

# Real-world experience of using the ToTo<sup>®</sup> Lateral Turning System in a busy spinal unit: benefits and tips in practice

## KEY WORDS

- ▶ Pressure ulcers
- ▶ Turning system
- ▶ Mobility
- ▶ PU prevention

The Midland Centre for Spinal Injury is a 46-bed centre, providing care to a mixture of acute patients (15 beds) and rehabilitation patients (31 beds). The staff is made up of a dedicated team of consultants, doctors, psychologists, resettlement team physiotherapists and occupational therapists. The centre has been established for over 50 years and has a catchment area of more than 100 miles, including major trauma centres in Coventry, Birmingham and Stoke.

Pressure ulcers (PUs) have become widely known as a key indicator of the quality and experience of patient care, and as such their prevention has become an area of focus (Stop the Pressure, 2018). We now know that many PUs are preventable, and that when they do occur they can be very painful and debilitating, having a profound impact on the overall wellbeing of patients (Moore and Cowman, 2009).

However, despite increased awareness and progress, PUs remain a significant healthcare problem, with up to 200,000 people developing a new PU per year (Guest et al, 2017). Treating pressure ulcers costs the NHS more than £1.4 million every day (Guest et al, 2017).

Patients with mobility issues are at the highest risk for developing PUs. Guidance states that patients who have been assessed as being at risk of developing a PU should change their position frequently (at least every 6 hours if deemed at risk, or every 4 hours if high risk); if they are unable to reposition themselves, they should be offered help to do so, using appropriate equipment if needed (National Institute of Health and Care Excellence [NICE], 2014).

The spinal centre deals with a large number of patients with mobility issues, so PU prevention is a priority. The centre has a PU prevention protocol in place that may be used by other centres and in wider practice, incorporating the Toto Lateral Turning System (ToTo; Frontier Medical Group, UK).

## TOTO<sup>®</sup> TOUCH LATERAL TURNING SYSTEM

ToTo is an automated lateral turning system, designed to reposition the patient to an angle of approximately 30 degrees at regular intervals and thus reduce the risk of pressure damage to at-risk patients (ToTo Product Information, 2019). It works by tilting the patient from side to side, using inflating air cells. The system is made up of two components: the turning platform and the touch-control unit.

The turning platform inflates smoothly and evenly, to support patients and avoid the risk of twisting. The platform is suitable for use with all bedframes in any profiled or 'rise and recline' position, allowing for universal installation and compatibility. This also removes the need for additional manual handling devices (such as slide sheets), which can cause further friction and shear to patients' skin.

The platform is controlled by a touch-control unit, which allows the platform to work automatically, turning the patient at regular intervals that can be set for the individual patient. This means that patients who cannot turn themselves can be turned at regular intervals day and night, and is suitable for use even while patients are sleeping.

The platform comes in a transport bag and is easy to carry (weighing less than 6 kg). This means that it is useful for use post-discharge for patients where this is needed (see section on Facilitating

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discharge and use at home). The platform can be transported and installed by a single person with no specialist skills or training required, so is ideal for this purpose.

### PATIENT SELECTION AND STARTING USE

The Midland Centre for Spinal Injury has used the ToTo system for some time and now implements it as standard practice in all suitable patients where turning is required to avoid the risk of pressure damage (*Box 1*).

Some patients at the centre are able to turn themselves, in which case ToTo is not used: all patients are given the chance to try turning themselves and to find the best methods for them as individuals. Independence is an important factor and, either way, it is important that the individual feels in control of their own options.

If the patient is unable to turn manually/independently, the ToTo system is used wherever possible. In terms of patient selection within the unit, it should be noted that in the case of existing skin issues the patient should be manually monitored and turned, so the ToTo system would not be used. The system also has a maximum weight limit of 250 kg.

In suitable patients, it is important that the individual is informed and educated about the system before use, to explain how it works and to ensure that they are comfortable and happy with this option. Some patients can be nervous at the idea of being 'turned' and are worried that the motion of the platform might make them feel as though they are being 'tipped'. However, in practice, the majority of patients are very happy to use the system, particularly if it has been explained and demonstrated to them. In cases when the patient does not want to use the ToTo system, positioning with pillows and manual turning techniques are used instead.

It can be useful to demonstrate the system and how it works, before it is used on the patient: they can see the movement of the platform and be prepared in advance for how high the platform is and how it moves. It can also be useful to put the sides up on the bed, so that the patient feels more secure if necessary.

The timing regulator is a particularly

helpful component, as the platform can be set automatically depending on the individual patient. In most cases, according to local protocol, the system is set to turn the patient every 2–3 hours, which is sufficient to reduce the risk to the patient's skin, but it can be set for 30-minute intervals if necessary. The system can be set at intervals of 30, 60, 120, 180 or 240 minutes.

### PRACTICAL BENEFITS IN PRACTICE

The ToTo system has proved to be extremely beneficial in practice. The key values of the Trust include caring for patients, staff and finances, and using the system has been found to 'tick all the boxes'.

One of the key benefits of using the ToTo system is that it reduces staff needs and nursing time. This frees time for staff to care for patients and carry out other necessary work. In turn, this saves money for the department and reduces the burden on resources.

Using the automated timer system also provides reassurance. The automated system removes the risk of any discrepancies in care, and the potential risk for human error, which is particularly useful in a busy department. This means that you know your patients are receiving gold-standard care, being turned at the appropriate intervals to protect their skin. With PU prevention now being such a key area of focus, this is a great reassurance for both staff and patients.

There is a clear light indicator and alert system, to ensure patient safety. This is easy to use, showing the automated time setting and letting the user know if there is any issue, to ensure that turning is being conducted in a reliable and timely manner.

### PATIENT-CENTRED BENEFITS

Patient feedback on the ToTo system has been very good, with the majority of suitable patients very happy using the system: many have reported that they 'love it' and are often reluctant to stop using it if it is no longer necessary.

The system provides a degree of independence to the patient, which is very important to their wellbeing and quality of life. In patients that are unable to turn themselves, using an automated system means that they are not dependent on staff having to manually turn them.

It has also been found that the ToTo system promotes better sleep in patients during use at night, as it is much less disruptive to the patient than manual turning. Use of the ToTo system is also good for the patient's back and shoulders and promotes overall patient comfort. The system is discreet and quiet, with no vibrations, so patients find it unobtrusive to use.

### FACILITATING DISCHARGE AND USE AT HOME

Importantly, for both the patient and healthcare facility, the ToTo system is suitable for home use, so can help to facilitate discharge and promote better care at home.

At The Midland Centre for Spinal Injury, the assessment team work with the patient to facilitate discharge. The patient is assessed at this stage to establish if they are able to turn themselves independently. Manual turning and pillow positioning can be used if so.

If the patient is unable to turn themselves, the ToTo system can initially be trialled while the patient is still at the centre, to establish that they are comfortable with using the system, to educate them about how it works, and make sure that they are happy to use it themselves at home.

If the system is found to be beneficial and suitable for the individual, the team at the centre can help to apply for funding and liaise with district nurses. Facilitating discharge in this way is extremely beneficial for both patients and healthcare facilities, as it enables patients to be more independent at home.

Using the ToTo system in the home setting reduces the need for carer time, if carer support is required: where otherwise it would be necessary for a carer to come and turn the patient periodically overnight, using the ToTo system, the carer would need to come only once and switch the system on to the appropriate automatic time setting. This is a significant cost saving, and also enables the patient to be more independent. Alternatively, the system can be operated by a family member or friend.

The system has been found to be very practical for use at home, with easy installation of the platform. It is suitable to fit any bed and is designed to be placed under the existing mattress

#### Box 1. Undisturbed wound healing: key considerations guiding the practical application of wound care (Brindle, 2019)

- ▶ Clinically effective, shown to redistribute pressure away from 'at risk' areas
- ▶ Shown to increase patient and staff compliance
- ▶ Adaptive profiling platform designed for compatibility with any bed frame in any profiled or 'rise and recline' position
- ▶ Quick and easy installation: weighing less than 6kg and delivered fully assembled in a transport bag
- ▶ Promoting safety by removing the need for additional manual handling aids
- ▶ Gentle, consistent and controlled turning, fully supporting patients from head to toe
- ▶ Ensuring compliance, ensuring patients are kept moving

(apart from pocket-sprung). The platform is lightweight and easy to clean. The transport case has also been found to be useful, for instance if the patient is travelling away from home.

### SUMMARY

Using the ToTo system has proved to be extremely beneficial for patients, staff and the department. Staff and patients alike have given excellent feedback and would recommend the system.

Setting up a protocol using the ToTo system for suitable patients has facilitated improvements in patient care and staff efficiency, which could be applied to other busy departments where PU prevention in vulnerable patients is a priority. **WUK**

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