Standardising wound care documentation in clinical practice: The wound healing assessment and monitoring (WHAM) tool

KEY WORDS
- Wound assessment
- Documentation
- Healing rates
- Practice improvement
- Outcome measurement
- Standardised practice

Background: Across the UK, there is no standardised approach to wound assessment and documentation (Dowsett, 2009), or collection of wound healing rate data. **Aim:** This article outlines an initiative to improve the assessment and documentation of wound care in a community setting. **Methods:** The authors have devised a new package of wound care documentation, which incorporates a visual healing graph adapted from the National Pressure Ulcer Advisory Panel (NPUAP, 1998) Pressure Ulcer Score for Healing (PUSH) tool. This tool provides a standardised, evidence-based, visual approach to wound assessment and documentation. The new approach is named the Wound Healing Assessment and Management (WHAM) tool. **Results:** Use of the tool has demonstrated improvements in the quality of care that patients receive in relation to wound care and improvements in quality of life. **Conclusion:** The WHAM tool shapes holistic assessment, supports clinical judgement, ensures regular evaluation, and initiates consistent, regulated practice.

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The aim of this article is to present an initiative designed to improve the assessment and documentation of wound care in a community setting. The authors have devised new documentation incorporating a visual healing graph adapted from the National Pressure Ulcer Advisory Panel (NPUAP, 1998) Pressure Ulcer Score for Healing (PUSH) tool, named the Wound Healing Assessment and Management tool (WHAM).

Nursing documentation is fundamental to nursing care delivery and its design must support patient care continuity (Saranto and Kinnunen, 2009). Accurate documentation facilitates productive communication between clinicians to promote optimal care, thus allowing the progress of healing, and treatment interventions, to be monitored (Gethin, 2006).

Dowsett (2009) highlights the particular importance of wound assessment and management documentation in the community setting, where a variety of clinicians are reliant on up-to-date information being available for the patient's treatment plan, as these clinicians usually work alone. Fletcher (2008) suggests we should strive for standardised practice in wound care, with clear, evidence-based objectives, regularly reviewed, with specialist referral when wounds do not progress as expected. This should enhance the patient's chances of achieving prompt wound healing.

Vowden et al (2009) estimated that 3.5 patients per 1000 have a wound, demonstrating that substantial resources are required to treat wounds. A lack of tailored wound assessment, planning, knowledge, and continued review of effective wound management plans by nurses, has been found in the literature, despite clinical evidence-based information being readily available (Dowsett, 2009; Beldon, 2010; Benbow, 2011).

Collins et al (2002) define assessment as "information obtained via observation, questioning, physical examination and clinical investigation in

order to establish a baseline". Meanwhile, Culley (2001) states that effective documentation of the assessment must be made before management can take place. The development of the WHAM tool was aimed at standardising wound assessment and improving treatment planning, wound management, and documentation of wound care.

THE PUSH TOOL

In 2005, Gardner et al conducted a prospective research study assessing the validity of the PUSH tool (NPUAP, 1998) when used weekly in clinical practice to track changes in pressure ulcer status. They concluded that PUSH was a clinically practical, evidence-based, valid measure, which accurately differentiated healing from nonhealing pressure ulcers.

Ratcliff and Rodeheaver (2005) undertook a descriptive study addressing the use of PUSH to measure venous ulcer healing. Based on this study, the PUSH tool was an effective way to monitor healing trends in venous ulcers, as well as pressure ulcers, enabling the authors to collect monthly patient outcomes and benchmark their practice.

Gunes (2009) evaluated the use of PUSH using a prospective, methodological study, reporting the tool to be practical, user-friendly, and sensitive to change. However, a modification of the PUSH tool was suggested; the inclusion of wound depth (Gunes, 2009).

The NHS publication, *High Quality Care for All* (Darzi, 2008), recognised that if changes to drive up quality were to last, the initiatives for quality improvement had to be patient-centred, clinically-driven, and locally led. Collation of information is required to demonstrate improvements. Nurses need to provide evidence of their contribution to improving outcomes for patients, patients' experience, and healthcare services (Gerrish et al, 2011).

The WHAM tool project aims included:

- Collection of healing rates and outcomes
- Accurate documentation of holistic, effective wound care

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- Audit assistance and practice improvement
- The establishment of a standardised approach for clinical staff across the Trust.

THE WHAM PROJECT

Discussions with stakeholders took place to ascertain a workable model to achieve the aims of the project. Logistics were considered, for example, data collection and analysis, and feasibility of new paperwork. A new systems approach to training was developed. Additional resources were not available, therefore, changes were managed within existing funding and staffing frameworks.

A baseline audit of standards of wound care documentation was undertaken prior to the pilot and at implementation stages. This enabled the impact of the project implementation to be measured.

The baseline audit examined nursing documentation of wound assessments and highlighted gaps and inequalities in record keeping and practices. These included:

- Varying methods of wound measurement
- Varying time lapses between reassessments
- Varying practices used to decide if escalation for senior review or referral to tissue viability service was needed
- Overall inconsistencies in methods of documentation between clinical staff.

The WHAM tool was devised, incorporating a locally adapted version of the NPUAP's (1998) PUSH tool. Additions were integrated to enable the recording of wound depth, location of wounds using a body map, and holistic assessment to identify factors delaying wound healing. Issues with existing documentation were addressed during the development of the WHAM tool.

Photography was introduced as a key communication tool between clinicians and to aid the accuracy of evaluations. The WHAM tool involves assessing a wound then plotting the wounds status on a graph. A visual prompt is produced so that, at a glance, clinicians can observe if a wound is improving, static, or deteriorating.

Pilot stage

Two pilot teams were recruited (one in a treatment room setting, and one in a community setting) to evaluate the WHAM tool over a 10-week period with support from a staff champion within each team. Training was provided to both teams around completion of the new documentation, and contact numbers were provided for support in case any issues arose. The tissue viability clinical lead ensured momentum for the project was maintained, providing encouragement and motivation when challenges arose during the pilot.

Implementation

The project was implemented in a staged approach across clinical and domiciliary settings, ensuring consistently high standards for all patients. Effective multidisciplinary teamwork supported this process. This approach enabled patients to receive care at different locations, facilitating patient choice and continuity of care. Administrative staff from each team were involved to aid implementation. A structured training programme was developed, which provided a comprehensive guide on how to complete the documents.

The final version of the WHAM tool was launched via dedicated teaching sessions between December 2010 and January 2011, encompassing more than 160 clinicians caring for patients with wounds. Sessions were run at various times throughout the day to enable optimum attendance, while avoiding disruption to patient services. An instruction booklet was devised and disseminated. Digital cameras were used to enable community nurses and podiatrists undertaking domiciliary visits to take wound care photographs, according to the new guidance.

A multidisciplinary steering group was formed for the project ensuring representation from all clinical areas. Clarity of roles and responsibilities were defined across the steering group, which included head of clinical services, tissue viability, district, and treatment room nurses, podiatrists, data analyst, and administrative staff. Quarterly steering group meetings continue to take place to ensure the WHAM tool is maintained.

Data collection

Data collection systems were established. A data cleanse was necessary and small changes made to ensure standardised, accurate information was collated and presented.

Dedicated administration time for inputting information is integral to evidencing outcomes. In August 2011, a more sophisticated data collection system was adopted to facilitate the volume of data, and enable detailed dashboard reports to be produced. The dashboard reports provide:

- Type of wounds within the locality
- Number of wounds healed/unhealed under a team's care
- Average wound healing time by wound type
- Average wound healing time by teams for specific wound types
- Source of referral.

The dashboard data are shared across services and teams via a quarterly newsletter and the steering group. This information sharing should, in turn, provide the catalyst for sharing best practice across the locality.

New clinical wound care guidelines

Trust guidelines were reviewed and rewritten to ensure outcomes are measurable and that high quality and safe practice was embedded into the culture of the organisation. The guidelines provide clear advice and direction to all clinicians undertaking wound care that incorporates the WHAM tool.

Six-monthly audits of the WHAM tool documentation are undertaken to monitor standards across services and to ensure momentum and best practice is maintained. *Table 1* illustrates the impact of the WHAM tool on wound care documentation. Results are compared before and after WHAM tool implementation (November 2010 and November 2011, respectively).

CONCLUSION

Implementation of the WHAM tool has improved record-keeping, while also enabling clinicians to measure and monitor outcomes, including wound healing rates across the locality. The project has prompted greater communication between multidisciplinary team members.

"The WHAM tool is a sustainable project and has provided a more transparent, effective, and comprehensive service for patients, clinicians, and the organisation."

Since the WHAM tool's implementation, the wound evaluation process has improved, prompting quicker action and ensuring ritualistic practice is avoided. The audit monitors record-keeping by clinicians on a 6-monthly basis, including: wound location and type, date of wound onset, factors delaying healing. The rationale for treatment decisions is now clear and improved adherence to the wound care formulary can be demonstrated, which should result in a reduction in prescribing costs. Anecdotally, the project has prompted appropriate referrals to specialist services within the community and has reduced hospital admissions and improved patient care.

The WHAM tool is a sustainable project and has provided a more transparent, effective, and comprehensive service for patients, clinicians, and the organisation. The project is easy to replicate and is currently being implemented in a neighbouring locality. The WHAM tool shapes holistic assessment, supports clinical judgement, ensures regular evaluation and initiates consistent, safe, regulated practice, while enabling training resources to be targeted in areas of need.

The project has also helped to facilitate the collection of evidence of outcome measures with the analysis, monitoring, and presentation of data. The WHAM tool has demonstrated improvements in the quality of care patients receive in relation to wound care and quality of life. WUK

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Table 1. Wound care documentation audit results for the WHAM tool

Criteria	November 2010 (%)	November 2011(%)	Improvement(%)
Is the date of wound onset documented?	60	90	30
Is the type of wound defined?	90	95	5
Is a treatment plan in place?	55	100	45
Are there treatment plans for individual wounds where treatment differs?	47.5	90	42.5
Is there a clear rationale for each stage of treatment?	72.5	100	27.5
Are wounds measured within 14 days?	52	87.5	35.5
Are wounds photographed within 14 days?	15	72.5	57.5
Is there evidence of nutritional status assessment?	65	90	35
Is there evidence of pain assessment?	37.5	100	62.5
Is the dressing selection compliant with the current wound care formulary?	77.5	92.5	15