

ORIGINAL ARTICLE

Feasibility of PURPOSE T in clinical practice and patient participation—A mixed-method study

Lisa Hultin^{1,2}  | Ann-Christin Karlsson^{1,3} | Malin Löwenmark^{1,2} |
Susanne Coleman⁴ | Lena Gunningberg^{1,2}

¹Department of Public Health and Caring Sciences, Uppsala University, Uppsala, Sweden

²Uppsala University Hospital, Uppsala, Sweden

³Region Gotland, Visby, Sweden

⁴Clinical Trials Research Unit, University of Leeds, Leeds, UK

Correspondence

Lisa Hultin, Department of Public Health and Caring Sciences, Uppsala University, IFV, Husargatan 3, Box 564, Uppsala 751 23, Sweden.

Email: lisa.hultin@pubcare.uu.se

Abstract

This study aimed to evaluate the feasibility of implementing an electronic version of PURPOSE T, a risk assessment instrument for pressure ulcers, in a Swedish hospital ward. A mixed-method was used. Nursing staff received training in PURPOSE T and a record review was performed (n = 30). PURPOSE T replaced the Modified Norton Scale, and after one month another record review was performed (n = 30). Individual interviews with patients (n = 15) and focus group interviews with nursing staff (n = 23) were performed after the implementation. The results of the record review and the focus group interviews showed good clinical feasibility of PURPOSE T. The record review showed that more patients were at risk of developing pressure ulcers and more nursing interventions were prescribed with PURPOSE T compared to the Modified Norton Scale. The focus group interviews showed that all nursing staff were satisfied with PURPOSE T. The instrument contributed to increased reflection and analysis as well as the opportunity for nursing staff to draw their own conclusions regarding patients' risk status. The documentation encouraged the prescription of more preventive actions, and the nurses were more involved at bedside. However, almost all the patients expressed not receiving any information about pressure ulcers.

KEYWORDS

feasibility, nurses, patient participation, pressure ulcer, risk assessment

Key Messages

- PURPOSE T demonstrates successful feasibility when implemented in clinical practice
- the study provides evidence that an electronic version of PURPOSE T could replace pressure ulcer risk assessment instruments that are used today
- routines for sharing information with patients about pressure ulcers need to be prioritised in clinical practice

This is an open access article under the terms of the [Creative Commons Attribution-NonCommercial-NoDerivs](https://creativecommons.org/licenses/by-nc-nd/4.0/) License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

© 2022 The Authors. *International Wound Journal* published by Medicalhelplines.com Inc and John Wiley & Sons Ltd.

1 | INTRODUCTION

Patients with pressure ulcers represent a large group of patients worldwide. There is an estimated prevalence of pressure ulcers from 0% to 72.5%, with a large variation between clinical and geographic setting.¹ Pressure ulcers cause human suffering, which includes pain, psychological, social and economic consequences.² The prevalence of pressure ulcers is generally higher in patient groups, such as those with hip fractures and older people. The costs of pressure ulcers are heavy for the health care system.³ Pressure ulcers have been recognised as an indicator both for patient safety and for quality of care in hospital and community settings. They are considered as adverse events and are often avoidable if prevention is used.¹ Therefore, it is important that the healthcare system takes responsibility for these events and addresses them across the spectrum of care.

According to International Guidelines,¹ prevention starts with the identification of patients at risk of developing a pressure ulcer (s), through a process known as risk assessment. This is thought to facilitate the instigation of preventative measures such as the use of equipment (eg, specialist mattresses and cushions), repositioning schedules and the provision of patient information. Furthermore, it is important to use an evidence-based and validated pressure ulcer risk assessment instrument, and the patient should receive relevant information and be encouraged to participate in their own preventive care.

1.1 | Development and evaluation of PURPOSE T

More than 40 pressure ulcer risk assessment instruments have been used with limited methodological development and practical foundation over the last 60 years.⁴ Therefore, Coleman et al.⁵ developed the Pressure Ulcer Risk Primary or Secondary Evaluation Tool (PURPOSE T) where conceptual, methodological and practical limitations were addressed. The instrument was developed in the United Kingdom (UK) using “gold standard” instrument development methods,⁵ in a structured five-phase approach. The development methods incorporated a systematic review of pressure ulcer risk factors, a consensus study with service user involvement, conceptual framework development, pre-testing with clinical nurses and clinical evaluation in acute and community healthcare settings.^{5–8} PURPOSE T has been psychometrically evaluated in the UK in a clinical evaluation, but not in any other country.⁵

We wanted to understand if PURPOSE T would work in clinical practice in Sweden. Therefore, PURPOSE T was translated from English into Swedish, according to World health organisation (WHO) translation guidelines,⁹ as well as PURPOSE T language translation guideline.⁵ Thereafter, we conducted a psychometric evaluation in Sweden¹⁰ that reported very good inter-rater and test-retest reliability for the overall assessment decisions, and convergent validity was reported as moderate to high, supporting the results of the original psychometric evaluation undertaken in the UK.⁵ Having demonstrated the psychometric properties of PURPOSE T in the Swedish context,¹⁰ we went forward with evaluating the clinical usability of PURPOSE T among registered nurses. The results demonstrated an overall positive perception of PURPOSE T as the instrument was regarded as an efficient tool that addresses the complex needs when assessing patients' risk for pressure ulcers.¹¹

PURPOSE T aims to separate “patients at risk of developing pressure ulcers” (primary prevention), “patients that already have pressure ulcers” (secondary prevention) and “patients not at risk at the moment”. The instrument is integrated into a three-step assessment process: Step 1: A screening assessment that compromises mobility, skin status and clinical judgement, which allows for patients who are clearly not at risk to be quickly screened out. Those with a potential risk or an actual pressure ulcer continue to step 2: Full assessment of independent movement, sensory perception, moisture, diabetes, circulation, nutrition, medical devices, detailed skin assessment and previous pressure ulcers. Step 3 requires a consideration of step 2 in order to choose one of the three assessment decisions: “no pressure ulcer-not currently at risk”, “no pressure ulcer but at risk” or “pressure ulcer”. PURPOSE T uses three colours to give weight to the different risk factors. <https://ctr.leeds.ac.uk/purpose/purpose-t/>.

1.2 | Patient participation in pressure ulcer prevention

According to International guidelines¹ and Swedish national law and regulation, the patient should receive relevant information and be encouraged to participate in his or her own care.¹² Patients can have a key role in ensuring their own safety and prevent pressure ulcers.¹ It is important that registered nurses give the patient information about their risk status and invite them to be active partners in preventing pressure ulcers.

Patient participation can be described as the involvement of patients in the decision-making process about their health care issues, partaking in planning and

managing self-care. It comprises engagement around the clock and not just during “one health-care moment”.¹³ Furthermore, patient participation is considered central to good healthcare and to have a positive health outcome for patients.¹⁴ Patient’s involvement in care decisions regarding pressure ulcers is important. However, many patients report that health care staff fail to establish a connection with them and to inform them about pressure ulcers.^{15–17}

Additionally, there is a research gap in the understanding of how patients understand and follow advice pertaining to pressure ulcer prevention and treatment.¹⁸ Although patient participation is an important element in pressure ulcer prevention, studies have focused on experiences of patient participation from the perception of registered nurses, rather than directly from the patients’ themselves.¹⁹ This could mean that important knowledge to facilitate optimum participation has not been identified.

Having established the usability of PURPOSE T in the Swedish context,¹¹ our next step is to evaluate its feasibility in clinical practice at a hospital ward and its impact on care processes and patient participation. Feasibility considers relevant factors to ensure that the intervention will work,²⁰ and this will inform further large-scale implementation into routine practice and into the electronic health record.

2 | METHODS

2.1 | Aims

To evaluate the feasibility of implementing an electronic version of PURPOSE T in a Swedish hospital ward. Specific aims were:

To assess the impact of using PURPOSE T on documented pressure ulcer risk factors and preventative interventions in the electronic health record.

To explore if and how information about pressure ulcer risk and prevention is shared with patients.

To explore the experience of nurses and assistant nurses using PURPOSE T in routine clinical practice.

2.2 | Design

This study is a feasibility study with a convergent parallel mixed-method design,²¹ evaluating the implementation of an electronic version of PURPOSE T. The study incorporates a review of patients’ electronic health record, individual patient interviews and staff focus group interviews.

2.3 | Setting

The study setting was a 24-bed orthopaedic ward at a university hospital in Sweden. The ward receives both acute and elective patients and has approximately 1800 (mostly acute) admissions annually, with hip fractures as the most common cause of admission. Mostly, all registered nurses have a bachelor’s degree in nursing at the hospital. There are altogether 20 registered nurses (hereinafter referred to as nurses), and 40 assistant nurses working in the ward, including both day and night shifts. They form four care teams per daytime shift and two care teams per night-time shift; each team comprises one nurse and two assistant nurses that are responsible for six patients (day shifts) and twelve patients (night shifts). The nurses are responsible for the nursing care and the nursing documentation, while the assistant nurses do most of the bedside care. According to the hospital guidelines, a risk assessment and a skin inspection should be performed on patients within eight hours of admission to the hospital. The result should be documented in the electronic health record in a standardised and structured way, using templates. If the patient is at risk for pressure ulcers, a care plan should be started with planned nursing interventions documented. The Modified Norton Scale was used for pressure ulcer risk assessment prior to this study, and it incorporates scoring to support decision-making about risk. The Modified Norton Scale includes seven risk factors (score 1–4): mental condition, physical activity, mobility, food intake, fluid intake, incontinence and general physical condition. A total score of ≤ 20 indicates that a patient is “at risk” for pressure ulcers.²² All hospital beds are equipped with new mattresses that combine air with foam for effective pressure redistribution and comfort. They are effective in the prevention and treatment of pressure ulcers up to category 3.

2.4 | Sample

2.4.1 | Electronic health record review

All patients were consecutively invited by the first author to participate, and all patients who received information agreed to participate ($n = 30$ before and $n = 30$ after the implementation of PURPOSE T). Inclusion criteria for patients: enrolled at the ward for \leq two days and exclusion criteria: patient at the end of life, patients with dementia and acute confusion and/or unable to provide informed consent.

2.4.2 | Individual interviews with patients

A convenience sample of patients ($n = 15$) was invited to participate by the first author. All patients received

information, agreed to participate and were scheduled for an interview the same day. Some of the patients ($n = 10$) were included in both the electronic health record review and the individual interviews. Also in the individual interviews the exclusion criteria for patients: patients at the end of life, patients with dementia and acute confusion.

2.4.3 | Focus group interviews with registered nurses and assistant nurses

All nurses ($n = 20$) (responsible for the risk assessments) and some assistant nurses ($n = 10$) were invited for focus group interviews. The first author presented information about the study at staff meetings. Those who were interested in participating were personally contacted by the first author, who provided them with further information and then scheduled a focus group that was suitable, according to their work schedule, with nurses and assistant nurses in separate focus groups. Inclusion criteria for nurses and assistant nurses: working at least 50% or more at the ward.

2.5 | Implementation procedure for PURPOSE T

Prior to the study start, the first and last author contacted the head of the department and the nurse manager to discuss available resources (time and staff) to conduct the study. An education nurse was appointed as an internal facilitator to schedule staff education and provide the first author with information about the ward routines. Furthermore, development work to integrate PURPOSE T into the electronic health record was conducted. It turned out that it was not possible to transfer the colours of PURPOSE T into the computer system. The templates for PURPOSE T were pilot tested by a couple of nurses. A pocket card was designed to be used as a reminder for nurses and assistant nurses of the key elements of PURPOSE T as well as examples of how to inform the patients about the result of their risk assessment and pressure ulcer prevention. The first author trained all nurses and assistant nurses on how to perform risk assessments with PURPOSE T. The training included an oral presentation, case study vignettes and practice in the electronic health record (about 90 min). All nurses and assistant nurses received a pocket card. Thereafter, the Modified Norton Scale was replaced with PURPOSE T in the electronic health record, and the nurses and assistant nurses worked with PURPOSE T daily for one month. The first author acted as an external facilitator at the ward during

the implementation period to answer questions and give feedback on risk assessments with PURPOSE T, skin inspection and classification of pressure ulcers, see Figure 1.

2.6 | Data collection

The quantitative patient record review was conducted before and after the implementation of PURPOSE T. The individual interviews with patients and the focus group interviews with nurses and assistant nurses were conducted after the implementation of PURPOSE T. Data were collected between August and December 2020, see Figure 1.

2.6.1 | Electronic health record review

A data collection form for record review with yes and no questions was used. The form was developed by the first, second and last author based on the Modified Norton Scale²² and PURPOSE T.^{5,10} The data collection form included patient's background data, pressure ulcer risk assessment and nursing interventions (found in the admission assessment notes and nursing care plans). Pressure ulcer risk assessment was defined as a documented outcome of the Modified Norton Scale or PURPOSE T. Nursing care plan in the electronic health record, presence of planned nursing interventions, result, evaluation and discharge notes were reviewed. The first author reviewed the electronic health records for included patients.

2.6.2 | Individual interviews and focus group interviews

The first, second and last author developed a semi-structured questioning route for the individual patient interviews and two semi-structured questioning routes for the nurse and assistant nurse focus groups. The questioning routes were pilot tested by presenting and discussing the questions at a seminar with senior nurse researchers. Minor modifications were made, for example, rephrasing questions. The questioning routes were also tested in the first focus group interview and the first individual interview. However, no changes were made, and the data were included in the analysis, see Table 1.

Individual patient interviews

Key questions for the patients were: *What information have you received about pressure ulcer here at the ward?*

FIGURE 1 Implementation procedure for PURPOSE T and data collection

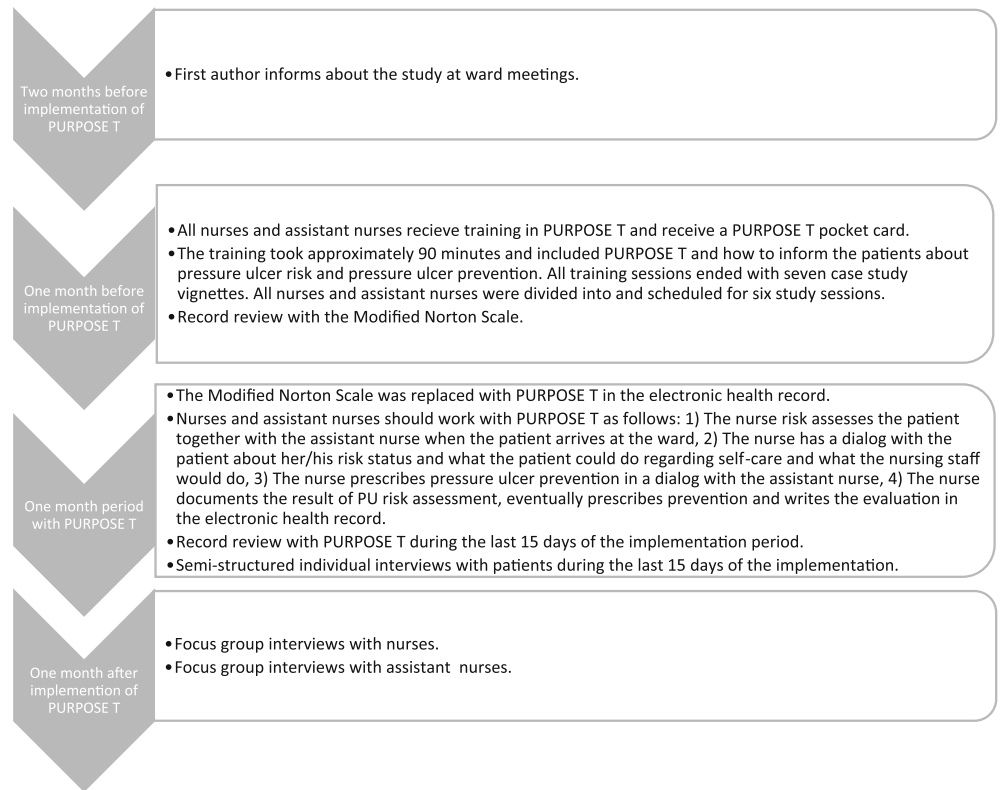


TABLE 1 Questioning route; focus group interviews with nurses

<i>Opening question</i>
What is your name and how long have you worked at this ward?
<i>Main question</i>
Can you tell me about your experiences of using PURPOSE T?
What are your experiences of talking with the patient during the assessment?
How has it been to look at the patient's skin?
How was it to inform the patient about the result of the risk assessment?
How has it been to document the risk assessment in the electronic health record?
How has the cooperation with the assistant nurses been?
How much time was required to risk assess with PURPOSE T compared to the Modified Norton Scale?
If you compare PURPOSE T with the Modified Norton Scale, what are your thoughts?
Is PURPOSE T suitable for the patients' care at your ward?
When thinking about the future – what risk assessment instrument would you like to use?
<i>Ending question</i>
Is there anything more you would like to add?

What information have you received regarding risk assessment of pressure ulcer/skin inspection? What information have you received on how to prevent pressure ulcers? Has a nurse or an assistant nurse in the ward established a care plan together with you to prevent pressure ulcers or treat existing pressure ulcers?

Demographic data were collected before each individual interview (gender, age and diagnosis). The interviews were conducted at the bedside, and only the first author and the participant were present. All participants were encouraged to talk freely, and all questions were asked from the questioning route, with probing questions when appropriate. The interviews were audio recorded and lasted between five to 17 min.

Focus group interviews with nurses and assistant nurses

Key questions for the nurses related to how they experienced the use of PURPOSE T and how they informed the patients about the result of the risk assessment, see Table 1. The key questions for the assistant nurses were: *Can you describe your role in risk assessment and prevention of pressure ulcers? How was the collaboration between the nurses? How was it to inform the patient about the result of the risk assessment?*

Demographic data were collected before each focus group interview (gender, age, educational level, years at the ward and years in profession). A moderator held the focus group interviews, and an assistant moderator

observed the group interaction and took field notes. All questions were asked from the questioning route, with probing questions when appropriate. The second author or a lecturer held the focus group interviews. The second author held the individual interviews (with two nurses who could not attend any of the focus groups due to sickness). The focus groups and one of the individual interviews were held in a separate room at the hospital ward, and one individual interview was held via telephone. The interviews were audio recorded and lasted between 20 and 40 min.

2.7 | Ethical consideration

Nurses, assistant nurses and patients received both verbal and written information about the study and signed a written consent. All participants were ensured that they could withdraw at any time. The data collection followed the Declaration of Helsinki²³ and the national and local ethical guidelines.²⁴ The study was approved by the Regional Ethical Review Board (#2020/01730) prior to the data collection.

2.8 | Data analysis

2.8.1 | Electronic health record review

Descriptive statistics were used to describe the demographic variables. Chi-square was used to compare patient groups (before and after the implementation of PURPOSE T) for dichotomous variables. When cells had an expected count of less than five, Fisher's exact test was performed. Mann-Whitney *U* test was used to compare non-parametric variables (number of planned nurse interventions within the patient groups before and after the implementation of PURPOSE T).

2.8.2 | Individual interviews with patients

The interviews were transcribed verbatim by a professional transcription service. The data from the individual interviews did not allow for a qualitative analysis, as almost all the patients expressed not receiving any information about pressure ulcers. Therefore, a quantitative content analysis was used.²⁵ The transcribed text from the interviews was systematically and repeatedly read to get a sense of the meanings as a whole. Numeric values (yes = 1/no = 0) were given to the answers as codes; therefore, the frequency could be summarised.

2.8.3 | Focus group interviews with nurses and assistant nurses

The interviews were transcribed verbatim by a professional transcription service. The analysis of the nurses' and assistant nurses' focus group interviews were made separately. A qualitative content analysis was used²⁶ with a deductive approach.²¹ From the results of Hultin et al.,¹¹ we had previously identified: risk assessment, documentation, teamwork and patient information and participation as important concepts to evaluate regarding the feasibility of PURPOSE T. Therefore, a deductive approach was used with these concepts when analysing the focus group interviews.²¹ The analysis proceeded as follows:

- A summary was shared directly after the focus group, by the moderator and the assistant moderator, regarding what information had been provided, the interaction in the group, and how many minutes the focus group lasted.
- The transcribed text from the interviews was read repeatedly to get a sense of the meaning as a whole.
- Meaning units were deductively identified using the four concepts; risk assessment; documentation; teamwork; and patient information and participation.
- Meaning units were first labelled with codes, then grouped together and sorted according to differences and similarities into sub-categories.
- Comparisons were made during the whole process between the text from the nurses' and assistant nurses' groups.
- Comparisons were made during the whole process between categories and subcategories and the text as a whole, by the first, second, third and last author. All steps in the analysis process were characterised as flexible, and each step was discussed with co-authors until consensus was reached.

2.9 | Validity and reliability/Rigour

The reliability and validity of PURPOSE T in a Swedish context have previously been established and published.¹⁰ The rigour in the present study has followed the recommendations for mixed-method.²⁷ The research group followed transparent processes through data collection and analysis to promote validity and reliability. This incorporated for example, research group involvement in the development, piloting and use of the questioning routes and record review forms; reflexive discussions about the data collected; and an agreed upon analysis processes. To ensure confirmability, quotations were used to illustrate the results and confirm the categorisation.²⁶ The questioning routes and record review forms were not validated or tested for reliability.

TABLE 2 Documentation in the electronic health record and patient demographics; review of patient records

Variable	MNS n = 30		PURPOSE T n = 30		P-value
Age					
Mean (SD)	66.5 (21.9)		65.0 (19.7)		0.381 ^a
Median (range)	72.5 (21–97)		67.0 (19–88)		
Length of hospital stay					
Mean (SD)	7.9 (5.9)		11.6 (8.8)		0.064 ^a
Median (range)	5.5 (2–25)		8.0 (2–31)		
	n	%	n	%	
Sex					
Male	11	36.7	17	56.7	0.121 ^c
Female	19	63.3	13	43.3	
Risk assessment	26	86.7	30	100.0	0.112 ^b
Skin assessment	23	76.7	30	100.0	0.011 ^c
Pressure ulcer	3	10.0	1	3.3	
At risk for pressure ulcer	2	6.7	12	40.0	<0.001 ^c
Not at risk for pressure ulcer	24	80.0	18	60.0	
General nursing care plan, pressure ulcers	3	10.0	9	30.0	
Standardised nursing care plan	24	80.0	27	90.0	
Nursing interventions related to pressure ulcer prevention					
Information to patient	0	0.00	8	29.6	
Pressure reducing equipment	4	16.7	10	37.0	
Regular position change	9	37.5	14	51.9	
Daily skin assessment	19	79.2	22	81.5	
Specific care (pressure ulcer prevention)	23	95.8	26	96.3	
Medication	0	0	1	3.7	
Total nursing interventions	55		81		0.036 ^d
Interventions/patient	1.8		2.8		
Nursing evaluation	8	29.6	25	89.3	
Discharge note	1	3.7	5	17.9	
PURPOSE T					
Step 1, screening	-		30	100.0	
Step 2, full assessment	-		26	86.7	
Step 3, decision	-		29	96.7	

Abbreviation: MNS, The Modified Norton Score.

^aIndependent t-test.

^bFisher's exact test.

^cChi-square test.

^dMann-Whitney *U* test.

3 | RESULTS

3.1 | The impact of using PURPOSE T in the documentation of pressure ulcer risk factors and preventive interventions

A total of 60 patients were included in the record review, incorporating males (n = 28) and females (n = 32). Of

the 60 participants, 50 had an orthopaedic acute trauma, two had undergone hand surgery, five were relocated infection patients, two were relocated urology patients and one was a relocated surgical patient. There were no significant differences in age or length of stay in hospital between the two groups (patients who were assessed by the Modified Norton Scale and patients who were assessed by PURPOSE T) (Table 2). The Modified Norton

Scale identified two (6.6%) patients at risk for pressure ulcers, and PURPOSE T identified 12 (40.0%) which was a significant difference ($\chi^2 = 16.60$, $df = 1$, $P < 0.001$). There was no significant difference between the patients that received a standardised nursing care plan between the two groups. However, patients at risk for pressure ulcers, according to PURPOSE T were prescribed significantly more nursing interventions/patients compared to patients assessed at risk with the Modified Norton Scale ($U = 318$, $P < 0.05$) (Table 2). The nurses evaluated their prescribed nursing interventions on eight of 30 (26.7%) patients when risk assessing with the Modified Norton Scale and 25 of 30 (83.3%) when risk assessing with PURPOSE T, with a significant difference ($\chi^2 = 20.38$, $df = 1$, $P < 0.001$). All of the patients, except one, had a complete assessment according to PURPOSE T. Four patients needed to go through the screening step only.

3.1.1 | Information about pressure ulcer risk and prevention shared with patients

Fifteen patients were interviewed individually. There were nine males and six females; the median age was 69 years, with a range of 30 to 89. All patients, except one, were satisfied with the stay at the ward; they received much help, even though they had to wait some time to receive help.

All patients, except one, expressed that they did not receive information about pressure ulcers, prevention of pressure ulcers, result of the risk assessment, and not one of the nurses had made a care plan together with them. However, some of the patients expressed that they knew what a pressure ulcer was and /or how to prevent a pressure ulcer. They had a relative who had a pressure ulcer or had themselves had one previously. Three patients had received information from the physiotherapist about the need to move their feet and tense their buttocks to prevent venous thrombosis (Table 3).

“Information? No, not that I know of. It’s possible that they did it the first few days. I have no idea, I don’t remember anything about those days, due to pain and painkillers”.
(Patient 5, Individual interview).

3.2 | The nurses’ and assistant nurses’ experiences of using PURPOSE T in routine clinical practice

A total of 15 nurses (two declined participation and three did not answer) and eight assistant nurses (two became

TABLE 3 Patients’ experiences of receiving information; individual interviews (n = 15)

	Yes
I’m satisfied with my stay at the ward	14
I have a friend or a relative who has had a pressure ulcer, and I know what a pressure ulcer is	13
I received information about pressure ulcers at the ward	1
I received information about the result of the risk assessment	0
I received information about pressure ulcer prevention at the ward	0
A nurse or an assistant nurse inspected my skin, and I received information about the result	4
The nurse made a care plan together with me	0

TABLE 4 Demographic characteristics of nurses and assistant nurses; focus group interviews

Variable	Focus group interviews nurses (n = 15)	Focus group interviews assistant nurses (n = 8)
Age		
Median (range)	34 (23–57)	44 (23–60)
Sex		
Male	2	1
Female	13	7
Years in profession		
Range (median)	0.25–26 (5.5)	4–35 (9)
Years at ward?		
Range (median)	0.25–19 (5)	2–35 (5)
Master’s degree in nursing	1	

ill) participated in the focus groups or the two individual interviews. There were four focus group interviews with nurses (2–4 participants/group) and two focus group interviews with assistant nurses (4 participants/group), and the majority were women in all groups (Table 4). The nurses had performed between four to 80 (median 8) risk assessments with PURPOSE T. The assistant nurses had not performed any risk assessments with PURPOSE T on their own. All of the nurses were satisfied with PURPOSE T and did not want to go back to the Modified Norton Scale. The assistant nurses were also satisfied and experienced that PURPOSE T contributed to the risk factors being carefully considered.

TABLE 5 Nurses' experiences of working with PURPOSE T; focus group interviews

Categories	Sub-categories
Risk assessment	<p>Satisfactory in its entirety</p> <p>Unaltered time required, despite a comprehensive assessment</p> <p>Reflection, analysis and conclusion</p> <p>Possibility to identify more risk patients</p>
Documentation	<p>Went from uncertain to confident</p> <p>Encouragement for preventive action</p>
Teamwork	<p>Unchanged teamwork – but more involved nurses at the bedside</p>
Patient information and participation	<p>Gave information to patients “in passing”</p> <p>Patient participation hindered due to the patients' health condition</p>

“This is much better than what we have had before; the new system makes you think more, and it practically leads you to what to do. First, you have to think about how the patient moves, what risk factors there are in how they have eaten and drank, or if they sweat a lot and so on. It encourages actually checking the skin, each step encourages action in a practical way”. (Nurse, Focus group 2).

The nurses' and assistant nurses' experiences of using PURPOSE T are described in four categories with nine subcategories (Table 5).

3.2.1 | Risk assessment

Satisfactory in its entirety

The nurses experienced that the instrument served them well in their daily work and contributed to a more efficient risk assessment. They expressed that the instrument was more up to date to “today's” admitted patients with comorbidity compared to the Modified Norton Scale that was perceived as “old fashioned”. They perceived that PURPOSE T included risk factors that were easy to assess and understand, for example, “spends all or the majority of time in bed or chair” as compared to “mobility-slightly impaired” in the Modified Norton Scale. Furthermore, the nurses could decide what the answer to the

assessment of the risk factor was here and now compared to the Modified Norton Scale. The nurses stated that it is a risk assessment that they perform at the bedside and were satisfied with this.

“So many patients have developed multiple illnesses; it has been like that for a long time but now there are so many with a lot of illnesses. Because you survive much longer. And then, it feels like PURPOSE T is a little more up to date with the care we provide now compared to the Modified Norton Scale. I think PURPOSE T includes most of the risks that actually exist for pressure ulcers”. (Nurse, Focus group 5).

However, some nurses stated that they were more used to working with the Modified Norton Scale. Therefore, it was automated as they knew it like “the back of their hands” and that PURPOSE T initially was more excessive. Still, they expressed that it was probably just a matter of time before they found PURPOSE T to be as automated.

“The Modified Norton Scale, it was just automatic... It was in our backbone. With PURPOSE T, I had to think a little. But, I don't think... so, really it shouldn't take so much longer to learn”. (Nurse, Focus group 5).

The assistant nurses described that PURPOSE T contributed to paying more attention to increased risk factors compared to the risk factors in the Modified Norton Scale.

“But it's good that it is more detailed. You look at the whole patient. And with BMI, or if they have any oxygen or small stuff like that, which you might not have thought of before in the same way. So, that's good, I think”. (Assistant nurse, Focus group 1).

Unaltered time is required, despite a comprehensive assessment

The nurses perceived that the assessment did not take longer to conduct compared to the Modified Norton Scale. They appreciated step 1 (screening), which could save time. The nurses expressed that PURPOSE T was more comprehensive, with increased depth and breadth about the patient's pressure ulcer risk status. They gained more information that could contribute to the patient's care. However, a few nurses experienced that it initially

could take a longer time, but after a few assessments, there was no difference in time required.

“You get more out of the PURPOSE T assessment, even though it takes about as long as the Modified Norton Scale”. (Nurse, Focus group 2).

Reflection, analysis and conclusion

With PURPOSE T, the nurses felt they were encouraged to reflect, analyse and to draw their own conclusions from the risk assessment. They appreciated being able to make an active decision concerning if the patient was at risk, not at risk or had a pressure ulcer. They perceived they could be more active, as opposed to the Modified Norton Scale, where they relied on a number telling them if the patient was at risk or not. They expressed that sometimes they did not even agree with the number obtained. However, two newly graduated nurses felt uncertain about drawing their own conclusion.

“In the end, it's up to you to judge if the patient is 'at risk', and you don't get a result that shows the patient is 'at risk'. But it is you who decides based on what is written in your assessment. So, another responsibility is placed on the nurse”. (Nurse, Focus group 2).

Possibility to identify more risk patients

The nurses perceived that PURPOSE T could now identify more patients that are at risk or have a pressure ulcer because of the content of risk factors compared to the Modified Norton Scale. Nurses expressed that they recognised the importance of each risk factor and valued how PURPOSE T allowed them to see different risk profiles that required different interventions. Furthermore, they perceived that they had to consider all risk factors, which gave them more information to rely on when it came time to make their assessment decision.

“It is more detailed, and I capture patients that I might not have done with the Modified Norton Scale. I think it contains more relevant risk factors for what causes pressure ulcers”. (Nurse, Focus group 7).

The assistant nurses expressed that PURPOSE T helped them to pay more attention to different risk factors, for example, skin, patient's movements and medical devices causing pressure damage. They identified those areas better now compared to when using the Modified Norton Scale. However, the assistant nurses also stated

that it is not their responsibility to perform the whole risk assessment.

“When you get a new patient, you check... if the patients have a drip, catheter, pressure ulcer... Does the patient have a diaper or risk... it's a bit like that you check. Can the patient move? Lift the leg, how strong is it?” (Assistant nurse, Focus group 2).

3.2.2 | Documentation

Went from uncertain to confident

According to the nurses, the documentation in the electronic health record was “tricky” in the beginning, but they went from being uncertain to confident quickly. Initially, the nurses expressed that there were many different options (risk factors) to choose between in PURPOSE T in the electronic health record, and they were not certain if they had filled in the correct boxes in the steps (steps 1–3) and felt unsure if they had covered the right ones. However, this became easier with repeated use. The nurses also described that PURPOSE T does not take as much space in the electronic health record, as it develops as a drop-down menu during the assessment, depending on the patient's risk status.

“At first, I thought it was a bit difficult; it felt like there were a lot of steps. But then, when you get used to it, now I think it works well”. (Nurse, Focus group 1).

The assistant nurses thought it was easier to understand if the patient was at risk or not or had a pressure ulcer when reading PURPOSE T in the electronic health record compared to reading the Modified Norton Scale in the electronic health record. They shared that it is the nurses who perform the documentation, but sometimes the assistant nurses document preventive interventions.

“I actually think PURPOSE T is a little better. Partly because you see when you go into the patient's medical record... So, if it's a giant part with text, you know that here is something I need to keep track of. You see the risks in a different way because you know you have to think more; you may need to be extra careful. So, I think it's good”. (Assistant nurse, Focus group 1).

Encouragement for preventive action

When the nurses documented the assessment of PURPOSE T, it encouraged them to start a care plan and

prescribe nursing interventions due to the risk factors that they had identified, for example, if independent movement was impaired, they prescribed nursing interventions such as turning schedule and pressure reducing equipment. They expressed they could easily see a pattern in the risk assessment as a basis of what planned nursing interventions to prescribe compared to the Modified Norton Scale. The nurses believed the instrument encouraged them to act preventively.

“Care plans, they help one to get started with the patients through a good foundation. But PURPOSE T is a very good thinking tool to get you started”. (Nurse, Individual interview 1).

3.2.3 | Teamwork

Unchanged teamwork – but more involved nurses at the bedside

The nurses described that the teamwork with the assistant nurses had not changed; on the other hand, the nurses shared that the nurses looked at the patient's skin more often now when they were using PURPOSE T compared to the Modified Norton Scale. According to the nurses, the assistant nurse usually performs the skin inspection when the patient is admitted to the ward, for example, during the pre-surgery shower. Thereafter, they have a discussion with the nurse regarding if they found anything to be deviant. However, the nurses expressed that it is their responsibility to perform the risk assessment; therefore, they now take the opportunity to look at the skin more frequently themselves as a skin inspection is included in PURPOSE T. They also reported that they always look at the skin if the assistant nurses report there is a wound; moreover, they grade the pressure ulcers if there is one, which they sometimes delegated to the assistant nurse when the Modified Norton Scale was used.

“I'd say that I have definitely looked at the skin more, together with the assistant nurses compared to... now compared to before. That it is ok to work more inter-professionally now with this tool”. (Nurse, Individual interview 1).

The assistant nurses stated that they perform the skin inspection and discuss the result of the skin inspection that is included in the risk assessment together with the nurse. They expressed that the teamwork is the same as before; however, they believed that the nurses looked at the skin a little more now using PURPOSE T compared to the Modified Norton Scale.

“Maybe the nurse is more involved now... When a patient comes and we turn him/her over, they are there and look at the skin; they make the skin assessment immediately. I think maybe you want to involve the nurse more now with PURPOSE T”. (Assistant nurse, Focus group 2).

3.2.4 | Patient information and participation

Gave information to patients “in passing”

The nurses reported that they are aware that they should give the patients information about the risk assessment result and pressure ulcer prevention. However, they often give that information to the patient “in passing” during other care situations due to lack of time, for example, during skin inspection or admission dialogue. Some nurses experienced that the information was more accurate and clearer now, but they were still uncertain if the patient understood that it is important information. They did not use the pocket card regarding patient information. The nurses expressed that if the patient was obviously not at risk, for example, younger patients, the patients often answer that they already know about this topic and do not need the information or help.

“We explain why we choose to take certain actions; because you have an increased risk of getting pressure ulcers here and there, and we do this so that we can prevent that. It just goes quickly. It's not something I plan and think about telling the patient”. (Nurse, Focus group 6).

“With PURPOSE T, you can still inform the patient, ‘Yes, but ok, right now you aren't making any movements yourself, keep in mind that there may be a risk of pressure ulcers.’ I think they may forget a bit that they are at risk of getting pressure ulcers. But when you do this in their room and at least bring it up with them, they become more involved in their own care”. (Nurse, Focus group 2).

The assistant nurses expressed that they inform the patients about pressure ulcer prevention, and they do that at the same time as they carry out pressure ulcer prevention, for example, place a cushion under the patient's heels. A few assistant nurses stated that when they manage to inform the patients, the patient participation increases when they listen, for example, the patient will ask the nursing staff to change their position for prevention.

“One patient whom I had informed about the importance of why we needed to change her position, then called and asked for help ‘now I want to change position’. So, then she understood the importance of changing positions to prevent it and became involved in her self-care”. (Assistant nurse, Focus group 1).

Patient participation hindered due to the patient's health condition

The nurses experienced that there were obstacles to patient participation with many of the patients who were admitted to the ward. They expressed that when patients arrive at the ward, they are often tired after being in the emergency department. Thereafter, they are transferred to the ward where they are often placed in the hallway waiting for a room and when they finally arrive in a room, they are exhausted and cannot absorb information about pressure ulcers. The nurses described that due to the patients' situation, for example, pain, dementia or tiredness, the nurses do not inform or make a care plan together with them for pressure ulcer prevention. The nurses also expressed that they try to inform the patients; however, when the patients are in pain, they do not want to participate. They just want to stay in one position; the one that is the most pain free.

“Most of the patients that I have done a risk assessment on have suffered from severe dementia, so then it hasn't really been possible to talk to them”. (Nurse, Focus group 2).

The assistant nurses expressed that due to the patients' situation, there are obstacles to patient participation, for example, they are afraid to move due to pain or tiredness. They also described that the ward has a lot of patients with dementia and those patients are hard to reach out to with information.

“Some patients are in so much pain and can't turn around. Then it is also extra important that you explain and that the patient tells you when he or she feels that the pain is under control”. (Assistant nurse, Focus group 1).

4 | DISCUSSION

The aim of this study was to evaluate the feasibility of implementing an electronic version of PURPOSE T in clinical practice in Sweden. The results showed good feasibility of PURPOSE T and no inconsistencies between different perspectives.

The quantitative results from the record review and the individual patient interviews are mirrored regarding the content of subcategories that evolved from the qualitative analysis of the focus group interviews. The two data sets with quantitative and qualitative data revealed confirmatory results that broaden and expand the understanding of the feasibility of PURPOSE T. The qualitative result of the nurses' and assistant nurses' description of PURPOSE T was convergent and confirmed the result from the quantitative record review, for example, identifying an increased number of patients at risk and an increased number of nursing interventions being prescribed. Qualitative data from the focus group interviews showed that the nurses and assistant nurses informed the patients “in passing.” However, they were not certain that the patients could assimilate the information. The individual patient interviews showed that almost all the patients did not perceive this information, and the qualitative results were expanded with the quantitative individual interviews.

Feasibility related to relevant factors to ensure that the intervention will work.²⁰ PURPOSE T identified more patients at risk of PU development, when compared to the Modified Norton Scale and led to an increase in the number of prescribed nursing interventions. The nurses involved in the study indicated that this assessment outcome aligned with their clinical judgement and that the need for increased interventions was appropriate. Furthermore, nurses and assistant nurses were satisfied with the instrument and did not want to go back to the Modified Norton Scale.

The implementation of PURPOSE T went surprisingly well, and the nurses and assistant nurses accepted the instrument, understood it and could work with the instrument quite quickly. When implementing an assessment instrument, one should choose an instrument that has shown good psychometric properties and has good validity,¹ which PURPOSE T fulfils.^{5,10,11} This might be why the nurses and assistant nurses accepted and liked the instrument. According to the EPUAP/NPIAP/PPPIA guidelines,¹ the risk assessment should follow a structured approach. Specifically, it should include a screening to identify patients who are (very likely) at risk of getting pressure ulcers, and then undertake a full assessment with in-depth evaluation of risk factors only on those patients (very likely). Thereafter, the nurse should interpret the assessment using his or her clinical judgement. Those guidelines are fulfilled with PURPOSE T, and the result shows that the nurses reflected on, analysed and drew a conclusion, which fulfils the guidelines and might have contributed to the easy implementation of PURPOSE T in clinical practice. PURPOSE T encourages nurses to use their clinical judgement within the

assessment and draw on wider information about the patient that could include population and context-specific factors.

According to Kitson et al.,²⁸ successful implementation of an intervention increases if the evidence is robust, the context is receptive to change, and the process of change is appropriately facilitated. Several factors in our study contributed to the successful implementation of PURPOSE T. The instrument is evidence-based.^{5,10,11} The context was positive for a change, both on local and organisational level, for example, the head of the department and the nurse manager approved the implementation of PURPOSE T and provided resources so the staff could leave the ward to attend training in PURPOSE T. The nurses and assistant nurses showed interest in PURPOSE T; furthermore, there were no informal leaders who, to our knowledge, opposed PURPOSE T. The first author was an external facilitator, and the education nurse was an internal facilitator, who was present in the ward daily during the implementation period. Therefore, they could help and encourage the clinicians to work with PURPOSE T. These three factors: an evidence-based assessment instrument, a positive context and the daily presence of a facilitator were probably important for the successful implementation of PURPOSE T.

However, unlike the positive result of the feasibility of PURPOSE T, the results showed that almost all the patients expressed not receiving any information about pressure ulcers and did not experience patient participation in their pressure ulcer prevention and/or treatment. One reason could be that the 90 min training material had too much focus on PURPOSE T and too little focus on patient participation. PURPOSE T was a new instrument, while participation regarding pressure ulcer prevention was not a novelty, but an important dimension in nursing that we wanted to encourage. However, according to the result, we can conclude that there should have been more focus on patient participation during training. According to Kitson et al.,²⁸ the recipients have values and beliefs that are important for implementation. For example: Is the patient regarded as a resource in his/her own care? Does the ward have a tradition of not including the patient? According to Oxelmark et al.,²⁹ who interviewed nurses about supportive and hindering factors in patient participation, a ward routine with engrained nursing routines and traditions of not involving the patient can be a deterrent to patient participation. This confirms our result showing that patients were not involved in their own pressure ulcer care. In the same study,²⁹ the nurses also expressed a lack of time for shared conversations between the nurse and patient as a hindering factor,²⁹ which also confirms the nurses' experiences in the present study.

In a framework for patient participation,³⁰ the patient and the registered nurses should go through three phases to achieve participation: human connection, information processing and action. During the first phase, the registered nurse and the patient build an equal human connection. In the second phase, the registered nurse and the patient exchange information. Finally, in the third phase, the patient takes action towards his or her health problem.³⁰ The patients in the present study probably did not move through the three phases. It is possible that the patients did not feel a human connection with nurses and assistant nurses and therefore could not continue to the information processing and action phases. Data from a qualitative study conducted by Hultin et al.,³¹ in the same hospital showed that 21 out of 31 older orthopaedic patients did go through the three phases, became aware of pressure ulcers and took action in their pressure ulcer prevention. However, in that study,³¹ it was not a ward nurse, but a nurse researcher, who gave the patients information about pressure ulcers.³¹ This could be a crucial factor, as an external nurse has more time to build an equal relation with the patient.

Another issue that could have been an obstacle to patients' participation in their own pressure ulcer care is the patients' health condition. According to both nurses and patients, during the first couple of days, the patients were in pain and received drugs that made it difficult for them to participate in their own care. A review by Angel and Fredriksen³² shows that the patient's situation: severe illness, poor health and age, impedes patient participation. This is consistent with our findings that suggest that there are obstacles such as the patient's situation, for example, the patients are tired, in severe pain or suffering from dementia. Patients' participation in their own pressure ulcer care is a complex process. Before this happens, patients and nurses must have the ability, knowledge and ambition to share this responsibility.

4.1 | Strengths and limitations

Using a mixed-method design gave an enhanced understanding of the nurses' and assistant nurses' perspective of PURPOSE T and the patient's perception of participation in pressure ulcer prevention. It is a strength to compare quantitative and qualitative data and to give a voice to the participants to ensure that the findings are grounded in participants' experiences.²¹ The patients included for individual interviews were assumed to be at risk for pressure ulcers since they were admitted to the ward; therefore, they did not undergo a risk assessment prior to the study. When the results were analysed, we found that there were patients who were relocated from

other wards, for example, urology and infection. This could have contributed to not all included patients being at risk for pressure ulcers. When including patients for the record review and individual interviews, the first author asked a nurse in every ward team if there were any patients at the end of their life, patients with dementia and/or patients with acute confusion. These patients were excluded due to ethical aspects. We are aware that these patients are often at risk of pressure ulcers. However, these patients were included in the intervention and have undergone a risk assessment with PURPOSE T. The first author acted as a facilitator during the study period; therefore, it cannot be ruled out that the participants (nurses and assistant nurses) were inspired to increase their documentation during that period and expressed a typical type of response to please the author in the focus group interviews. The data collection was performed during the Covid pandemic; therefore, the numbers of participants varied in the focus group interviews due to short notice of absence because of Covid symptoms.

5 | CONCLUSION

The feasibility of PURPOSE T was good. Furthermore, the instrument inspired the nurses to reflect, analyse and draw their own conclusions. It is possible to identify an increased number of patients at risk of developing pressure ulcers with PURPOSE T. Also, the number of preventive pressure ulcer interventions prescribed increased. The study provides evidence that an electronic version of PURPOSE T could replace outdated pressure ulcer risk assessment instruments that are used today. Almost all the patients expressed not receiving any information about pressure ulcers and did not experience patient participation related to pressure ulcer prevention. Routines for sharing information with patients about pressure ulcers need to be prioritised in clinical practice. Further studies are needed to follow-up on the implementation of PURPOSE T and understand how we can increase patient participation in pressure ulcer prevention.

ACKNOWLEDGEMENTS

King Gustav V and Queen Victoria's Freemason's Foundation, Stockholm, Akademiska Sjukhuset's Clinical Research Support (ALF) and the Medical Faculty of Uppsala Universitet, Uppsala, Sweden supported this work.

FUNDING INFORMATION

This research received no specific grant from any funding agency in the public, commercial or not-for-profit sectors.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

DATA AVAILABILITY STATEMENT

Data available on request from the authors.

ORCID

Lisa Hultin  <https://orcid.org/0000-0001-8270-8560>

REFERENCES

1. EPUAP/NPIAP/PPPIA, European Pressure Ulcer Advisory Panel, National Pressure Injury Advisory Panel and Pan Pacific Pressure Injury Alliance. Prevention and treatment of pressure ulcers/injuries: clinical practice guideline. In: Heasler E, ed. *The International Guideline*. EPUAP/NPIAP/PPPIA; 2019.
2. Gorecki C, Brown JM, Nelson EA, Briggs M. Impact of pressure ulcers on quality of life in older patients: a systematic review. *J Am Geriatr Soc*. 2009;57(7):1175-1183. doi:10.1111/j.1532-5415.2009.02307.x
3. Demarré L, Van Lancker A, Van Hecke A, Verhaeghe S. The cost of prevention and treatment of pressure ulcers: a systematic review. *Int J Nurs Stud*. 2015;52(11):1754-1774. doi:10.1016/j.ijnurstu.2015.06.006
4. Stansby G, Avital L, Jones K, Marsden G. Prevention and management of pressure ulcers in primary and secondary care: summary of NICE guidance. *BMJ*. 2014;348:1-5. doi:10.1136/bmj.g2592
5. Coleman S, Smith IL, McGinnis E, Keen J. Clinical evaluation of a new pressure ulcer risk assessment instrument, the pressure ulcer risk primary or secondary evaluation tool (PURPOSE T). *J Adv Nurs*. 2018;74(2):407-424. doi:10.1111/jan.13444
6. Coleman S, Gorecki C, Nelson EA, Closs SJ. Patient risk factors for pressure ulcer development: systematic review. *Int J Nurs Stud*. 2013;50:974-1003. doi:10.1016/j.ijnurstu.2012.11.019
7. Coleman S, Nelson EA, Keen J, Wilson L. Developing a pressure ulcer risk factor minimum data set and risk assessment framework. *J Adv Nurs*. 2014;70:2339-2352. doi:10.1111/jan.12444
8. Coleman S, Nixon J, Keen J, et al. Using cognitive pre-testing methods in the development of a new evidenced-based pressure ulcer risk assessment instrument. *BMC Med Res Methodol*. 2016;16(1):1-13. doi:10.1186/s12874-016-0257-5
9. WHO. (2010). *Process of translation and adaptation of instruments*. https://www.who.int/substance_abuse/research_tools/translation/en/
10. Hultin L, Karlsson A-C, Öhrvall M, Coleman L. PURPOSE T in Swedish hospital wards and nursing homes: A psychometric evaluation of a new pressure ulcer risk assessment instrument. *J of Clin Nurs*. 2020;(29):4066-2075. doi:10.1111/jocn.15433
11. Hultin L, Gunningberg L, Coleman S, Karlsson A-C. Pressure ulcer risk assessment-registered nurses' experiences of using PURPOSE T: A focus group study. *J of Clin Nurs*. 2020;(31):231.
12. *Patient Safety Act* (SFS 2010:659). Social department. https://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/patientsakerhetslag-2010659_sfs-2010-659

13. Eldh AC. Facilitating patient participation by embracing patients' preferences—a discussion. *J Eval Clin Pract.* 2019;25:1070-1073. doi:10.1111/jep.13126
14. Martinsson C, Uhlin F, Wenemark M, Eldh AC. Preference-based patient participation for most, if not all: a cross-sectional study of patient participation amongst persons with end-stage kidney disease. *Health Expectations.* 2021;1–9:1833-1841. doi:10.1111/hex.13323
15. Schoeps LN, Tallberg A-B, Gunningberg L. Patients' knowledge of and participation in preventing pressure ulcers— an intervention study. *Int Wound J.* 2017;14(2):344-348. doi:10.1111/iwj.12606
16. Tobiano G, Bucknall T, Marshall A, Guinane J. Patients' perceptions of participation in nursing care on medical wards. *Scand J Caring Sci.* 2016;30(2):260-270. doi:10.1111/scs.12237
17. Vanderwee K, Defloor T, Beeckman D, Demarré L. Assessing the adequacy of pressure ulcer prevention in hospitals: a nationwide prevalence survey. *BMJ Qual Saf.* 2011;20(3):260-267. doi:10.1136/bmjqs.2010.043125
18. Ledger L, Worsley P, Hope J, Schoonhoven L. Patient involvement in pressure ulcer prevention and adherence to prevention strategies: an integrative review. *Int J Nurs Stud.* 2020;101:103449. doi:10.1016/j.ijnurstu.2019.103449
19. Latimer S, Chaboyer W, Gillespie B. Patient participation in pressure injury prevention: giving patient's a voice. *Scand J Caring Sci.* 2013;28:648-656. doi:10.1111/scs.12088
20. Georgakellos DA, Macris AM. Application of the semantic learning approach in the feasibility studies preparation training process. *Inf Syst Manag.* 2009;26(3):231-240. doi:10.1080/10580530903017708
21. Creswell JW, Plano Clark VL. *Designing and Conducting Mixed Methods Research.* 3rd ed. Los Angeles, CA: SAGE; 2018.
22. Ek C-A. Prediction of pressure sore development. *Scand J Caring Sci.* 1987;1(2):77-84. doi:10.1111/j.1471-6712.1987.tb00603.x
23. WMA. (2013). *The world medical association-WMA declaration of Helsinki – ethical principles for medical research involving human subjects.* <https://www.wma.net/policies-post/wma-declaration-of-helsinki-ethical-principles-for-medical-research-involving-human-subjects/>
24. CODEX. (2020). *Rules and Guidelines for Research.* <http://www.codex.vr.se/forskarensetik.shtml>
25. Weber RP. *Basic Content Analysis.* 2nd ed. Newbury Park: SAGE; 1976.
26. Krueger RA. *Focus Groups: a Practical Guide for Applied Research.* 5th ed. Los Angeles, CA: SAGE; 2015.
27. O'Cathain A, Murphy E, Nicholl J. The quality of mixed methods studies in health services research. *Original Res.* 2010;13(2):92-98. doi:10.1258/jhsrp.2007.007074
28. Kitson AL, Harvey G. Methods to succeed in effective knowledge translation in clinical practice. *J Nurs Scholarsh.* 2016;48(3):294-302. doi:10.1111/jnu.12206
29. Oxelmark L, Ulin K, Chaboyer W, Bucknall T. Registered Nurses' experiences of patient participation in hospital care: supporting and hindering factors patient participation in care. *Scand J Caring Sci.* 2018;32(2):612-621. doi:10.1111/scs.12486
30. Thórarinsdóttir K, Kristjánsson K. Patients' perspectives on person-centred participation in healthcare: a framework analysis. *Nurs Ethics London.* 2014;21(2):129-147. doi:10.1177/0969733013490593
31. Hultin L, Karlsson A-C, Öhrvall M, Gunningberg L. Information and communication technology can increase patient participation in pressure injury prevention: a qualitative study in older orthopedic patients. *JWOCN.* 2019;46(5):383-389. doi:10.1097/WON.0000000000000568
32. Angel S, Frederiksen KN. Challenges in achieving patient participation: a review of how patient participation is addressed in empirical studies. *Int J Nurs Stud.* 2015;52(9):1525-1538. doi:10.1016/j.ijnurstu.2015.04.008

How to cite this article: Hultin L, Karlsson A-C, Löwenmark M, Coleman S, Gunningberg L. Feasibility of PURPOSE T in clinical practice and patient participation—A mixed-method study. *Int Wound J.* 2023;20(3):633-647. doi:10.1111/iwj.13904