Abstract

Introduction: Internationally, guidelines are developed to ensure safe, effective, person centred, timely, efficient, and effective practice. However, their use in clinical practice is found to be variable. The Tissue Viability Society (TVS) published updated seating guidelines in 2017, yet, little is known about how these guidelines are being used.

Methods: The aim of this evaluation was to gauge the impact of the Tissue Viability Seating Guidelines on clinical practice and policy. A cross-sectional questionnaire was used to elicit the responses from anyone with an interest or role within seating and pressure ulcer prevention and management. The survey was distributed through a variety of methods including email to members of the Tissue Viability Society and social media platforms from September to December 2019.

Results and Discussion: There were thirty-nine responses, the bulk of which were from healthcare professionals across primary and secondary care. All but one respondent was from the United Kingdom. Eleven had incorporated the latest TVS seating guidance into policy and sixteen into practice. The results of our survey demonstrates congruence with the literature as the main themes that emerged included incorporating the guidance into everyday clinical practice, education, and training, and as a resource or dissemination tool. Barriers to implementation included being unaware of the guidelines and unaware of one's own professional and collective organisational responsibility to guideline dissemination. However, many respondents were planning to incorporate the guidelines using a variety of methods.

Conclusion: This survey has shown there are some examples of successful implementation of the TVS Seating guidelines. Future TVS guidelines should include implementation strategies, interventions, and goals for local champions to ensure barriers to implementation are both assessed and addressed. Future work could also include a trial of the guidelines within a pilot project.

Keywords

Pressure ulcers, Seating, Guidelines, Implementation, Strategies.

Introduction

In 2017, the Tissue Viability Society (TVS) published seating guidelines for adults, carers, and health and social care professionals on how best to prevent seating related pressure ulcers (Stephens and Bartley, 2018, Stephens et al., 2018). However, little is known about how these guidelines are being used. We sought to explore the impact of these guidelines on how clinicians deliver care and develop policy. Our aim in this regard, was to understand how these guidelines are being used and what can be done to support their implementation. The objectives of the guidelines were to empower individuals (adults, their significant others, and health and social care professionals), to collaborate and participate in the prevention and management of seating related pressure ulcers.

Implementing guidelines in health and social care practice is challenging for many reasons, relating to the individual and the context in which the planning of care and support is facilitated (Beauchemin et al., 2019, Feder et al., 1999, Rauh et al., 2018). The challenges of ensuring that wound care guidelines are used to inform end users policy, and practice in an appropriate manner have been highlighted in different settings (Barker et al., 2013, Weller et al., 2020). Historically, wound care guidelines have been written with patients as passive rather than active participants. The ongoing Covid 19 pandemic has highlighted some of these challenges, including the importance of end user collaboration; and contradictory opinions about how useful different types of evidence are in informing policy and clinical practice (Greenhalgh, 2020). The challenges of guideline implementation have contributed to different ways of working in health and social care, as well as public perceptions and expectations of frontline clinicians (Bennett et al., 2020, Kim et al., 2020, Wu et al., 2020, WHO RoE, 2020). This has changed the focus of the therapeutic relationship to a more person-centred approach (Skills for Health, Skills for Care and Health Education England 2017). In this rapidly evolving context, it is important to share guidance about best practice, such as how to prevent seating related pressure ulcers, in a way that is easily understood by adults, carers, policy makers as well as clinicians working in health and social care.

Background

Much has been written about clinical guidelines and their impact on healthcare provision and positive outcomes (Shekelle et al., 2012). Guidelines are seen as a vital component of healthcare governance; however, the literature suggests transference into practice is varied (Gagliardi & Alhabib, 2015). From the literature, reasons for some guidelines being integrated into practice and others that are not, include the method of delivery in which the information is transmitted. For example, dissemination activities via journals, emails and

post are considered passive and are less likely to be implemented (Sheldon et al., 2004; Feder et al., 1999). Safe and effective governance requires health and social care services to develop guidelines which can be translated into everyday policy and practice to improve outcomes for the people who require them (Gagliardi & Alhabib 2015). The literature proffers no one effective strategy for implementing guidelines and suggests a varied approach (Fischer et al., 2016; Feder et al., 1999). The implementation of wound care guidelines by practitioners has been evaluated by several researchers (Watts & Clark, 1993; Grey & Clark, 1998 (unpublished data); Clark, 2003). Limitations of these evaluations are that most only present data on the number of guidelines in place within the organisations who participated. Recognising the need to explore the extent and barriers to implementation of guidelines Clark (2003) conducted a study with members of the TVS and found that although national and international guidance on all aspects of wound care was now being incorporated into local policy, barriers to implementation existed. From an international perspective, a literature search revealed a dearth of evidence purporting the incorporation of guidelines into practice with only two studies found. One study evaluates the impact of wheelchair seating policy and guidance on clinical practice in rural South Africa (Visagie, Scheffler & Schneider, 2003) and the other describes and measures wheelchair assessment practice and adherence to an evidence based seating assessment tool in Canada (Lo, Hebert & Colquhoun, 2019). Similarities in the findings from both studies are congruent to those of Clark (2003) and include staff either not following the guidance, only following the guidance superficially, and not adhering to the assessment tool. The reasons for this are recorded as being due to lack of financial resources, equipment availability, lack of knowledgeable and skilled staff (Visagie, Scheffler & Schneider, 2003) and a knowledge to action gap. This demonstrates a disparity between knowing what is best practice and engaging in it (Lo, Hebert & Colquhoun, 2019). What is evident from the literature is that successful implementation of guidelines requires an accompanying strategic plan that addresses behaviour change at both personal and organisational level using an integrated knowledge transfer approach.

The purpose of this evaluation, via an online survey, was to explore the impact of the TVS Seating Guidelines (Stephens & Bartley, 2017) on policy and practice, which were developed to ensure that the dissemination and implementation had the widest impact. The findings of the survey will be used to make recommendations for future TVS guideline development and dissemination strategies.

Method

Aim

The aim of this evaluation was to gauge the impact of the Tissue Viability Seating Guidelines on clinical practice and policy.

Participants

The target population was focused on anyone with an interest or role within seating and pressure ulcer prevention and management.

Instrument used

A popular cross-sectional survey design was used (Mathers, Fox and Hunn, 2009) which is flexible and utilises questionnaires as a tool for data collection. Surveys are an efficient and cost-effective way to recruit participants from a widely dispersed sample who may wish to share their voice but, in an anonymous way (Sinclair, O'Toole, Malawaraarachchi, and Leder, 2012).

Limitations of this survey include dependence on sampling accuracy which could lead to sampling bias. The survey was developed for the TVS to evaluate the impact of their guidelines and therefore the audience was mainly represented by Tissue Viability Nurses who make up the majority of the membership. However, anyone could complete the survey irrespective of their motivations and background. Open-ended questions were used but due to word limits this did not allow participants to provide in-depth responses if they wished to.

The TVS survey included the use of both open and closed questions exploring place of work, role, reasons for implementation of the guidelines or not, and if the guidelines were used how they had been incorporated into policy and practice *(see table 1*). The survey was distributed to the target population through a variety of methods including email to members of the Tissue Viability Society and social media platforms from September to December 2019. Ethics application was not applied for as the survey was deemed a type of service evaluation as the team were asking whether the guidance had been incorporated into practice (Twycorss and Shorten, 2014).

Survey questions

Q1 In what country do you work? – choose from a list

Q2 Where do you work? - choose from a list

Q3 What is your job title? – choose from a list

Q4 Have you incorporated the 2017 Tissue Viability Society Seating Guidelines into your local policy documents?

Q5 Have you incorporated the 2017 Tissue Viability Society Seating Guidelines into your practice?

Q6 Are you able to provide an example of how you incorporated evidence from the guidelines into the delivery of a patient/service users care and outcome?

Q7 If you have not incorporated the 2017 Tissue Viability Society Seating Guidelines into your local policy, practice and patient/service user outcomes, could you explain why? Q8 Is there anything else you would like to add about how you have incorporated the guidance into policy, practice and patient/service user care?

Table 1: Survey questions

Findings

Demographics

There were thirty-nine responses 38 from across the UK and 1 from Ireland, the majority of which were from healthcare professionals across primary and secondary care. Responses were also elicited from the private, voluntary, independent, and manufacturing sector (*see table 2*). 32 respondents were from nursing backgrounds, 4 were allied health professionals and 3 were from manufacturing and the private, voluntary, and independent sector.

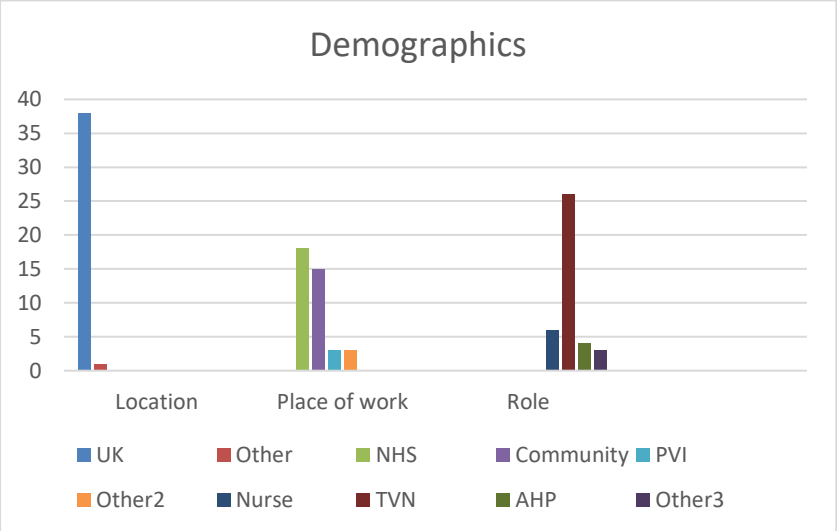

Table 2: Demographics (n=39)

From the thirty-nine respondents, eleven had incorporated the latest TVS seating guidance into policy and sixteen into practice. Making a total of twenty-seven who had utilised the guidelines.

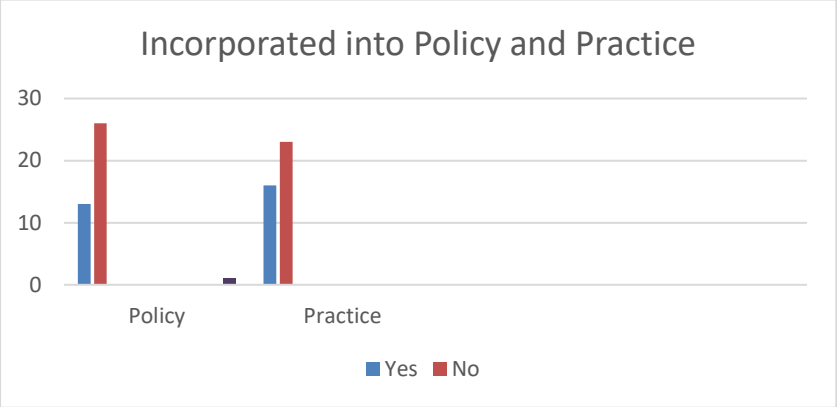

Table 3: Incorporated into Policy and Practice

How the guidelines were incorporated into practice.

Details emerged of how the respondents are using the guidelines in clinical practice, these included incorporating them into everyday clinical practice, education and training, and as a resource or dissemination tool.

Everyday clinical practice

The use of the guidelines in everyday clinical practice varied. One respondent shared how they had included other disciplines in their practice *"From attending the TVS conference and reading the guidance I now involve OT with seating assessment of patients".* Another shared how they had altered their own and others practice because of the guidelines *"I changed my own practice cascaded and advised staff on a 1:1 basis and introduced elements to our pressure ulcer training programme".* A different respondent shared how the guidelines had led to a holistic approach taken to the assessment, prescription, and recording of seating *"Patients are assessed for the 'correct fit' of their chair, and documentation is entered which states assessments have been made, and which chair has been allocated".* Two respondents disclosed how the guidelines had changed their own practice in pressure ulcer prevention and seating *"A patient was admitted to the unit and I was able to conduct an assessment and prescribe an appropriate cushion for their needs"* and how they had used the guidelines *"when carrying out a seating assessment for specialist seating".*

Education and training

Twenty-six respondents were TVN's several of which reported how they incorporated the guidelines into education and training. One respondent had ensured a thorough and

detailed implementation plan across allied health professionals, this included "*….Education to therapy staff involved in this collaborative project and available resource… rolling in service training programme for new therapy starters".* utilised the guidelines as a means of supporting staff in clinical decisions made *"… to support advice given, to evidence practical demonstrations. Provided to teams and care homes to update staff".* Another respondent used the guidelines to assist with staff development *"2018.Training sessions during CPD days".* One reported that *"Tilt-in- space chairs used widespread and aim to get the correct chair height- we have 3 choices, chair depth is able to be altered"* denoting that the change in practice was linked to updating on chair height and depth as a result of the guidelines.

A resource or dissemination tool

The guidelines were particularly useful for five respondents as a resource or dissemination tool. A respondent who had implemented a dissemination plan for AHP's wrote how the guidelines had also been used in *"Promoting and utilising Trust 'Sitting in Hospital ' leaflet on specific ward during NHSI pressure ulcer prevention collaborative… Introduction of leaflet to all Therapy staff through staff meetings. Leaflet is available in all clinical areas or via intranet for staff to access."*

A different respondent used the guidelines to develop materials on pressure ulcer prevention and management in seating and is now *"…able to send copies of the posters we developed on "Top Tips" for seating".*

One respondent shared how the guidelines led to interprofessional working within pressure ulcer prevention and management and the impact of this to service provision *"We have worked with our Wheelchair Service Team to develop posters & deliver training. They consider elements of practice & care that had previously not been on the radar. Also, the Team are now receiving earlier referrals & contributing to relevant Root Cause Analysis, the latter enabling further learning about the complexities of seating".*

The fourth respondent evaluated the impact the guidelines had on everyday practice "*2018- New guidelines were developed which incorporated the TVS Seating Guidelines. Audits were completed to assess compliance".*

A fifth respondent used the guidelines for undergraduate education *"Advised to AHP & nursing under graduates / Universities as a resource".*

Why the guidelines had not been incorporated

Of those who responded that they hadn't incorporated the guidelines certain themes arose: unaware of the guidelines (n=9); unaware of collective organisational responsibility to guideline dissemination (n=4); and planning to incorporate the guidelines into policy or

practice (n=21) using a variety of methods (such as adapting local policy/guidelines, develop information leaflets and posters, deliver interdisciplinary training/education/continuous professional development which includes friends and family).

Unaware of the guidelines

Nine respondents were unaware of the guidelines and responses varied from *"Did not know they existed", "Have not been made aware of them until now"* and *"Wasn't aware of guidelines".* Others expanded on their lack of awareness and what they were going to do about it *"I have only just seen the guidelines so will now think about ways to incorporate it in to my daily practice"* and *"Unfortunately, this is the first time I have been made aware of these guidelines, but I will speak with my team to see how best we can implement and enforce these guidelines through our team policies and procedures".*

Unaware of collective organisational responsibility to guideline dissemination

An interesting theme developed as to why the guidelines had not been incorporated into policy or practice. From the answers provided it suggested some respondents felt this was not within the scope of their role or responsibilities. Replies included *"Not my role to do that", "I do not make decisions on policies for our service" and "I'm not the policy writer".* One respondent felt that the reason for the lack of incorporation of the guidelines into policy and practice was because *"Very few members of the specialist team I work in are members of the TVS and even fewer regularly read the up to date guidance due to this"* suggesting that as a team the latest guidelines are only read if clinicians are affiliated to an organisation who devised them. Another felt pressure ulcer prevention and management in the seated adult was not their role responding with the comment *"Our OT's do all the seating assessments and I'm sure will be aware of all the relevant guidance".* A different respondent answered, *"The trust document was not written by ourselves and we were not given the opportunity to comment!!"* suggesting that sometimes guidelines are not written in conjunction with those who lead care delivery.

Planning to incorporate the guidelines

Several respondents provided examples of how they were planning to incorporate the guidelines into future practice. This included a variety of methods such as adapting current policy (*n=8*) and current guidelines (*n=1*). Three respondents were developing information leaflets and two were creating posters. Incorporating the guidelines into interdisciplinary training and education featured for eight of the respondents with one respondent including

a reference to educating friends and family. One respondent referred to utilising the guidelines in continuous professional development.

Other responses

Other reasons why the guidelines had not been incorporated into policy and practice included not having read them yet (n=2) and another respondent who was *"…very new to the service and trying to understand all of the literature available to help my practice".*

One respondent felt they were unable to fully integrate the guidelines *"…as do not have resources to provide large variety of chairs for every size of patient"* suggesting a barrier to implementation from organisational and financial restrictions.

Finally, in answer to the question is there anything else you would like to add one respondent saw the guidelines as "a discussion and not being clear". However, other respondents stated how useful they found the guidelines, the perspective they were written from and the other supportive materials available with the paper and online document with one stating *"I am impressed that they are developed from the service user perspective and are provided in a variety of formats i.e video, paper, leaflet. Helps with education of patients and students/other staff"*.

Discussion

It is acknowledged in the literature that clinical guidelines are the cornerstone of efforts to develop better outcomes in healthcare provision (Shekelle et al., 2012). Despite their recognition as an essential element of healthcare governance, evidence suggests that they are not always implemented into policy or practice (Clark, 2003; Visagie, Scheffler & Schneider, 2013; Gagliardi & Alhabib, 2015; Lo, Hebert & Colquhoun, 2019). In 2003 a study by Clark found that the implementation of the TVS wound care guidelines by its members were affected by three factors, a lack of resources, a lack of awareness, and a lack of acceptance of the key findings. One recommendation from the study was that any new guidelines developed by the TVS should be disseminated at educational events and conferences. However, a systematic review of the literature suggests that implementation rates of guidelines vary and could be a result of passive dissemination activities such as publication in journals and targeting of specific audiences via post or email (Sheldon et al., 2004; Feder et al., 1999). Therefore, the purpose of this evaluation was to explore the impact of the TVS Seating Guidelines (Stephens & Bartley, 2017) on practice and policy, which were developed to ensure that dissemination and implementation had the widest impact on service user care. The findings of the survey will be used to make recommendations for future TVS guideline development and dissemination strategies, in

addition to supporting the implementation of the guidance emerging from the National Wound Care Strategy Programme (NWCSP).

Guidelines aim to collate evidence and translate this into practice and policy to aid service reconfiguration and governance (Gagliardi & Alhabib, 2015). How this is carried out in clinical practice is varied and according to Feder et al. (1999) no single effective strategy to assist with implementations of guidelines is available and a multifaceted approach should be taken. The results of our survey demonstrate congruence with the literature as the main themes that emerged included incorporating the guidance into everyday clinical practice, education and training and as a resource or dissemination tool (Fischer et al., 2016; Gagliardi & Alhabib, 2015; Eagle et al., 2006). Barriers to implementation included being unaware of the guidelines and unaware of one's own professional and collective organisational responsibility to guideline dissemination. Consistent with findings noted by Visagie, Scheffler & Schneider (2013) and Lo, Hebert & Colquhoun (2019). However, many respondents in this recent survey were planning to incorporate the seating guidelines using a variety of methods.

In a scoping review of the barriers and strategies to guideline implementation Fishcer et al. (2016) distinguished between *"personal factors, guideline-related factors and external factors"* (p.5). Personal factors relate to a clinician's knowledge and skills, such as a lack of awareness, familiarity, or negative attitudes and behaviours to guideline implementation. This draws a parallel with our findings that some respondents were unaware of the guidelines and others did not view dissemination as part of their roles and responsibilities. This is despite a requirement to keep up to date with the latest evidence in order to deliver evidence-based practice (HCPC, 2018; NMC, 2018). Our survey found that even though dissemination occurred via a variety of methods, clinicians were still unaware of them. This could be due to strategies not utilised by the TVS such as setting intervention goals for the dissemination of the guidelines and trialling the implementation of the guidelines within a pilot project (Forsner et al., 2010; Barosi, 2006; Fischer et al., 2016). Declaring in a survey that one is unaware of the guidelines might initially be surprising for the reader. However, in the professional codes of conduct (HCPC, 2018: NMC, 2018) there is a requirement to the professional duty of candour in regard to being open and honest. Although this relates to the when things go wrong with treatment or care, it could be interpreted to being honest and open about the latest guidelines.

External factors that impact on guideline implementation include organisational constraints, lack of resources, collaboration, and social and clinical norms (Visagie, Scheffler & Schneider, 2013; Fischer et al., 2016). Again, aspects of this are harmonious with our survey findings with responses collated referring to clinicians not being involved in policy development and not having the resources to implement the guidelines to the level they were intended. Strategies to overcome this include clear roles and responsibilities and multidisciplinary collaboration (Bekkering et al., 2005; Lugtenberg et al., 2009) which help

shape social norms and implementation (Schectman et al., 2003). It is interesting to review these approaches when considering five respondents utilised the guidelines as a resource or tool to implement a clear dissemination plan. The respondents described using a variety of strategies and materials, accessible via different media, using audit to assess compliance. All of which had a direct impact on service provision, interprofessional working and learning and facilitated guideline adherence. These respondents could be referred to as champions of the guidelines, enthusiastically partaking in creating and implementing guideline adherence to improve the quality of care in pressure ulcer prevention and management (Eagle et al. 2006). However, a lack of resources regarding staffing, workload and equipment would impact adherence to best practice guidelines and has been recorded in the survey responses as a reason for not incorporating the guidelines into local policy and practice, reflecting what is already found in previous seating guideline implementation studies (Visagie, Scheffler & Schneider, 2013; Lo, Hebert & Colquhoun, 2019).

Fundamental to the process of dissemination is that the clinicians have utilised different strategies in raising awareness and increasing familiarity with the guidelines into everyday policy and practice. Positive strategies from 'champions' of best practice include incorporation of the guidelines into local education and training and utilising them as a resource or dissemination tool. Reflecting on the study by Lo, Hebert & Colquhoun (2019) the strategies used by the respondents in our study to assist with successful implementation of seating guidelines into practice was the use of a knowledge translation approach (Strauss, Tetroe & Graham, 2003). This approach involves a five to seven step cycle of actions required for effective implementation of knowledge (e.g., clinical guidelines) into practice. Applying the five-step process to our survey findings it is clear that Step one is allowing the champions to identify the knowledge-to-action gaps in the implementation of the seating guidance. Step two is adapting knowledge of the seating guidelines to local context regarding resources and services available. Step three assessment of barriers to knowledge at individual and organisational levels. Step four the selection, tailoring, and implementation of interventions such as education, training and interprofessional services. Finally step five monitoring of knowledge and evaluating outcomes with audits and continuing to maintain knowledge through continuous cycles of mandatory training.

It is noteworthy to report that only four respondents to the survey were AHP's .One explanation could be that the role of the AHP in pressure ulcer prevention and management in the UK is poorly understood as traditionally the role is undertaken by nursing staff. This is despite best practice advocating an interprofessional approach (Clarkson et al., 2019). However, as already noted, a limitation to the survey was that it was sent to TVS members and posted via TVS social media outlets; unintentionally limiting potential responses from AHP's in the field.

Appraising the findings from this survey and the evidence base regarding putting guidelines into practice highlights that this process is not *'self-implementing'* (Grol, 1997, p.420).

Moving forward any future TVS Guidelines developed by opinion leaders should be disseminated locally by champions (Eagle et al., 2006) utilising a broad range of implementation strategies and interventions. This is to ensure barriers to implementation are both assessed and addressed. Future work could also include setting intervention goals for the dissemination of the guidelines and trial within a pilot project.

Limitations

A limitation of this evaluation includes the method of data collection being dependent upon sampling accuracy and one main source of distribution. In this instance participants who have an interest or work within the field of seating and pressure ulcer prevention and management. Anyone could complete the survey irrespective of their motivations and survey questions do not allow the participant to provide in-depth reasons for the 'why' aspect of a question. A higher response rate would have generated greater transferability of the findings.

Conclusion

The purpose of this evaluation was to measure the impact of the Tissue Viability Seating Guidelines on clinical policy and practice. The target population was focused on anyone with an interest or role within seating and pressure ulcer prevention and management. Using a cross sectional survey design the survey included the use of both open and closed questions to elicit responses. Findings yielded thirty-nine responses from professionals across all sectors of health, social care, and industry. Eleven had incorporated the latest TVS seating guidance into policy and sixteen into practice. The results of our survey demonstrate congruence with the literature as the main themes that emerged included incorporating the guidance into everyday clinical practice, education and training, and as a resource or dissemination tool. Barriers to implementation included being unaware of the guidelines and unaware of one's own professional and collective organisational responsibility to guideline dissemination. However, many respondents were planning to incorporate the guidelines using a variety of methods. Future TVS guidelines should include implementation strategies, interventions, and goals for local champions to ensure barriers to implementation are both assessed and addressed. Future work could also include a trial of the guidelines within a pilot project to evaluate knowledge transfer in action; and distribution through multiple professional channels and organisations. This survey has shown there are some examples of successful implementation of the TVS Seating guidelines.

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Conflict of Interest

The Tissue Viability Society Board of Trustees supported the survey which generated the data used in this paper. However, the views and opinions expressed therein are those of the authors, and do not necessarily reflect those of the Tissue Viability Society Board of Trustees or the Tissue Viability Society. No funding bodies had any role in study design, data collection and analysis, decision to publish, or preparation of the manuscript.

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Author contributions

Conceived and designed this paper: MS and CB. This paper was written by MS, CB, RS, and NS. Initial data analysis and interpretation by NS. Additional data analysis and interpretation by MS and CB and RS. The authors that contributed to data analysis and interpretation: MS, CB, RS, and NS. The first draft of the manuscript was written by MS and CB. Authors who contributed to the writing of the manuscript: MS, CB, RS and NS. ICMJE criteria for authorship met by: MS, CB, RS, and NS. Agree with manuscript, results, and conclusion: MS, CB, NS and RS. Read and approved the manuscript as submitted: MS, CB, RS, and NS.

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