# 10 Year Health Plan Supporting Documentation - Wound Care Plan

#### **BACKGROUND**

The UK has a thriving wound-care industry comprising nearly 100 companies and employing over 4000 people<sup>i</sup> directly employed plus those engaged in the wider supply chain backing it up. It is the headquarters of two of the top three global wound care companies, with those two companies being the only multi-national companies headquartered in the UK. In addition, the NHS is globally respected for its delivery of tissue viability services and has a network of academic centres to support research and development in the field.

In 2018 the National Wound Care Strategy Programme (NWCSP) was commissioned by NHS England to address the issue of sub-optimal wound care and marked unwarranted variation in UK wound care services, underuse of evidence-based practices and overuse of ineffective practices. <sup>ii</sup>

The formation of the NWCSP provided a welcome focus on treatment of wound. Now, with the programme being closed at end of FY 24/25, we call on the government to ensure the momentum started with the programme is continued through in new policies, plans and actions to build on the unique opportunities of our industrial base. This will support economic growth, improved patient outcomes and enhanced system efficiency.

Although numbers of community nurses are rising, the UK still ranks the lowest within OECD16 for nurses working outside of hospital, nearly 90% below OECD16 average. Figures also show that District Nurses, primarily responsible for wound care, have declining numbers  $^{iii}$ . These numbers contrast starkly with numbers of hospital based nurses where UK is second highest in OECD16 rankings. We support the NHS work force plan to significantly increase the number of District Nurses, this needs to be supported by an increase in specialist Tissue Viability Nurses to drive continued improvement in the management of wounds.

This sub-sector plan for advancing wound care in the UK leverages the combined expertise of industry, the NHS, and academic institutions to foster innovation, streamline research, and improve patient outcomes.

#### Scale of the Problem

Wound care in the UK is a significant and growing healthcare issue, linked to factors such as an aging population, increased rates of diabetes, obesity, and exacerbated by limited access to specialised wound care services.

Wound care represents the 6th highest expense for the NHS $^{iv}$ , above conditions such as obesity, and cost the NHS £8.3 billion in 2017/18, of which 81% was incurred in the community. $^{v}$  It is believed this cost is now closer to £10 billion a year.

Wound care is a resource intensive condition with over 70% of costs attributable to Healthcare Professionals and only 6% attributable to wound care products. Great focus on the condition could free up resources consumed by the estimated 3.8million patients annually who are treated for wounds, 67% of which are of working age.<sup>2</sup>

# The Opportunity

Greater emphasis on the prevention and treatment of wounds through educational initiatives, deployment of technology and a value-based approach to healthcare can help manage the



financial impact on the NHS. This should be delivered through a combination of policy interventions, funding initiatives and clear responsibilities at senior and ICS levels.

Thorough a strategic approach to wound care we can improve the financial burden from wound management, create efficiencies in service delivery, deliver improved patient outcomes and build on the strong industrial base in the UK.

### **RECOMMENDATIONS**

The are 5 domains in which action can be taken

- 1. Collaborative research
- 2. Greater use of technology
- 3. Policy, incentives and funding
- 4. Education and Training
- 5. Monitoring & Evaluation

### 1. Collaborative Research & Development Hubs

- Specialist Hubs: Establish innovation hubs that bring together R&D expertise from industry, NHS clinicians, and universities. These hubs could work on developing, testing and translating innovative wound care products, focusing on areas such as advanced wound dressings, bioactive materials, integrated sensors. The placement of hubs should prioritise areas with strong healthcare infrastructure (particularly acute and community integration), research universities, and access to expertise and skilled labour. A "hub-and-spoke" model could be adopted, with one or two major "hubs" that are globally competitive in R&D and commercialisation, supported by smaller "spoke" centres, each focused on specific aspects of wound care (e.g., service integration, materials science, digital monitoring). This setup would encourage knowledge exchange while balancing resource distribution across regions, ensuring both national reach and high local impact.
- Clinical-Research Data Integration: Integrate NHS data insights into these hubs to refine wound care products based on real-world outcomes, including chronic wound types such as diabetic foot ulcers, pressure sores, and post-surgical wounds. This will require capturing relevant data, as outlined in The Professional Records Standards Body Wound Care Information Standard, within the community services dataset and an improvement in quality of that dataset.
- **Academic-Industrial Fellowships:** Support placements of Ph.D. students and postdocs within both NHS settings and industry, fostering cross-sector expertise.
- Sustainable and Cost-effective Wound Care Products: addressing recycling initiatives, new materials and resilient and sustainable supply chains.
- Aligning research priorities and funding: The National Institute for Health Research should support a wound care industrial strategy by facilitating research, innovation, and collaboration with industry partners. Prioritising funding for wound care research and support for clinical trials, translational research and educational initiatives.

# 2. Digital Health Solutions & Remote Monitoring

- Smart Wound Care Devices: Invest in developing sensor-based technologies and digital platforms that track wound healing and provide feedback to healthcare providers, supported by major companies with expertise in medical devices and digital health
- NHS Integration & Clinical Trials: Test these digital solutions within NHS settings through structured clinical trials to ensure they meet rigorous standards and adapt them to local clinical needs.

 Patient Self-Monitoring Tools: Develop patient-focused applications and devices to aid in self-care and allow remote monitoring by NHS clinicians, improving access for rural patients and reducing hospital admissions.

# 3. Policy Support

- Prioritisation and responsibilities: It is recommended that the Chief Nursing Officer
  has overall responsibility for wound care delivery and that every ICB is legally
  mandated to incorporate delivery of Tissue Viability services into their strategic
  planning.
- NHS-NICE Collaboration for Rapid Approval: The NHS and the National Institute for Health and Care Excellence (NICE) should work with industry to develop assessment processes optimised for products technologies and treatments such as wound care. Current approaches do not recognise the full benefits of technologies or the challenges in evidence generation.
- Standardised Protocols for Wound Management: Build on the work of the NWCSP to establish evidence-based, standardised wound care protocols, supported by digital platforms, which could improve diagnosis, preventative actions and treatment consistency and enable faster adoption of new products across the NHS.
- Funding for High-Impact Research: Secure government and private funding to support
  high-impact research projects that have the potential to reduce healthcare costs and
  improve outcomes. Strategically utilise grants to focus on wound care as a key
  industrial subsector to support UK manufacturer and shorter supply chains and
  resilience.
- Reimbursement: maintain a permissive list of products suitable for community prescribing within Part IX of the Drug Tariff. The process for listing should be streamlined, transparent and value based.

#### 4. Workforce, Training and Education

- Deliver on the commitments in NHS Workforce plan: ensuring a skilled workforce is in place, supported by appropriate technology, is the bedrock of service delivery. This will need to comprise of a robust district nurse cohort and necessary specialist nurses and allied HCPs.
- Cross-Sector Training Programs: Develop educational modules and workshops for NHS clinicians and wound care professionals, led by wound care companies and academic partners, to promote understanding of new technologies. This would build on the clinical training delivered by the NHS.
- AI/VR/AR Enhanced Training for Wound Assessment: Use AI algorithms developed in collaboration with academia to train NHS staff on identifying and categorising wound types and assessing healing progress accurately.
- Consolidate educational approaches: The Nursing and Midwifery Council (NMC) should investigate mandating educational standards to ensure that compulsory wound care education is taking place in pre and post registrational nursing training programmes.<sup>vi</sup>

### 5. Monitoring & Evaluation

- Performance Benchmarks: Establish benchmarks based on clinical and economic outcomes tracked by the NHS, alongside academia and industry, to assess the success of new products and practices.
- Long-Term Studies & Post-Market Surveillance: Conduct long-term studies on the
  outcomes of wound care innovations implemented within the NHS, with support from
  research teams for data analysis and interpretation. This is particularly important
  given the implementation of NICE Late Stage Assessment (LSA) which requires

evidence generation for mature products. Recruitment of sufficient patients into studies to meet evidence requirements is highly challenging and needs to be a collaborative effort between NICE, NHSE and Industry.

This strategy could place the UK at the forefront of wound care innovation, creating a robust pipeline for new products, greater investment in R&D and clinical trials in the UK and fostering cost savings for the NHS, and ultimately improving patient outcomes by aligning industrial, academic, and healthcare sector expertise.

There is a strong link between NHS collaboration and adoption with private sector investment in R&D. Having access to clinical and academic expertise alongside a receptive market for trials and subsequent adoption is an important element of R&D programmes. The current reimbursement process, through Drug Tariff Part IX, provides patients and clinicians to a wide choice of appropriate technologies with a well-established and easy to use prescribing mechanisms. This user and patient led approach, with checks and balances at a local level, is currently an internationally positive element of the UK market, attracting investment and early access to innovation.

#### **INVESTMENT AND OUTCOMES**

### **Expected Outcomes**

- **Improved Patient Outcomes:** from enhanced healing rates from the adoption of advanced wound care technologies, digital monitoring, and adherence to standardised care protocols.
- Reduction in Complications and Recurrence: from secondary complications, such as
  infections, sepsis and amputations, especially among vulnerable populations with
  diabetes and mobility issues. Supporting economic and social activity and reducing
  burden on the health system.
- Reduced Hospital Admissions, Stays and Surgical Costs: Fewer patients requiring hospitalisation and interventions, extended hospital stays for wound-related complications, especially through remote monitoring and early intervention.
- **Increased R&D and Manufacturing Jobs:** Establishing the UK as a global leader in wound care research and product development would support growth in UK-based manufacturing, supply chain management, and research roles tied to industry.
- Streamlined Supply Chains and Efficient Use of Resources: Sustainable product development and supply chain optimisation would reduce material and travel costs, ultimately benefiting NHS net zero targets.

### **Investment Implications**

- Setup Costs: Establishing collaborative research hubs and digital health infrastructure
  would require initial investment, likely sourced from public-private partnerships,
  research grants, and possibly NHS budgets, although this can build on existing centres
  of excellence such as Birmingham, Cardiff and Hull.
- Talent Development and Training: Providing general and specialist training and education would require budget allocation for programs and may involve temporary costs for backfilling clinical roles during training periods, however this is consistent with the planned NHS workforce plan.
- R&D and Clinical Trials: Costs associated with developing and testing new wound care
  products could be high, especially for products involving innovative biomaterials,
  sensors, and digital technologies.
- Sustainable Manufacturing Costs: Transitioning to sustainable, UK-based production could involve setup costs and potentially higher per-unit costs initially, which could

- decrease as scale and efficiencies are realised. This cost would be borne by industry but needs to be recognised in procurement activities.
- Remote Monitoring Platforms: Building, testing, and implementing remote monitoring technology will require significant investment in IT infrastructure, cybersecurity, and user training. This will be through a mixed funding model with NHS needing to invest in infrastructure while industry will invest in delivery of monitoring solutions.
- Interoperability with NHS Systems: Ensuring seamless integration of new technologies with existing NHS systems and electronic health records would require dedicated IT resources. This is consistent with the approach outlined in the Data (Access and Use) Bill.

# 5. **Cost-Benefit Over Time**

- Initial Phase (Years 1–3): Higher upfront costs for R&D, digital platform setup, clinical trials, and training. Potential partial offset by early adopters of digital health tools. The costs of this will fall across public and private sector.
- **Growth Phase (Years 4–7):** As technology adoption increases, the NHS and companies may see moderate cost savings from reduced hospital admissions and improved supply chain efficiency.
- **Maturity Phase (Years 8–10+):** The strategy should yield significant savings in chronic care costs, optimised resource use, and positive returns on investment in R&D.



https://www.gov.uk/government/statistics/bioscience-and-health-technology-sector-statistics-2021-to-2022

ii https://www.nationalwoundcarestrategy.net/about-the-nwcsp/

https://assets.publishing.service.gov.uk/media/66e1b517dd4e6b59f0cb2553/Independent-Investigation-of-the-National-Health-Service-in-England-Technical-Annex.pdf

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vi https://publicpolicyprojects.com/wp-content/uploads/2023/10/PPP-Wound-Healing-Report-1023.pdf