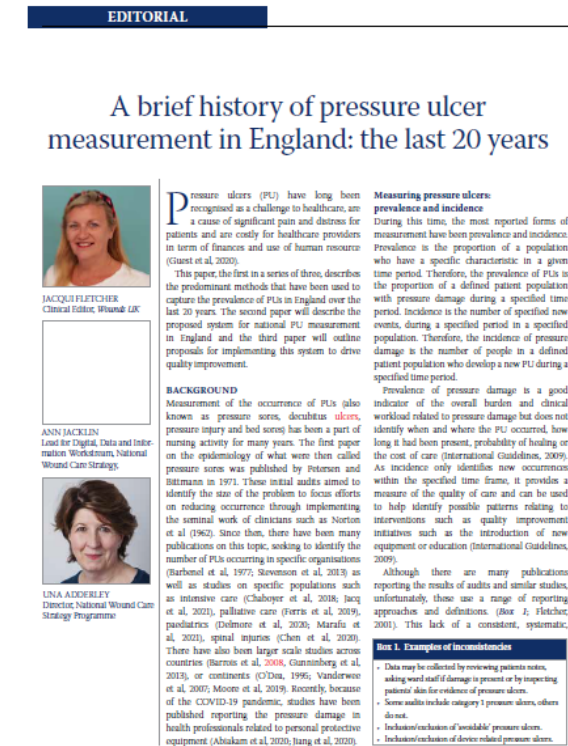
- Improve the quality of routine clinical data input through more accurate clinical coding and clinical record keeping.
- Improve the quality of pressure ulcer surveillance.
- May reduce TVN time spent on spontaneous incident reporting.
- Support the long-term aim of improving the continuity of patient care across the local health system..

2021 Q3 and Q4

- Development of national metrics – secondary care.
- Quality assurance and data improvement.
- Education and training.



2022 Q1

- Development of national metrics – community services.



NWCSP Free-to-access online education resources

Access our e-learning programmes on the e-LfH Hub [Register / Log in >](#)



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Sections

Essentials of Wound Care Education for the Health and Care Workforce

Interactive e-learning resources to support the development of wound care knowledge and skills in the health and care workforce

This programme is in partnership with...

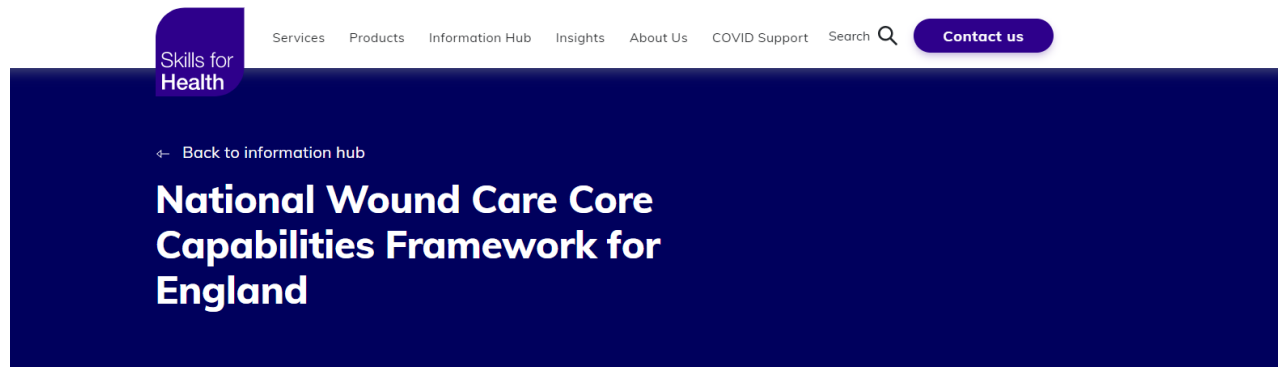



“I had limited knowledge about wounds, these sessions gave me knowledge which I can apply directly to practice. I would recommend these to all student nurses.”


“I have already recommended (these resources) to other geriatric medicine trainees as our curriculum requires tissue viability training & it also is useful revision for our Specialty Certificate Examination”

“I teach these subjects so it was good to see other ways of teaching....I did also learn some things I didn't know”

NWCSP Core Capabilities Framework



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National Wound Care Core Capabilities Framework for England

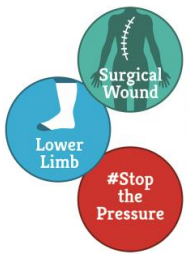
Introduction

The [National Wound Care Strategy Programme](#) (NWCSP) commissioned the development of this core capabilities framework for health and care staff involved in wound care in England. The framework describes the required skills, knowledge and behaviours to improve wound care in three clinical areas (Pressure Ulcers, Lower Limb and Surgical Wounds).



TUESDAY 9TH NOVEMBER AGENDA

07.45-08.30
Registration, refreshments, e-poster and exhibition viewing
08.30-09.00
Main Auditorium
Update from the National Wound Care Strategy Programme (NWCSP)
- NWCSP - Pressure Ulcers - Jacqui Fletcher
- NWCSP - Education and the Capability Framework - Danielle Fullwood



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Digital, Data and Information



DATA



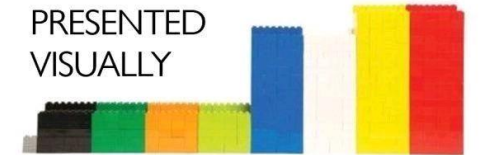
SORTED



ARRANGED



PRESENTED
VISUALLY



EXPLAINED
WITH A STORY

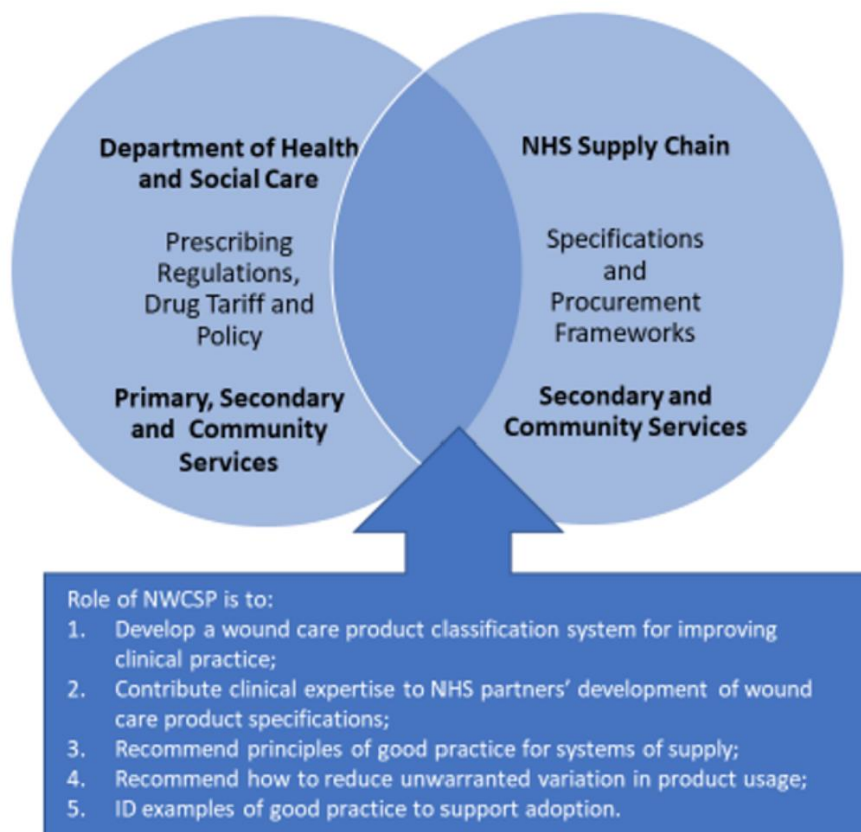




Supply and Distribution of Wound Products



Supply of wound care products into the NHS



- National wound care product classification system.
- Review and appraisal of options for ordering, supply and distribution of wound care products.





NWCSP|National Wound Care Strategy Programme

Pressure Ulcers | Lower Limb | Surgical Wounds

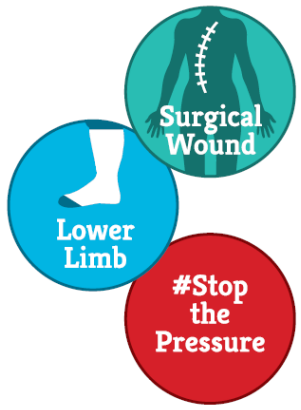
A programme commissioned by NHS England and NHS Improvement

Further information can be found at: www.nationalwoundcarestrategy.net

Questions please.....



Twitter: #NatWoundStrat



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Wounds ^{UK}
8 November 2021

Lower Limb: Implementation of Recommendations

Krishna Gohil *BSc (Hons); PgDipPH; PGCertIP; MRCPod; FFPM RCPS(Glasg)*

Clinical Lead - Lower Limb and Surgical Wounds

National Wound Care Strategy Programme (NWCSP)





Lower Limb - recommendations for care

For further information, please refer to the full NWCSP Lower Limb Recommendations at [NationalWoundCareStrategy.net](http://www.nationalwoundcarestrategy.net)



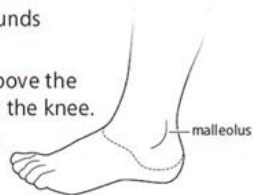
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Immediate and Necessary Care






For people with one or more wounds below the knee.

Leg wound- originating on or above the malleolus (ankle bone) but below the knee.

Foot wound - originating below the malleolus.



RED FLAGS

-  Acute infection of leg or foot (e.g. increasing unilateral redness, swelling, pain, pus, heat).
-  Symptoms of sepsis.
-  Acute or chronic limb threatening ischaemia.
-  Suspected deep vein thrombosis (DVT).
-  Suspected skin cancer.
- Treat infection.
- Immediately escalate.
- For people in the last few weeks of life, seek input from their other clinicians.

Immediate care

- Cleaning and emollient.
- Simple low-adherent dressing.
- Leg wounds, first line mild graduated compression.
- Supported self-care (when appropriate).

Assessment times for diagnosis and treatment

- In hospital with diabetic foot wound - refer to MDT **within 24 hours**.
- Any other type of foot wound - refer to MDT **within 1 working day**.
- Leg wounds - **assess within 14 days**.

Wounds on the Foot

One or more wounds below the malleolus

Diagnosis and treatment

1 Assess and identify contributing causes for non-healing

2. Diagnose cause of non-healing and formulate treatment plan

People with confirmed or suspected diabetic foot ulceration

- Refer to diabetic foot team.
- Provide care in line the NICE Guideline for Diabetic Foot Problems.

People with confirmed or suspected peripheral arterial disease

- Refer for vascular surgical opinion.
- Provide care in line the NICE Guideline for Peripheral Arterial Disease.

Ongoing care and review

Review at each dressing change and at weekly intervals

- Monitor healing at **4-week intervals** (or more frequently if concerned).
- If unhealed at **12 weeks**, reassess.

Wounds on the Leg

One or more wounds above the malleolus

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Leg wounds with an adequate arterial supply and no aetiology other than venous insufficiency

- Refer for venous surgical/endovenous interventions.
- Strong compression therapy.

Leg wounds with signs of arterial disease

- Refer for vascular surgical/endovenous interventions and advice on compression.
- Pending vascular opinion, if no symptoms of arterial insufficiency, continue with mild graduated compression.

Leg wounds of other or uncertain aetiology

- Refer for dermatology opinion (or other specialist depending on symptoms and service arrangements).
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Lymphoedema

- Refer for expert diagnosis and advice about lymphoedema.

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Following healing

Venous Leg Ulceration

- Compression hosiery.
- 6-monthly review for replacement of compression garments and ongoing advice.
- If changes in lower limb symptoms or skin problems relating to hosiery, undertake comprehensive re-assessment.



Lower Limb - recommendations for care

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The Problems

- Costs
- Consistency
- Coordination
- Counting

RECOMMENDATIONS

- Acute infection of leg or foot (e.g. increasing unilateral redness, swelling, pain, pus, heat).
- Impaired circulation.
- Suspected deep vein thrombosis (DVT).
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Foot wound - originating below the malleolus.



Costs

Consistency

Coordination

Counting

RED FLAGS

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- 6-monthly review for replacement of compression hosiery.
- If changes in lower limb symptoms or skin problems relating to hosiery, undertake comprehensive re-assessment.

The Outcomes

Improve patient care

Reduce variation

Improve healing & recurrence

Maximise NHS resources



Lower Limb - recommendations for care

For further information, please refer to the full NWCSP Lower Limb Recommendations at NationalWoundCareStrategy.net



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Immediate and Necessary Care

For people with one or more wounds below the knee.

Leg wound- originating on or above the malleolus (ankle bone) but below the knee.

Foot wound - originating below the malleolus.



Immediate care

- Cleaning and emollient.
- Simple low-adherent dressing.
- Leg wounds, first line mild graduated compression.
- Supported self-care (when appropriate).

Assessment times for diagnosis and treatment

- In hospital with diabetic foot wound - refer to MDT **within 24 hours.**
- In hospital with type of foot wound - refer to MDT **within 14 days.**
- Leg wound - **assess within 14 days.**

Wounds on the Foot

One or more wounds below the malleolus

Diagnosis and treatment

1. Assess and identify contributing causes for non-healing

2. Diagnose cause of non-healing and formulate treatment plan

People with confirmed or suspected diabetic foot ulceration

- Refer to diabetic foot team
- Provide care in line the NICE Guideline for Diabetic Foot Problems

People with confirmed or suspected peripheral arterial disease

- Refer for vascular surgical opinion.

Wounds on the Leg

One or more wounds above the malleolus

Diagnosis and treatment

1. Assess and identify contributing causes for non-healing

2. Diagnose cause of non-healing and formulate treatment plan

Leg wounds with an adequate arterial supply and no aetiology other than venous insufficiency

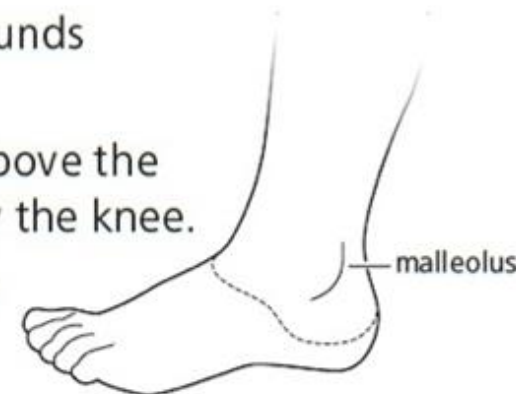
- Refer for venous surgical/endovenous interventions.
- Strong compression therapy.

Leg wounds with signs of arterial disease

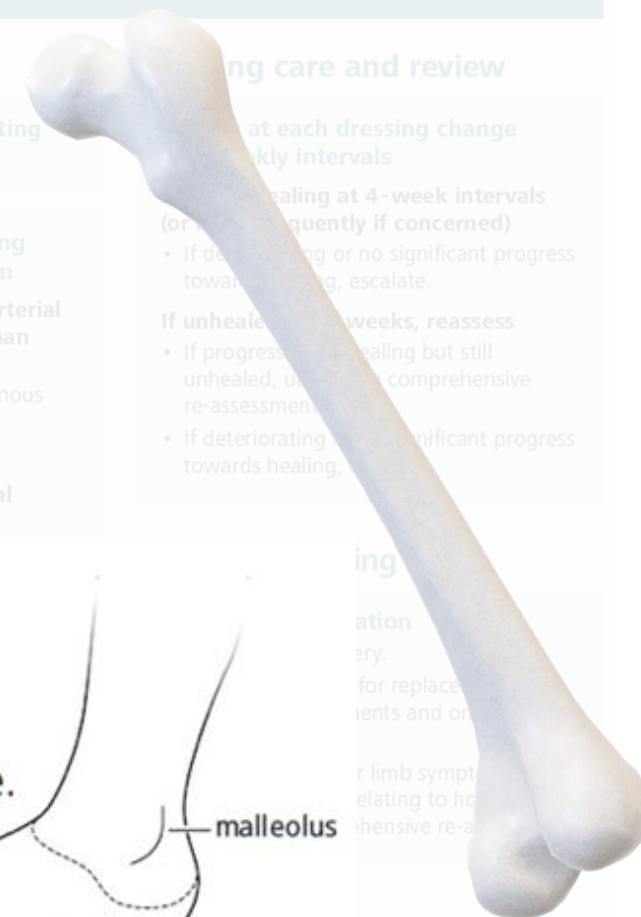
For people with one or more wounds below the knee.

Leg wound- originating on or above the malleolus (ankle bone) but below the knee.

Foot wound - originating below the malleolus.



Drawing the line!



Wounds UK



Lower Limb - recommendations for care

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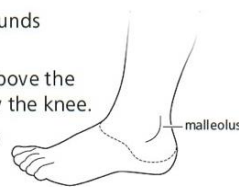
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Immediate and Necessary Care

For people with one or more wounds below the knee.

Leg wound- originating on or above the malleolus (ankle bone) but below the knee.

Foot wound - originating below the malleolus.



RED FLAGS

- Acute infection of leg or foot (e.g. increasing unilateral redness, swelling, pain, pus, heat).
- Symptoms of sepsis.
- Acute or chronic limb threatening ischaemia.
- Suspected deep vein thrombosis (DVT).
- Suspected skin cancer.
- Treat infection.
- Immediately escalate.
- For people in the last few weeks of life, seek input from their other clinicians.

Immediate care

- Cleaning and emollient.
- Simple low-adherent dressing.
- Leg wounds, first line mild graduated compression.
- Supported self-care (when appropriate).

Assessment times for diagnosis and treatment

- In hospital with diabetic foot wound - refer to MDT **within 24 hours.**
- Any other type of foot wound - refer to MDT **within 1 working day.**
- Leg wounds - **assess within 14 days.**

Wounds on the Foot

One or more wounds below the malleolus

Diagnosis and treatment

1. Assess and identify causes for non-healing

2. Diagnose cause of non-healing and formulate treatment plan

People with confirmed or suspected diabetic foot ulceration

- Refer to diabetic foot team.
- Provide care in line with the NICE Guideline for Diabetic Foot Problems.

People with confirmed or suspected peripheral arterial disease

- Refer for vascular surgical opinion.
- Provide care in line with the NICE Guideline for Peripheral Arterial Disease.

Ongoing care and review

Review at each dressing change and at weekly intervals

- Monitor healing at 4-week intervals (or more frequently if concerned).
- If unhealed at 12 weeks, reassess.

Wounds on the Leg

One or more wounds above the malleolus

Diagnosis and treatment

1. Assess and identify causes for non-healing

2. Diagnose cause of non-healing and formulate treatment plan

Leg wounds with an adequate arterial supply and no aetiology other than venous insufficiency

- Refer for venous surgical/endovascular treatment.
- Refer for expert diagnosis and advice about lymphoedema.

Leg wounds with signs of arterial disease

- Refer for vascular surgical/vascular medicine opinion.
- Provide care in line with the NICE Guideline for Peripheral Arterial Disease.

Ongoing care and review

Review at each dressing change and at weekly intervals

- Monitor healing at 4-week intervals (or more frequently if concerned).
- If unhealed at 12 weeks, reassess.

Ongoing care and review

Monitor healing at 4-week intervals (or more frequently if concerned)

- If deteriorating or no significant progress towards healing, escalate.
- If unhealed at 12 weeks, reassess
- If progressing to healing but still unhealed, undertake comprehensive re-assessment.
- If deteriorating or no significant progress towards healing, escalate.

Following healing

Venous Leg Ulceration

- Compression hosiery.
- Refer for expert diagnosis and advice about lymphoedema.

• If changes in lower limb symptoms or skin problems relating to hosiery, refer for expert diagnosis and advice about lymphoedema.

Immediate & Necessary Care

• Red Flags

• Immediate care

• Rapid access

- Diabetic foot ulcer: **24hrs**

- Foot wound: **1 working day**

- Leg wounds: **NWCSP guidance**



Lower Limb - recommendations for care

For further information, please refer to the full NWCSP Lower Limb Recommendations at NationalWoundCareStrategy.net



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Immediate and Necessary Care

For people with one or more wounds below the knee.

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Foot wound - originating below the malleolus.



Immediate care

- Cleaning and emollient.
- Simple low-adherent dressing.
- Leg wounds, first line mild graduated compression.
- Supported self-care (when appropriate).

Assessment times for diagnosis and treatment

- In hospital with diabetic foot wound - refer to MDT **within 24 hours**.
- For other type of foot wound - refer to MDT **within 1 working day**.
- Leg wound - assess within 14 days.

Wounds on the Foot

One or more wounds below the malleolus

Diagnosis and treatment

1 Assess and identify contributing causes for non-healing

2. Diagnose cause of non-healing and formulate treatment plan

People with confirmed or suspected diabetic foot ulceration

- Refer to diabetic foot team.
- Provide care in line the NICE Guideline for Diabetic Foot Problems.

People with confirmed or suspected peripheral arterial disease

- Refer for vascular surgical opinion.
- Provide care in line the NICE Guideline for Peripheral Arterial Disease.

Ongoing care and review

Review at each dressing change and at weekly intervals

- Monitor healing at **4-week intervals** (or more frequently if concerned).
- If unhealed at **12 weeks**, reassess.

Wounds on the Leg

One or more wounds above the malleolus

Diagnosis and treatment

1 Assess and identify contributing causes for non-healing

2. Diagnose cause of non-healing and formulate treatment plan

- Leg wounds with signs of arterial disease
- Refer for venous surgical/endovenous interventions.
- Strong compression therapy.

Leg wounds with signs of arterial disease

- Refer for vascular surgical opinion, if no symptoms of arterial insufficiency, continue with mild graduated compression.
- Pending vascular opinion, if no symptoms of arterial insufficiency, continue with mild graduated compression.

Leg wounds of other aetiology

- Refer for dermatology opinion (or other specialist depending on symptoms) and service arrangements for replacement of dressings and ongoing advice.
- Pending specialist opinion if no symptoms of arterial insufficiency, continue with mild graduated compression.

Lymphoedema

- Refer for expert diagnosis and advice about lymphoedema.

Ongoing care and review

1 Assess and identify contributing causes for non-healing

2. Diagnose cause of non-healing and formulate treatment plan

- Monitor healing at 4-week intervals (or more frequently if concerned)
- If deteriorating or no significant progress towards healing, escalate.
- If deteriorating or no significant progress towards healing, escalate.

Following healing

Venous Leg Ulceration

- Compression hosiery.
- If changes in lower limb symptoms or signs, refer to hosiery, compression and ongoing advice.
- If changes in lower limb symptoms or signs, refer to hosiery, compression and ongoing advice.

Wounds on the Foot

Rapid referral to MDT

- Diabetic foot ulcer:

24hrs

- Foot wound:

1 working day



Lower Limb - recommendations for care

For further information, please refer to the full NWCSP Lower Limb Recommendations at NationalWoundCareStrategy.net



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Immediate and Necessary Care

Wounds on the Leg

Rapid referral to MDT

- Full assessment:
14 days
- Venous leg ulcers with arterial supply
Compression

Assessment times for diagnosis and treatment

- In hospital with diabetic foot wound - refer to MDT within 24 hours.
- All other type of foot wound - refer to MDT within 7 working day.
- Leg wounds - assess within 14 days.

Wounds on the Foot

Wounds below the malleolus



Diagnosis and treatment

1. Assess and identify contributing causes for non-healing

2. Diagnose cause of non-healing and formulate treatment plan

People with confirmed or suspected diabetic foot ulcer

- Refer to diabetic foot team.
- Provide care in line with the NICE Guideline for Diabetic Foot Problems.

People with confirmed or suspected peripheral arterial disease

- Refer for vascular surgical opinion.
- Provide care in line with the NICE Guideline for Peripheral Arterial Disease.

Ongoing care and review

Review at each dressing change and at weekly intervals

- Monitor healing at 4-week intervals (or more frequently if concerned).
- If unhealed at 12 weeks, reassess.

Wounds on the Leg

One or more wounds above the malleolus

Diagnosis and treatment

1. Assess and identify contributing causes for non-healing

2. Diagnose cause of non-healing and formulate treatment plan

Leg wounds with an adequate arterial supply and no aetiology other than venous insufficiency

- Refer for venous surgical/endovenous interventions.
- Strong compression therapy.

Leg wounds with signs of arterial disease

- Refer for vascular surgical/endovenous interventions and advice on compression.
- Pending vascular opinion, if no symptoms of arterial insufficiency, continue with mild graduated compression.

Leg wounds of other or uncertain aetiology

- Refer for dermatology opinion (or other specialist depending on symptoms and service arrangements).
- Pending specialist opinion if no symptoms of arterial insufficiency, continue with mild graduated compression.

Lymphoedema

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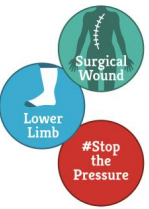
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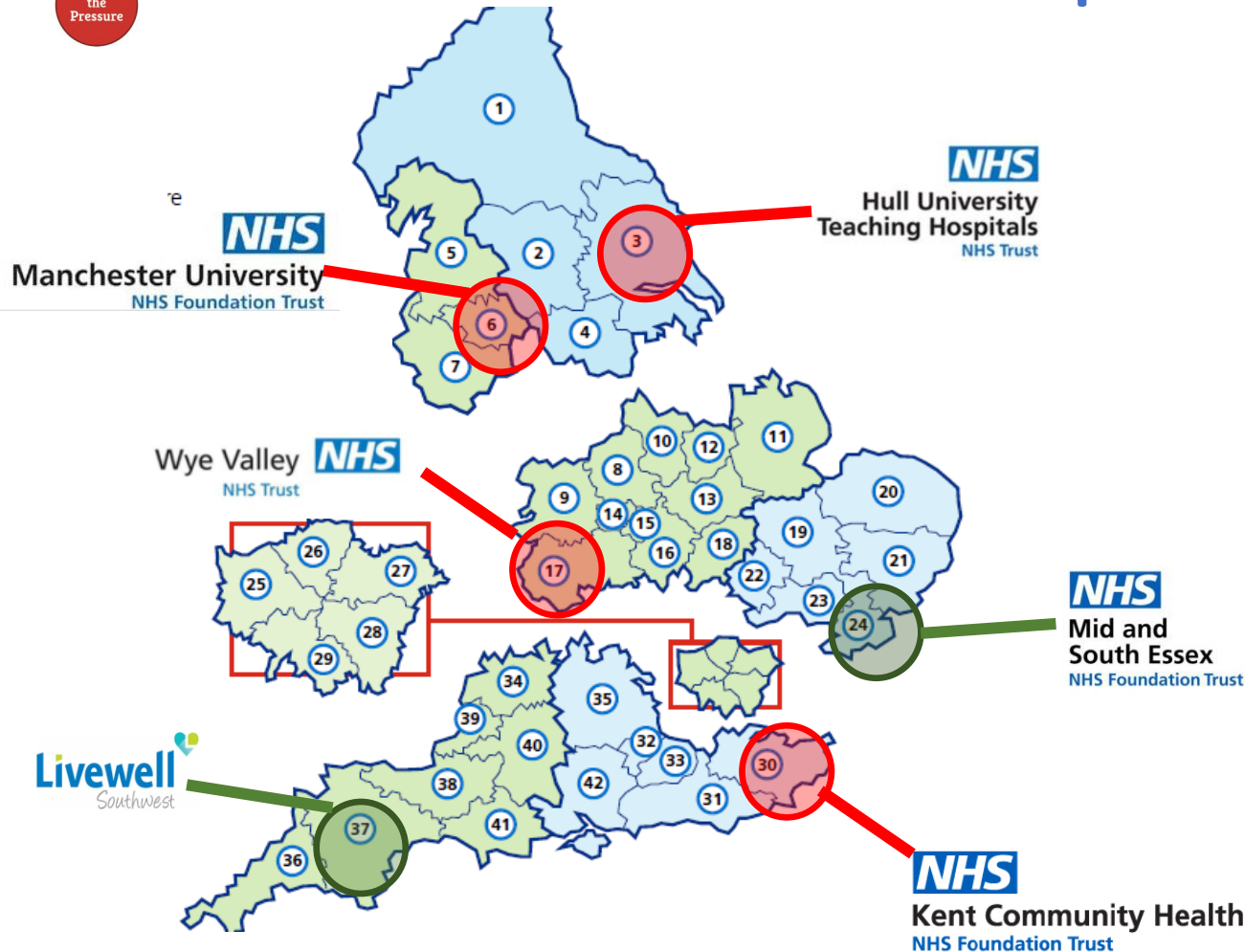
Following healing

Venous Leg Ulceration

- Compression hosiery.
- 6-monthly review for replacement of compression garments and ongoing advice.
- If changes in lower limb symptoms or skin problems relating to hosiery, undertake comprehensive re-assessment.

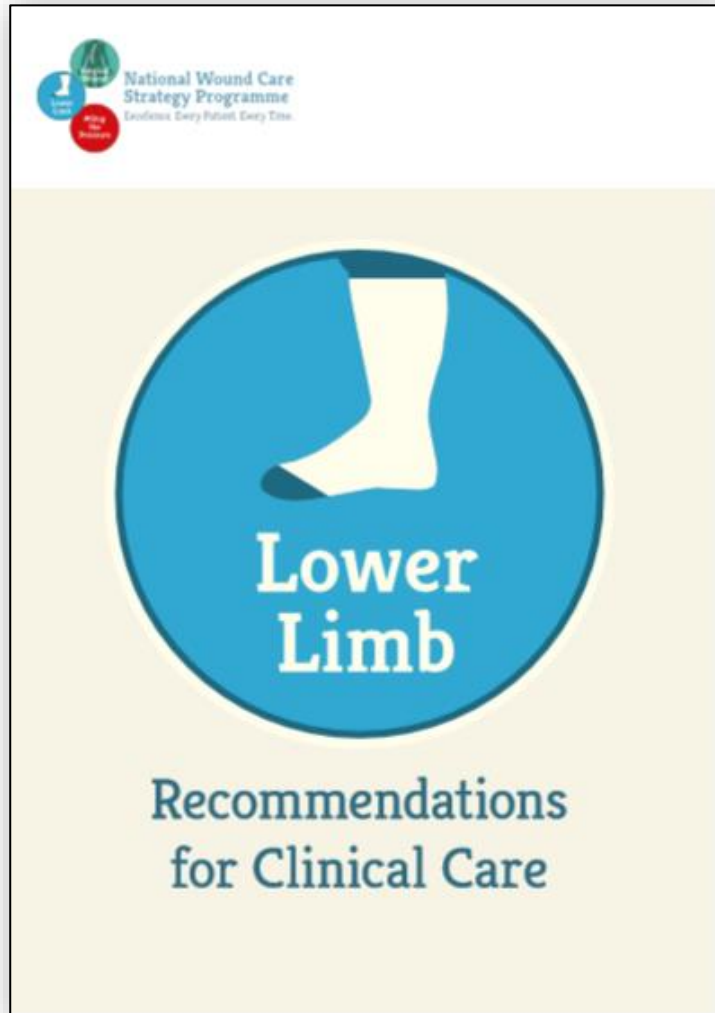


1st Tranche Implementation Sites



- Implementation at local level
- Innovation/problem solving
- Wound management digital systems
- Redesign of pathway
- Dedicated lower limb services

Tips on Implementation



- Patient centred
- Local champion
- Collaboration
- Evaluation
- Comms



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Lower Limb Learning Forum



- Facilitation of learning
- Support for non-first tranche implementation sites

<https://www.nationalwoundcarestrategy.net/improving-wound-care/>

- Blended learning mapped to National Wound Care Core Capabilities Framework for England.
- Education resources due to be launched by June 2022.



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Wounds UK



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Sign up at: www.nationalwoundcarestrategy.net

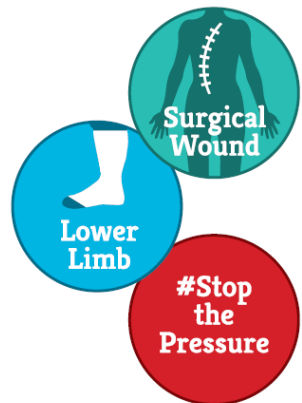
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@NatWoundStrat



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Wounds UK 2021 8th November 2021 Digital, Data & Information update

Ann Jacklin

DDI Lead, National Wound Care Strategy Programme

Ann.jacklin1@nhs.net

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Twitter: #NatWoundStrat


The use of data to support improvement

Immediate and Necessary Care

For people with one or more wounds below the knee.

Leg wound - originating on or above the malleolus (ankle bone) but below the knee.

Foot wound - originating below the malleolus.



RED FLAGS

- Acute infection of leg or foot (e.g. increasing unilateral redness, swelling, pain, pus, heat).
- Symptoms of sepsis.
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- Treat infection.
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Immediate care

- Cleaning and emollient.
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- Leg wounds, first line mild graduated compression.
- Supported self-care (when appropriate).

Assessment times for diagnosis and treatment

- In hospital with diabetic foot wound - refer to MDT **within 24 hours**.
- Any other type of foot wound - refer to MDT **within 1 working day**.
- Leg wounds - **assess within 14 days**.

Wounds on the Foot

One or more wounds below the malleolus

Diagnosis and treatment

1 Assess and identify contributing causes for non-healing

2 Diagnose cause of non-healing and formulate treatment plan

People with confirmed or suspected diabetic foot ulceration

- Refer to diabetic foot team.
- Provide care in line the NICE Guideline for Diabetic Foot Problems.

People with confirmed or suspected peripheral arterial disease

- Refer for vascular surgical opinion.
- Provide care in line the NICE Guideline for Peripheral Arterial Disease.

Ongoing care and review

Review at each dressing change and at weekly intervals

Wounds on the Leg

One or more wounds above the malleolus

Diagnosis and treatment

1 Assess and identify contributing causes for non-healing

2 Diagnose cause of non-healing and formulate treatment plan

Leg wounds with an adequate arterial supply and no aetiology other than venous insufficiency

- Refer for venous surgical/endovenous interventions.
- Strong compression therapy.

Leg wounds with signs of arterial disease

- Refer for vascular surgical/endovenous interventions and advice on compression.
- Pending vascular opinion, if no symptoms of arterial insufficiency, continue with mild graduated compression.

Leg wounds of other or uncertain aetiology

- Refer for dermatology opinion for other specialist depending on symptoms and

Ongoing care and review

Review at each dressing change and weekly intervals

Monitor healing at 4-week intervals (or more frequently if concerned)

- If deteriorating or no significant progress towards healing, escalate.

If unhealed at 12 weeks, reassess

- If progressing to healing but still unhealed, undertake comprehensive re-assessment.
- If deteriorating or no significant progress towards healing, escalate.

Following healing

Venous Leg Ulceration

- Compression hosiery.
- 6-monthly review for replacement of compression garments and ongoing advice.
- If changes in lower limb symptoms or skin problems relating to hosiery, undertake comprehensive re-assessment.

Establishment of **information feedback systems** to inform business and clinical needs

Roll-out of point of care **NHS-compliant mobile digital technology**

How we see the dual use of data

Patient data:

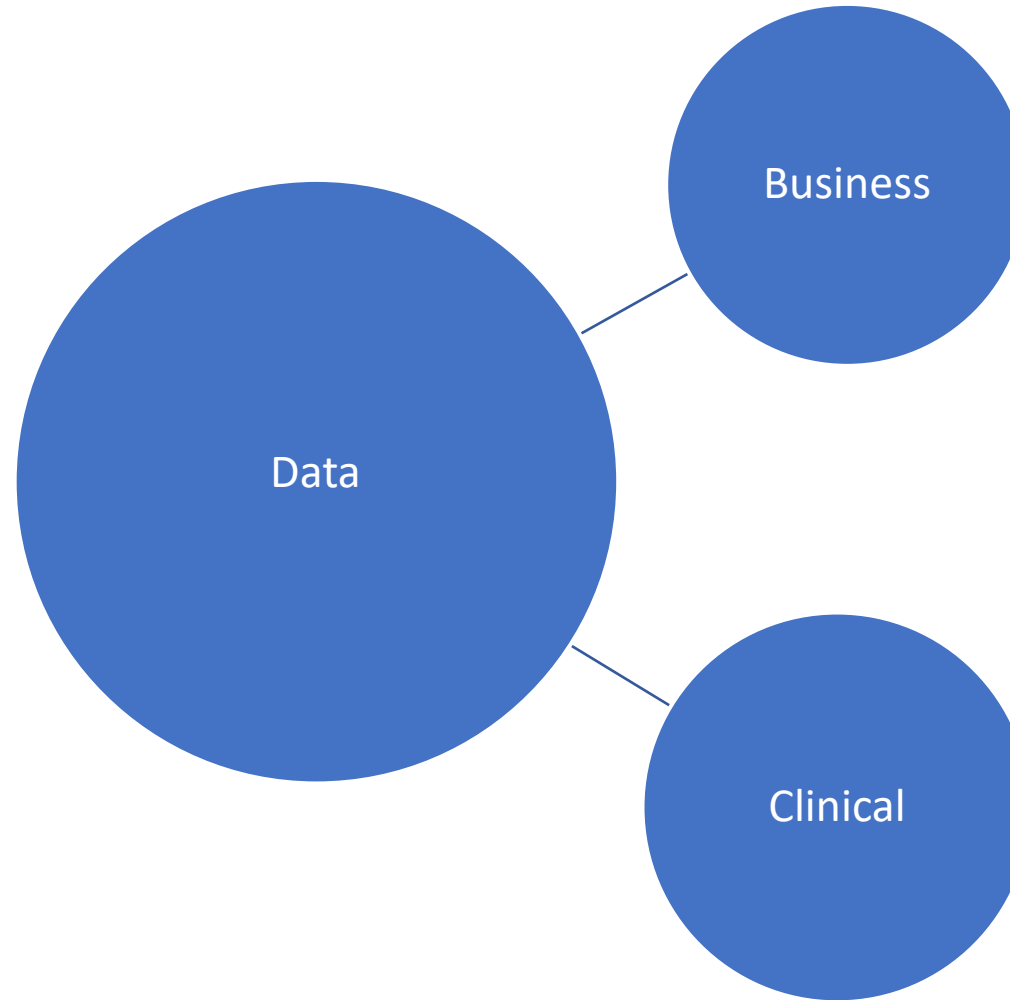
- Patient age, gender
- Referrals
- Diagnosis
- Activity volumes
- Outcomes

Workforce and Productivity data

- Staff involved
- Activity type

Product data

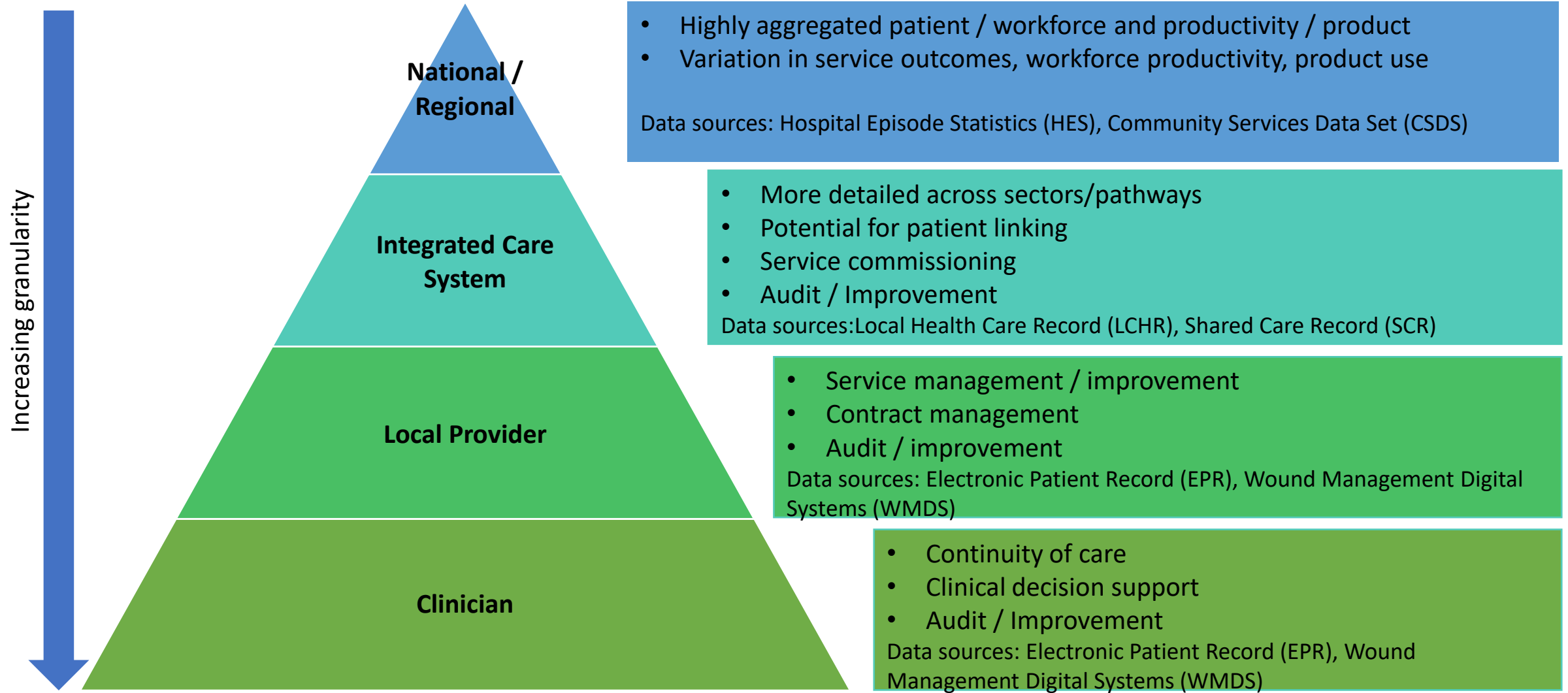
- Wound care products
- Equipment



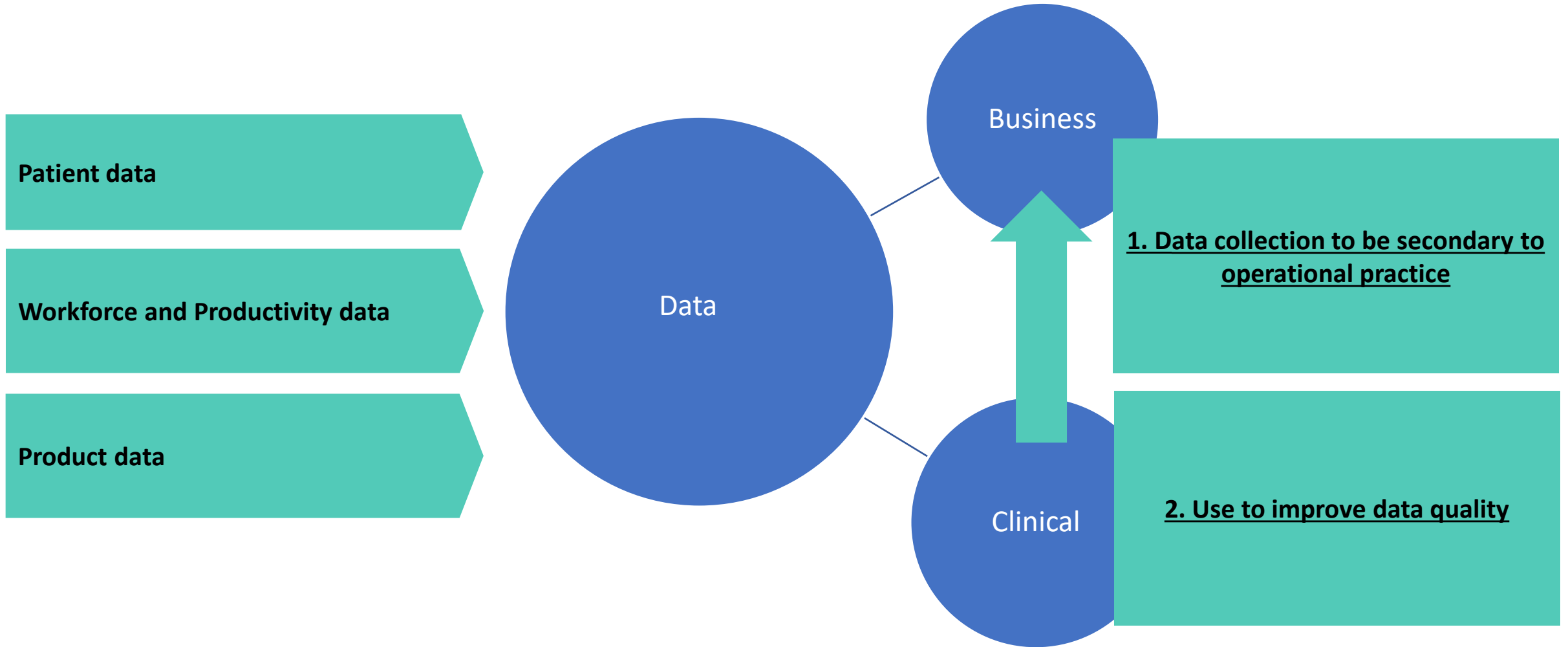
- **Commissioning & contract management**
- **Service Management**
- **Business case development**
- **Performance management**

- **Point of Care**
 - Continuity of care
 - Decision support
- **Audit**
- **Improvement**
 - To identify unwarranted variation
 - To support improvement programmes

The uses of data in improvement



Our resulting data principles



Developing the data needed to improve

Register of known suppliers of wound management digital systems (WMDS)

Company	Product (s)
Ekare https://ekare.ai/	InSight
Healthy IO https://healthy.io/wound/	Healthy IO
Entec Health (UK Distributor for Aranz Medical) https://www.entechealth.com/solutions/silhouette-for-clinical-practice/nw-generation/	Silhouette
Entec Health https://www.entechealth.com/wound-care-buddy-app/	Wound Care Buddy App (platform for wound care guidelines and formulary)
Islacare https://www.islacare.co.uk/	ISLA
Smith & Nephew https://www.woundcare-today.com/partners/smith-nephew https://www.formeo.co.uk/login.aspx	Formeo (web based non-prescription ordering)
Imito AG https://imito.io/en/imitowound	ImitoWound
WoundMatrix.com https://www.woundmatrix.com/	WoundMatrix
Gnosco AB https://dermicus.com/en/wounds/	Dermicus
Medical Data Solutions and Services http://www.mdssas.com/woundpad/	WoundPad
KroniKare pte ltd https://kronikare.ai/	Kronikare AI

Ann Jacklin (Data & Information Lead, NWCSPI): ann.jacklin@nhs.uk August 2020

Functional Overview for WMDS

Section 1: Underpinning principles for any Wound Management Digital System (WMDS)	
• The Wound Management Digital System (WMDS) should provide a single long-term record of all events in community and hospital care environments	Essential
• The use of a Wound Management Digital System (WMDS) should reduce administrative load	Essential
• The Wound Management Digital System (WMDS) should support live access to records and care plans	Essential
• The Wound Management Digital System (WMDS) should be intuitive and convenient for staff to use	Essential
• The Wound Management Digital System (WMDS) should be robust and reliable (i.e., available to use and input data all the time)	Essential
• The Wound Management Digital System (WMDS) should have low installation and update burden (e.g., the system automatically updates the next time a user logs in)	Essential
• The Wound Management Digital System (WMDS) supplier will provide staff with support (e.g., training) to use their system	Essential
• Users should be able to customise the system to develop local indicators/reports	Desirable
• The Wound Management Digital System (WMDS) supports and can contribute to the creation of a national image repository to support Artificial Intelligence (AI) development	Desirable

Specifying features such as analytics,
digital imaging, clinical decision
support

Aimed to support procurement and
commissioning frameworks

Information standards for wound care

Establishing the information needed
to meet clinical, business and
improvement needs

Establishing the national metrics to
support improvement

The diagram illustrates the relationship between various categories, inputs, compound indicators, individual indicators, and local indicators in the context of wound care metrics.

Categories: The key areas of our case for change

- Patient 1
- Workforce 2
- Products 3
- Education 3
- Patient experience 4
- Sustainability 5

Inputs: (i.e. LL Recommendation, CQUIN)

- Immediate Care
- Assessment, diagnosis & referral
- Treatment
- Outcomes & reoccurrence

Our metrics span the pathway (Primary Care, Community & Secondary Care, social care)

Compound indicators: measures that demonstrate the overall achievement of our recommendations or business case

- Compound Indicator

Our national programme focus is on:

- Defining the metrics that demonstrate the current state of the provision of wound care and the impact of the implementation of the LL recommendations.
- Helping the FIMPs assess their ability to meet these.
- We have agreed that our design principle for our compound indicators is that they should sit at the highest level, with individual indicators providing detail within it to help further understanding and direct QI.

Compound Indicator (Recommendation)

Individual Indicators: measures that can help provide more detailed understanding

- Indicator
- Indicator
- Indicator

Local indicators: metrics that FIMPs define as being needed

- Hull
- Kent
- Manchester
- Wye
- M&S Essex
- LiveWell

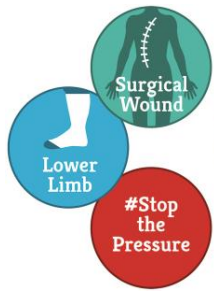
Our FIMPs will augment this work by defining local metrics that help demonstrate the impact of the recommendations locally to their local health economies.

Local Indicators

- Hull
- Kent
- Manchester
- Wye
- M&S Essex
- LiveWell

NWCSP Metrics - Patient

Immediate Care	Assessment, diagnosis and referral		Treatment	Outcomes and Recurrence		
001 % of patients with a leg wound without NWCSP 'Red Flag Symptoms' being treated with first line mild graduated compression	002 % of patients with a leg wound receiving initial full assessment within 14 days of initial presentation		009 % of people with a leg wound and an adequate arterial supply, where no aetiology other than venous insufficiency is suspected, in strong compression	012 % of people diagnosed with venous leg ulceration healed within 12 weeks of initial presentation	013 % of people diagnosed with venous leg ulceration healed within 24 weeks of initial presentation	014 % of people diagnosed with venous leg ulceration healed within 12 months of initial presentation
	003 % of people diagnosed with venous insufficiency (with VLU) referred to vascular service for assessment for endovenous ablation		010 % of people with venous insufficiency (with VLU) referred to vascular service for assessment for endovenous ablation who undergo endovenous ablation		015 % of people with a healed VLU experiencing a recurrence within 6 months	016 % of people with a healed VLU experiencing a recurrence within 12 months
	004 % of patients diagnosed with PAD referred to vascular surgeons for assessment		011 % of patients referred to vascular surgeons for assessment who undergo revascularisation	017 % of people with healed foot ulcer within 12 weeks of initial presentation	018 % of people with healed foot ulcer within 24 weeks of initial presentation	019 % of people with healed foot ulcer within 12 months of initial presentation
	005 % of patients in hospital with diabetes and a foot wound referred to the multidisciplinary foot care service or foot protection service within 24 hours	006 % of patients in hospital WITHOUT diabetes and a foot wound referred to the multidisciplinary foot care service or foot protection service within 1 working day			020 % of patients with a foot ulcer, without diabetes, experiencing a recurrence within 6 months	021 % of patients with a foot ulcer, without diabetes, experiencing a recurrence within 12 months
	007 % of patients in the community with diabetes and a foot wound referred to the multidisciplinary foot care service or foot protection service within 1 working day	008 % of patients in the community without diabetes and a foot wound referred to the multidisciplinary foot care service or foot protection service within 1 working day			022 % of people with foot ulceration and Diabetes who have had a minor amputation	023 % of people with foot ulceration and Diabetes who have had a major amputation
					024 % of people with foot ulceration without Diabetes who have had a minor amputation	025 % of people with foot ulceration without Diabetes who have had a major amputation
						026 % of people admitted to hospital with lower limb cellulitis



National Wound Care Strategy Programme

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- Supply & Distribution Work Stream
 - National Wound Product Classification System
 - Supply and Distribution Options Paper
 - Product Selection education and advice
- Underpinning Principles:
 - Working at ICS level to reflect wound care pathways
 - Extensive stakeholder consultation
 - Recommending not mandating
 - Transfer to business as usual from September 2025



Interested in wound care? Sign up at: www.nationalwoundcarestrategy.net



Twitter: #NatWoundStrat



Wound Product Classification System

- No single system in use is currently able to provide data required by the NHS
- Enhancing digital clinical decision support by using a common classification system
- Development
 - Initial design and prototype
 - Joint work with trade bodies to review
 - Populating the test classification system (via Industry partners and formularies from Trusts / FIMPs)
 - Resolution / refining stage / expert review
 - Simplification stage
- Consultation
- Implementation (2022)
- Initial work focussed on dressings, then compression and Negative Pressure