Shared wound care and the implementation tipping point: patient engagement to standardise practice

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N urses globally are facing pressures that severely impact their ability to carry out their vital role (Barrett and Heale, 2021; Castro-Ayala et al, 2022; World Health Organization [WHO], 2022). With the prevalence of chronic wounds rising by 71% since 2012, we are currently facing a crisis and new ways of working are required to meet the challenge of chronic wound management for both patients and individual practitioners (Sen, 2019).

Innovation accelerated during the pandemic in an effort to make healthcare services more resilient, effective and efficient. However, greater focus is now needed to ensure these new pathways, technologies and protocols continue to be implemented to maximum effect, especially when we consider the prediction by WHO that by 2030, the nursing shortage globally could be as high as 5.9 million (WHO, 2020; Oueen and Harding, 2021).

A recent review identified three main areas of stress that nursing staff experience (Broetje et al, 2020):

- Work overload: time constraints, staffing issues and high workloads
- Lack of formal reward: pay, growth and

development opportunities and effort-reward imbalance

 Work-life interference: unsocial hours and stressful or traumatic work environments.

As well as factors that put pressure on all nursing staff, there are compounding factors for specialist wound care nurses. Pressures include increasing costs of management, an ageing population, increased prevalence of co-morbidities and growing antimicrobial resistance (Sen, 2019; Guest, 2021).

There has also been a marked shift towards community nursing; in some markets, there has been a 399% increase in community nurse visits between 2012 and 2018, while specialist nurse visits decreased over the same period (Guest et al, 2020). As non-specialist community nurses now take a more active role in wound care, managing practice variation will become increasingly important (Guest, 2021).

Studies (Moore et al, 2021; Tayyib and Ramaiah, 2021; Blackburn and Ousey, 2022) have identified areas where nurses feel there is room to improve the management of wounds, including:

Higher patient involvement in wound

management

- Staff education
- Dressing selections and dressing change frequency
- Multidisciplinary coordination
- Holistic approach to care, which encompasses wider aspects of the patient's health, not just their wound.

These areas for improvement can be addressed through the implementation of shared care practices. Shared wound care encompasses practice interventions that facilitate interested and capable patients taking a more active role in care planning and delivery.

Shared care practices are not a new concept and are already implemented to great effect in diabetes, incontinence and stoma management (Ketterer et al, 2021; Pizzol et al, 2021; University of Southern California, 2021). In wound care, shared care has been found to improve patient engagement, personalise dressing change schedules and support a holistic view to patient care (Wounds International, 2022).

Furthermore, the shared wound care approach combined with the use of long-wear advanced foam dressings has been estimated to release up to 3.5 billion nursing hours globally by 2030, achieved primarily through reductions in unnecessary dressing changes and a reduction in patient visits (Moore et al, 2021; Moore et al, 2022).

Despite the many benefits of shared wound care, there are a multitude of challenges facing those wishing to implement new protocols (Grothier, 2018).

This article aims to support clinicians to begin conversations about the implementation of shared wound care and overcoming common challenges or barriers (Moore et al, 2021).

Shared wound care: in practice

Implementing new ways of working can be done informally at first, often through conversations with patients during typical care activities to educate or engage. To standardise, however, more formal protocols are needed with the support of the healthcare system and change of practice champions to drive change and record outcomes.

With protocol or behaviour change programmes, common challenges centre around the following (Grothier, 2018):

- Lack of cost benefits: additional expenses and resources caused by new ways of working and the individual nurse's capacity
- Accessibility: inability to attend training and educational initiatives due to time pressure and staffing issue

- Clinical effectiveness: patient suitability, informal support from family members and research access may be limited
- Scalability: the available resources for implementation and the sharing of best practice
- Ease of implementation: need for stakeholder engagement and poor communication which can lead to reduced confidence in practice.

Shared wound care can be implemented with minimal practice disruption and reassurance provided around each of these cited challenges or barriers. Using long-wear advanced foam dressings can aid nurses and patients practicing shared wound care. But, it should be noted that long-wear advanced foam dressings are not vital for the practice, and shared wound care can be implemented using other dressing types.

Cost and resource benefits

The benefits of shared wound care are multifaceted. Patient empowerment benefits can be seen across physical, mental and financial health. The 3.5-billion-hour time release model demonstrates the cost benefit to the global nursing profession (Moore et al, 2022). On the other hand, for individual practitioners, shared wound care has the potential to benefit daily working practice.

Community nurses have identified several benefits that shared wound care could bring to their working lives (Moore and Coggins, 2021):

- Timing: clinicians can spend more time with patients that have more complex needs
- Cost: fewer visits and fewer dressing changes result in reduced costs for care providers
- Relationship: patients that engage with their wound management have a better relationship with their clinician
- Reporting: patients that have a good understanding of their wounds provide better reporting information, which supports clinical decision making.

Time has been identified as one of the biggest constraints on clinicians, and one of the primary benefits of shared wound care is time release (Moore et al, 2021; Moore et al, 2022)*. Shared wound care when implemented alongside longwear foam dressings, has the potential to save up to 3.5 billion hours globally by 2030 (Moore et al, 2022). What does this mean, however, to an individual starting a conversation with stakeholders about implementing shared care at a practice level? It means a potential 10% reduction in community nursing time spent

*The data set used to create the 3.5 billion hour model, revealed that globally, 4,011,188,929 hours is spent on dressing changes in the community per year, ALLEVYN LIFE as part of a shared wound care approach has the potential to release 10.8% (433,208,404) of these hours. Nursing hours released per year (total) = 433.208,404

Nursing hours spent on dressing changes in the community per year (total) = 4,011,188,929

Hours released as a percentage of total nursing hours spent on dressing changes in the community = 433,208,404 / 4,011,188,929 = 10.8% changing dressings (Moore et al, 2022).

This time, currently dedicated to potentially unnecessary dressing changes or home visits, will allow nurses to optimise the time they have with patients with chronic wounds, wherever they sit on the shared care continuum.

For patients ready to embrace shared wound care, this approach allows their nurse to prioritise higher value tasks than dressing changes and provide more holistic care, for example spending more time treating co-morbidities or managing other issues related to chronic wounds that affect a patient's quality of life. If appropriate, it could also reduce the number or duration of visits, to allow the nurse to spend more time with patients that are not able or willing to participate in shared wound care, have more complex care needs and require a more hands-on approach (Smith+Nephew, 2016c; Moore et al, 2021).

While the implementation of shared wound care does not reduce a nurse's workload, improve remuneration, or improve work-life balance, it does allow a nurse to personalise wound care based on patient needs, which means an optimised use of finite nursing time (Moore et al, 2021).

Accessibility

Incremental efficiencies can be achieved by community and wound specialist nurses but implementing this can seem a daunting task when considering all aspects of shared wound care. This practice change, however, is more accessible than it may seem at first glance. Sixty percent of patients with chronic wounds already have some active role within their care, meaning that a proportion of patients will already be aware of some shared care practices as part of their standard care program (Moore et al, 2021).

Shared care is a continuum, meaning patients can become more or less involved in their care over time as their circumstances change. This means clinicians do not need to spend unnecessary time trying to fully involve a patient if they do not meet the criteria and regardless of a patient's capability they can fit somewhere on the shared care continuum (Moore et al, 2021; Wounds International, 2022).

A change in practice would not require additional qualifications, significant training or resources as it is nurse-led and much of the infrastructure, such as access to telehealth and reporting methods, are already in place as part of standard practices (Koonin et al, 2020; Mahoney, 2020; Moore and Coggins, 2021).

There are many tools available to aid clinicians in both the implementation and ongoing management of shared wound care:

- The T.I.M.E clinical decision support tool (CDST) [Figure 1] is a tool which aids clinicians to assess, treat and manage chronic wounds (Moore et al, 2019)
- The Shared Wound Care Discussion Guide (SWCDG) [Figure 2] is a tool used to discuss aspects of shared wound care with patients and informal carers, giving practitioners a better understanding of patient suitability (Moore et al, 2021)
- A Case Series illustrates types of cases that are applicable to shared wound care and where those cases sit on the care continuum (Wounds International, 2022).

These tools address several of the barriers to implementing evidence-based practice as identified by nurses, allow for personalisation of best practice to align with local requirements, and enhances patient, practitioner and healthcare provider discussions (Moore et al, 2019; Moore et al, 2021).

Clinically effective

As a new way of working, there are some limits to the evidence for shared wound care in clinical practice, especially around healing parameters such as wound size, wound bed condition and wound progression. However, qualitative data collected from patients and practitioners over a 4-week period and across five countries, suggests shared wound care enhanced the experience of wound healing (Wounds International, 2022).

This recent case series illustrates how practitioners and patients of varying capacity all benefited from a shared wound care approach. Patients and practitioners reported that they experienced: a decrease in patient visits, regular communication between patient and clinician, increased patient confidence and independence (Wounds International, 2022).

The more quickly and effectively a wound heals, the less chance there is of further complications such as infection occurring during the healing process. This poses issues with chronic non-healing wounds as they are inherently slow to heal (Guo and DiPietro, 2010). Shared wound care practices when used in conjunction with ALLEVYN LIFE foam dressings can help undisturbed healing and efficiency (Chewning et al, 2012; Smith+Nephew, 2012, 2016a, 2016d, 2018b; Moore et al, 2021; Wounds International, 2022).

Patient selection and effective communication between the clinician and patient are important for clinically effective wound management. The tools discussed above ensure that effective communication and patient selection can be Figure 1. T.I.M.E clinical decision support tool (CDST) for wound management (Moore et al, 2019).



achieved within a shared wound care practice (Moore et al, 2019; Wounds International, 2022). The tools allow for clinicians to select the suitable patients with the suitable wounds for full involvement in shared wound care, as well as identifying patients that can't or don't want to be involved in shared wound care.

Longer wear approaches require clinicians and clinically appropriate patients to leave their dressings on for longer to facilitate undisturbed healing, which is a key aspect of why shared wound care is an effective practice**. Undisturbed healing has been shown to be a beneficial practice in the treatment of acute wounds and non-healing wounds when practiced with long-wear advanced foam dressings, such as ALLEVYN LIFE (Stephen-Haynes, 2015).

Some of the major reasons for premature dressing changes are due to the dressing itself (i.e. dressing has moved, dressing smells, guidance from dressing manufacturer [*Figure 3*]. This can lead to

**Manufacturer's IFU should always be consulted.

Figure 2. Shared wound care discussion guide (SWCDG) (Wounds International, 2022).

Shared wound care discussion guide¹

Use this tool in conjunction with the ABCDE approach from the T.I.M.E. clinical decision support tool^{2,3} and follow the steps below with the patient and/or carer (also known as informal carer or caregiver)



reduced trust in dressings and more frequent dressing changes.

Shared wound care, when used alongside appropriate advanced foam dressings, can be an effective practice that offers clinical confidence to patients, practitioners and healthcare systems (Grothier, 2018).

Scalability

Shared wound care is a scalable strategy that

can be tailored to the specific healthcare system in which it is implemented. Clinicians are already practicing shared wound care as 60% of patients already take an active role in their treatment. Specific steps can be taken to scale shared care approaches with more patients, more formally and with less practice variation (Moore et al, 2021).

The nature of shared wound care makes it suited to a phased rollout, with initial

Figure 3: Common factors that drive dressing changes by nurses* (Smith+Nephew, 2022).



*In response to the following question: 'Here are some factors that people use to assess the condition of wound dressings and decide when to change the dressing. Based on your experience of managing chronic wounds, which of these factors most apply to you?' Base: All nurses (230). Manufacturer's IFU should always be consulted.

implementation carried out using a small cohort of patients that are most suitable for shared wound care (Moore et al, 2021). Not all patients need to be engaged in shared wound care right away, only the most clinically appropriate. This gives clinicians the ability to implement the practice at a pace that suits them and the demands of their practice.

As implementation progresses, practitioners will have more time to invest in scaling up shared care practices, and identifying, training and engaging new patients. A phased approach will have a cumulative effect on the time released, as more patients are enrolled onto a shared wound care pathway, more time will be released to nurses to enrol more patients. Alternatively, clinicians can dedicate more time to patients who are not able or don't want to be involved in shared wound care and require more hands-on care (Moore et al, 2021).

Other care areas such as diabetes management have utilised a shared care approach to improve quality of life for patients. Reports by stakeholder groups have highlighted areas that should be of focus when implementing shared care programs, areas such as care planning, clinical engagement and leadership, and clinical governance (Diabetes UK, 2014). By learning from experiences in other therapy areas, wound care specialists can streamline their implementation efforts, increasing scalability and the speed of uptake.

Implementation

Shared wound care is welcomed by many patients and practitioners and is a proven way to streamline wound management and improve clinical outcomes. However, there are still barriers to implementation which need to be addressed. While discussions about becoming involved in shared care can take place between practitioners and patients without involvement from all relevant stakeholders, implementing a formalised change of practice can be difficult.

This has been shown in the implementation of local diabetes shared care programs where involvement from senior hospital managers (e.g. chief executive officers), specialist clinical leads, community nurses, care commissioners, patient groups and disease specific charities were required to set up effective shared care pathways (Diabetes UK, 2014). This is a broad stakeholder group so effective engagement with all parties is required for effective implementation of shared wound care. *Box 1* shows the steps that should be taken when implementing a change of practice within a healthcare system and can be used to aid implementation of shared wound care within a healthcare organisation.

Experiences from stoma management can teach us a lot about how training, resourcing and product availability can be barriers to shared care. In the UK, Rotherham Clinical Commissioning Group found that patients were housebound due to poor continence equipment, patients had to modify their equipment and patients received equipment they did not need (Di Gesaro, 2012; NHS, 2021). This highlights the need for training, adequate resourcing, access to correct equipment and a robust and comprehensive business case to successfully implement shared wound care.

Conclusion

Shared care is a natural progression in chronic wound management, it is well evidenced in practice in the management of other chronic conditions and evidence in wound care is Box 1: Implementation of shared wound care using long-wear advanced foam dressing, such as ALLEVYN LIFE Advanced Foam Dressings — Clinical pathway considerations (see Appendix 1 for full list of implementation steps).

Assess:

- Patient identification using the SWCDG and assess the wound using the T.I.M.E CDST
- Dress:
- Choose a dressing that can best help the facilitation of shared wound care practices
- Educate:
 - Use standardised training modules to educate patients on shared wound care and ensure to check for comprehension by patient

Define:

- Care strategy Define a care and follow-up strategy that is aligned to the patient's quality of life
- Escalation Define a clear escalation pathway with the patient and all responsible clinicians

Reassess:

- Periodically reassess the patient and adapt care and follow-up strategy.

growing rapidly (Diabetes UK, 2014; Ketterer et al, 2021; NHS, 2021; Pizzol et al, 2021; Wounds International, 2022). Implementation of this practice can release a significant amount of time for every nurse that treats chronic wounds as well as improving outcomes by engaging patients in their own care and focusing more time on patients that can't. The time released can be optimised by each nurse depending on the demands and priorities of their role.

Practitioners can take steps now to begin implementing shared wound care and tools are available to assist pilot programs. Practitioners can start assessing where patients may sit on the shared care continuum using tools such as the T.I.M.E CDST [Figure 1], SWCDG [Figure 2], shared care case series and the international best practice guidelines (Moore et al, 2016, 2019, 2021; Wounds International, 2022). Starting with discussions with management, whether that is clinical leads or executive level management, is another way practitioners can begin the process. The last step practitioners can take is identifying a change of practice champion that can help drive change within their healthcare organisation.

The next article in the series will focus on implementing change of practice at an organisational level, aiming to aid practitioners to engage payors and higher-level management to implement shared wound care practices. Implementing shared wound care will be an incremental process but investment of the required time and resources promises to yield real improvements for practitioners, patients and healthcare providers in the management of chronic wounds.

References

- Barrett D, Heale R (2021) COVID-19: reflections on its impact on nursing. *Evid Based Nurs* 24(4): 112-113
- Blackburn J, Ousey K (2022) Exploring healthcare professional's perceptions of the real-world costs of

wounds. Wounds UK 18(1): 54-61

- Broetje S, Jenny GJ, Bauer GF (2020) The Key Job Demands and Resources of Nursing Staff: An Integrative Review of Reviews. *Front Psychol* 11: 84
- Castro-Ayala A, Borneo A, Holden J et al (2022) Nursing Under Unsustainable Pressure: Staffing for Safe and Effective Care in The UK. Available at: https://www.rcn. org.uk/Professional-Development/publications/nursingunder-unsustainable-pressure-uk-pub-010-270 (accessed 27.09.2022)
- Chewning B, Bylund CL, Shah B et al (2012) Patient preferences for shared decisions: A systematic review. *Patient Educ Couns* 86(1): 9-18
- Diabetes UK (2014) Improving the Delivery of Adult Diabetes Care Through Integration. Sharing Experience and Learning. Available at: https://www.diabetes.org.uk/Documents/ About Us/What we say/Integrated diabetes care (PDF, 648KB).pdf (accessed 17.04.2023)
- Di Gesaro A (2012) 'Self-care and patient empowerment in stoma management'. *Gastrointestinal Nursing* 10(2): 19–23
- Grothier L (2018) What are the challenges for community nurses in implementing evidence-based wound care practice? (part 2). *Wounds UK* 14(5): 34-39
- Guest JF, Fuller GW, Vowden P (2020) Cohort study evaluating the burden of wounds to the UK's National Health Service in 2017/2018: update from 2012/2013. *BMJ Open* 10 (12)
- Guest J (2021) 'Burden of wounds to the NHS: what has changed since 2012/13?' Wounds UK 17(1): 10–15
- Guo S, DiPietro LA (2010) Factors Affecting Wound Healing. J Dent Res 89(3): 219
- Joy H, Bielby A, Searle R (2015) A collaborative project to enhance efficiency through dressing change practice. J Wound Care 24(7): 312–7
- Ketterer SN, Leach MJ, Fraser C (2021) Factors Associated With Quality of Life Among People Living With a Stoma in Nonmetropolitan Areas. *Nurs Res* 70(4): 281
- Koonin LM, Hoots B, Tsang CA et al (2020) Trends in the Use of Telehealth During the Emergence of the COVID-19 Pandemic — United States, January–March 2020. Morb Mortal Wkly Rep 69(43): 1595-1599
- Mahoney MF (2020) Telehealth, Telemedicine, and Related Technologic Platforms: Current Practice and Response to the COVID-19 Pandemic. J Wound Ostomy Continence Nurs 47(5): 439-444
- Moore Z, Bell T, Carville K et al (2016) International Best Practice Statement: Optimising patient involvement in wound management. *Wounds International*
- Moore Z, Dowsett C, Smith G et al (2019) TIME CDST: An updated tool to address the current challenges in wound care. J Wound Care 28(3): 154-161
- Moore Z, Kapp S, Loney A et al (2021) A tool to promote patient and informal carer involvement for shared wound care. *Wounds International* 12(3): 86-92

Declaration

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Assess:

- Ability and capacity, self-confidence and motivation, carer status and wound type are all aspects that should be considered when assessing patients and their wounds
- Keep in mind that every patient and every wound is different and that patients can become more or less able to participate in their own care at any point
- Let the patient define what success is e.g. less smell or pain, greater independence or greater quality of life
- Utilise the SWCDG and the T.I.M.E CDST

Dress:

- Wear time of up to 5-7 days*
- Change indicator to minimise the visual impact of exudate and to show patients and clinicians when to change the dressing, helping to minimise clinically unnecessary dressing changes
- Excellent exudate management to prevent leakages
- Optimal patient comfort
- Odour control to extend wear times and patient tolerance
- Showerproof
- Educate:
- Create a standardised patient training programme with tools to aid the patient training process

- Tailor your training programme to the care setting in which shared care is being practiced
- Make the training process incremental to allow for differing patient abilities

Define:

- Care strategy
 - Follow-up schedules need to be tailored to patients – some may need an inperson appointment twice a week while others only need a phone appointment each week.
 - Offer a range of ways for patients to make contact e.g. In-person, clinic, phone, text
 - Standardised documentation will help keep accurate records and improve care- especially when multiple nurses are seeing one patient
 - Include patient reassessment to ensure that patients are receiving the appropriate level of care
- Escalation
- Standardised training for nurses, carers and patients on when escalation is required
- Clearly define who to contact in the event of an escalation as well as how to contact them

Reassess:

• Periodically reassess the patient and adapt care and follow-up strategy accordingly.

*5 days for sacral

- Moore Z, Coggins T (2021) Clinician attitudes to shared-care and perceptions on the current extent of patient engagement in wound care: Results of a clinician survey. *Wounds International* 12(1): 48-53
- Moore Z, Loney A, Probst S et al (2022) 3.5 billion hours of nurse time released by 2030: Potential efficiency gains from shared care and long-wear advanced foam dressings. *Wounds International* 13(2): 10-16
- NHS (2021) Delivering Excellence in Stoma Care : A Guide to Implementation. Available at: https:// medsopt.midlandsandlancashirecsu.nhs. uk/media/1058/aga_8653_nw-qipp-stomainteractive-pdf_v8final.pdf
- Pizzol D, Demurtas J, Celotto S et al (2021) Urinary incontinence and quality of life: a systematic review and meta-analysis. *Aging Clin Exp Res* 33(1): 25-35
- Queen D, Harding K (2021) The legacy of the COVID-19 pandemic and potential impact on persons with wounds. Int Wound J 18(4): 417
- Sen CK (2019) Human Wounds and Its Burden: An Updated Compendium of Estimates. *Adv Wound Care* 28(2): 39
- Simon D, Bielby A (2014) A structured collaborative approach to appraise the clinical performance of a new product. *Wounds UK* 10(3): 80–7
- Smith+Nephew (2012) Odour reducing properties of

ALLEVYN Life. Internal Report. (DS/12/127/DOF.)

- Smith+Nephew (2016a) A Randomised Cross-Over Clinical Evaluation to Compare Performance of ALLEVYN Life and Mepilex[®] Border Dressings on Patient Wellbeing-Related Endpoints. Internal Report. CE/047/ALF
- Smith+Nephew (2016b) DS.15.025.R New ALLEVYN Life Gen2 - Physical Testing
- Smith+Nephew (2016c) New ALLEVYN Life Gen2 wcl -Physical Testing. Internal Report. DS/15/025/R
- Smith+Nephew (2016d) Product Performance of Next Generation ALLEVYN Life Internal Report. ((HVT080) GMCA-DOF/08.)
- Smith+Nephew (2016e) Subjective comparison of masking ability of the New ALLEVYN LIFE versus Current ALLEVYN LIFE by Healthcare Professionals DS/16/061/R
- Smith+Nephew (2018a) An Open, Prospective, Randomised Volunteer Trial to Compare the Product Performance of Next Generation ALLEVYN Life with Mepilex Border and Current ALLEVYN Life. Internal Report. HVT080A/970A
- Smith+Nephew (2018b) Use of Moisture Vapour Permeability* (MVP) and Moisture Vapour Transmission Rate** (MVTR) data to support product claims referring to moist wound healing Smith+Nephew (2022) Allevyn Change Indicator

Research Background and objectives

- Stephen-Haynes J (2015) The benefits of undisturbed healing using ALLEVYN Life. *Wounds International* 6(4): 18-21
- Tayyib NA, Ramaiah P (2021) Nurses' Challenges and Experiences in Wound Care Management-A Qualitative Study. *Journal of Clinical and Diagnostic Research* 15(3)
- University of Southern California (2021) What Does Self-Care Mean for Individuals With Diabetes? Available at: https://nursing.usc.edu/blog/self-carewith-diabetes/
- World Health Organisation (WHO; 2020) State of the world's nursing 2020: investing in education, jobs and leadership. Available at: https://apps.who.int/ iris/handle/10665/331677
- WHO (2022) Ticking Timebomb: Without Immediate Action, Health and Care Workforce Gaps in the European Region Could Spell Disaster. Available at: https://www.who.int/europe/news/item/14-09-2022-ticking-timebomb--without-immediateaction-health-and-care-workforce-gaps-in-theeuropean-region-could-spell-disaster (Accessed: 27 September 2022)
- Wounds International (2022) Case series: shared wound care discussion guide. London: Wounds International