

The way forward in tissue viability management

Healthcare is under increasing pressure to reduce costs while maintaining the highest standard of care (Department of Health [DH], 2010). As tissue viability is multidisciplinary, demonstrating cost-effectiveness and clinical excellence can be problematic (Harding, 2000). There may be inconsistencies in treatment methods, monitoring techniques and outcome criteria across the team that impact on best practice. Keeping up-to-date, accurate records of consultations, interventions and outcomes is essential to good management and to maintaining high quality patient care. This article reviews MedICUs Tissue Viability (Mela Solutions), a networked database designed specifically to support integrated, multidisciplinary tissue viability teams.

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KEY WORDS

Tissue viability
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and management
Cost-effectiveness
MedICUs Tissue Viability

The quality of wound care needs to be demonstrated, quantified and recorded with 'true measures'. Indeed, quality, innovation, productivity and prevention (QIPP) has become synonymous with the tissue viability service, which has been highlighted for cost-savings by the Department of Health [DH] (NHS Improvement, 2011). The multidisciplinary nature of wound care can often result in inconsistencies in services that may ultimately have an adverse effect on patient wellbeing and increase overall costs (Harding, 2000).

In addition, wound treatment is multifaceted in nature, with its success dependent on many factors including:

- ▶▶ Wound aetiology and complexity
- ▶▶ General health
- ▶▶ Nutritional status
- ▶▶ Lifestyle

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- ▶▶ Patient motivation
- ▶▶ Comorbidities
- ▶▶ Range of available treatment options (World Union of Wound Healing Societies [WUWHS], 2008).

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With tissue viability teams coming from such diverse backgrounds and the complexity of the disease process and its treatment, deciphering which interventions and educational materials have the greatest impact on healing can be extremely difficult.

MedICUs Tissue Viability system

The MedICUs Tissue Viability system (Mela Solutions) is a PC-based data collection system that provides a cost-effective and easy way of recording and analysing patient care (Figure 1). The programme contains a fully customisable field and menu system, allowing the capture of data such as tissue viability assessment, medications, wound-specific interventions and adverse events. There is also a section specifically designed to capture information about the

advice given. In many cases, patients are provided with written and verbal education and training on how best to look after their wounds. The MedICUs system is capable of recording this information during the assessment and can be easily reviewed before, during or after consultations.

Flexibility is built-in

The system is flexible and can be adapted to the specific data collection requirements of individual teams. This is done by modifying the fields so that they refer directly to areas of interest, rather than general terms. In this way, specific information can be recorded which may otherwise get overlooked if a less adaptable system is employed.

MedICUs contains many other inbuilt features. For example, printing costs can be reduced by producing patient literature on-demand at the point of use. This removes the need for the tissue viability team to stock large volumes of hard copies that may go out of date. In addition, the system can record which leaflets have been given to individual patients, helping to prevent duplication of information.

Data analysis

MedICUs users record the time taken for the wound to heal, rather than the system predicting healing time. This allows retrospective analysis of the treatment protocols and identification of key healing factors in particular

communities. Reporting and analysing the data can be performed at the click of a button in one of two ways: either by using one of the predefined, comprehensive library searches, or users can design their own searches by selecting specific fields of interest. Once performed, the data can be used to identify successful interventions and educational materials, while highlighting those that have been less successful. This information can be used to design treatment protocols that both improve patient care and reduce overall costs.

How cost-savings can be identified

MedICUs Tissue Viability is designed for accurate monitoring of the wound healing process. For instance, the system allows users to look back and compare the healing time and outcomes of similar wounds associated with different treatments and the frequency of wound dressing changes. Treatment costs and nursing time can therefore be readily compared, which may identify potential cost-savings if a specific treatment can be substituted for an equally good, but less costly alternative, or if nursing time can be saved.

Security is paramount

Data security and confidentiality have become major issues in recent years. Therefore, password-protected layers secure all data within MedICUs Tissue Viability. For example, the handsets have three levels of security. The unit requires a login password as soon as it is turned on, and access to the database is protected by a second password, while a further level of security is provided by data encryption that comes at no extra cost as a nationwide NHS license is available. In addition, the database is hosted on NHS operated servers, which can only be accessed by healthcare professionals. In the event of handheld device loss, the data is protected by these security measures.

Installation and training

Installation and setup of MedICUs Tissue Viability can range from one day to a maximum of two weeks, depending on whether it is for single or multiple (networked) users, the number of licenses and the number of physical

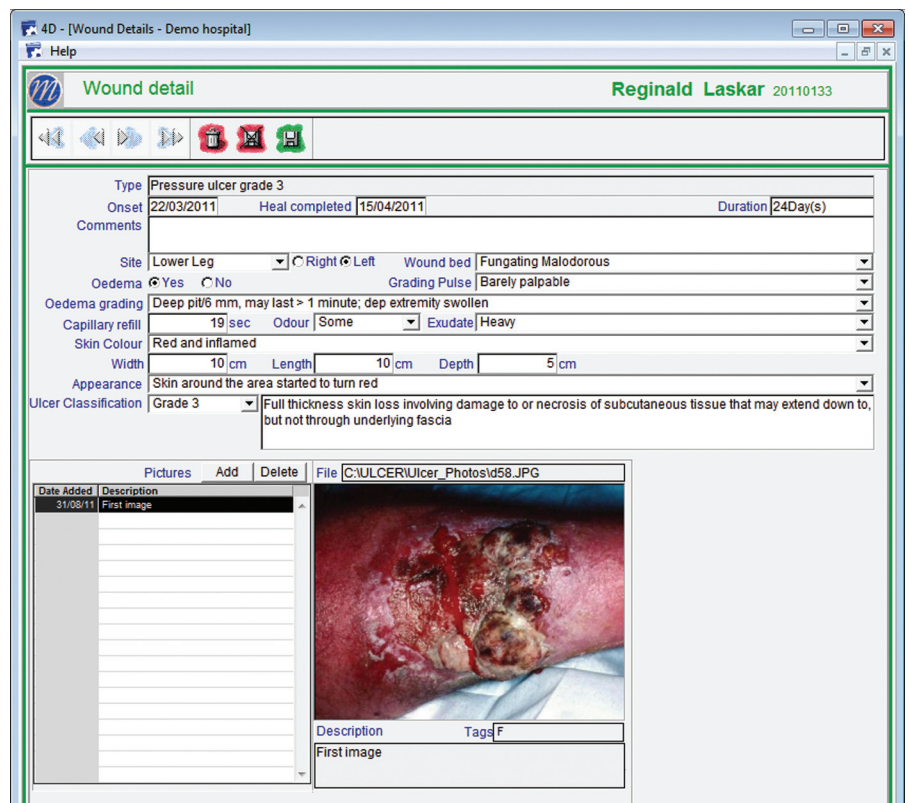
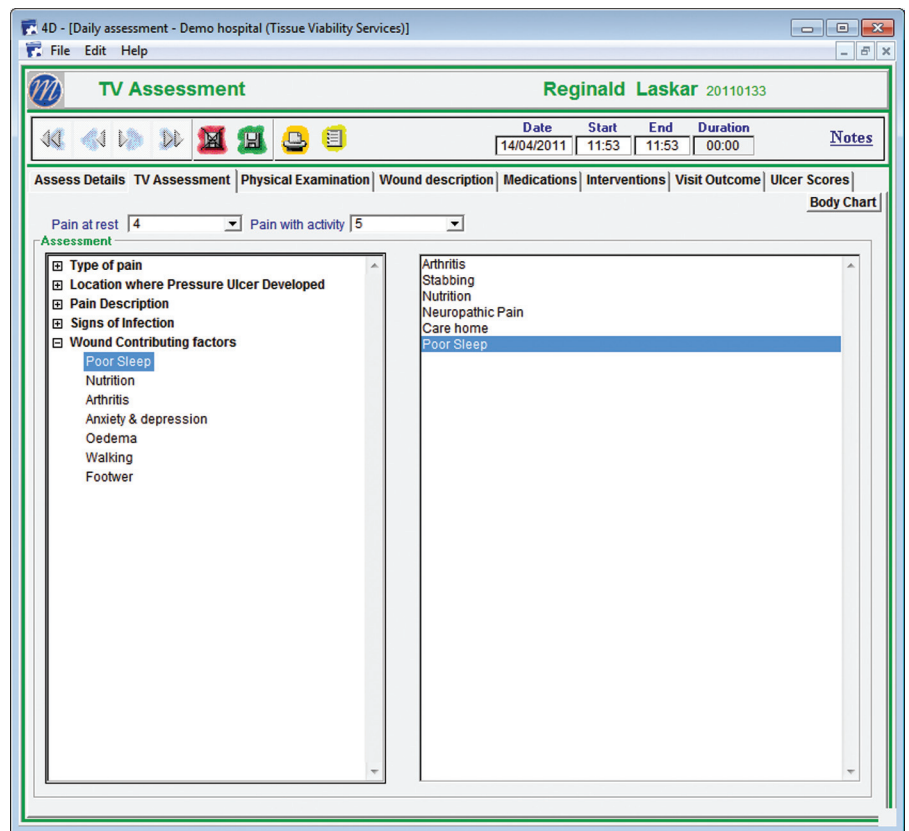


Figure 1. Screenshots of MedICUs Tissue Viability. Photograph reproduced courtesy of Wayne Naylor (www.worldwidewounds.com/2002/march/Naylor/Symptom-Control-Fungating-Wounds.html).

locations it needs to be available from. Mela Solutions provide comprehensive training and support facilitated by regular

online and face-to-face meetings. Future plans include permitting web access to the database via handheld devices.

MedICUs in clinical practice

The Coventry and Warwickshire Partnership Trust community tissue viability team (CWPT) identified an urgent need for an integrated, accurate, reliable and timesaving database to replace their previous system. The old system promised reporting benefits and the ability to enter information for all wound types, although was primarily developed for recording leg ulceration. However, the team found the programme lacked support and training, the reporting ability was not completed and it was unable to record all wound types and risk assessments.

The CWPT team uses a network version of MedICUs. In the author's experience, the quick and easy recording of patient data is extremely useful. Furthermore, the data collected during consultations can be easily printed for insertion into hardcopy patient files. For those with heavy caseloads, or based in the community, the MedICUs system allows team members to move quickly between patients by removing the need to carry large volumes of patient notes, which may be mislaid or become damaged. This helps reduce the overall burden on the tissue viability team, helping them to work more effectively and securely.

Digital image library

Two of the key features most liked by the CWPT team are the body diagram and the digital image library. The digital image library allows visual tracking of treatment progression and can help quickly identify improvements and areas requiring additional interventions. This library links the photographs directly to the patient records, without increasing the overall size of the database or impacting on the system's performance. In addition, the word processing module stores letters and notes of the verbal advice given to patients during consultations. As all the patient data and correspondence are available at the touch of a button, time can be saved as there is no need to search through lengthy patient files. Thus, in the author's opinion, making consultations more productive and rewarding for both the healthcare professional and the patient.

Data validation

As CWPT team members became familiar with the new system, it became evident that despite the highly organised nature of the team, there were areas

Tissue viability services continually need to highlight areas of waste, analyse outcomes and implement best practice. MedICUs Tissue Viability has proven to be an invaluable tool to address these issues.

where MedICUs Tissue Viability could drive efficiency savings. For example, the system highlighted the fact that in some cases there had been small data entry errors. The MedICUs Tissue Viability system has inbuilt data validation on fields like NHS number, referral date, date of birth, postcode, etc that prompt users to complete the data before exiting a record. Mela Solutions are currently working on an update that will allow users to define compulsory fields to ensure accurate and complete data collection at all times.

The future

The CWPT team agree that MedICUs Tissue Viability provides them with an easy-to-use, versatile method of recording all relevant data, analysing the medical care provided, allowing direct comparisons to be made between different types of wounds and healing paths. In the author's opinion, the data collection has improved with the support of Mela Solutions.

Conclusion

Tissue viability is not just about wound management; it also covers a wide range of organisational, political and socio-economic issues, as well as professional relationships and education (Shorney and Ousey, 2011). To run an efficient tissue viability service, each of these issues needs to be appropriately addressed. The current landscape is focused on increased efficiency while maintaining the highest healthcare standards (WUWHS, 2008). With tissue

Key points

- ▶▶ Tissue viability services are coming under increasing pressure to deliver cost-efficient care.
- ▶▶ Demonstrating cost-effectiveness in multidisciplinary teams can be problematic.
- ▶▶ Networked databases and analytical systems are key to demonstrating best practice in tissue viability.
- ▶▶ A flexible, intuitive management system can help increase productivity, improve outcomes and reduce costs.

viability services needing to highlight areas of waste, analyse outcomes and implement best practice, an integrated database like MedICUs Tissue Viability has proven invaluable in the author's trust by enhancing communication between team members and driving efficiencies. **WUK**

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