Title:"The development of the Purpose T pressure ulcer risk instrument into an electronic questionnaire to support mobile working "

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Introduction: "Methodological and practical limitations associated with traditional pressure ulcer risk assessment tools prompted a programme of work to develop a new instrument. This work was funded by a National Institute for Healthcare Research (NIHR)Programme Grant and led to the development of 'Purpose T' (PT).

What did you do and how did you do it? Which actions and steps did you take?: "As part of the trial management group, I was involved in the development of the tool and once it was tried and tested I implemented it within my local organization, a large NHS Community Trust in the north of England. The tool was implemented in 2015. At this time all our community services were transitioning away from paper records to electronic patient assessment and mobile working. Therefore the organisation needed to convert this risk assessment into an electronic format for use on Systmone. The development of the Purpose T questionnaire enabled real time assessment of pressure ulcer risk at the bedside and also enabled data to be extracted centrally to describe our at risk population.

The tool was developed as a questionnaire as this allowed our performance team and the local Tissue Viability service to extract data describing the pressure ulcer risk profile of the patients in our community trust. This helps the organisation make informed predictions about resource use with regards to equipment and potential impact upon capacity and demand within community teams.

What were the results? Which improvements did you see?:"

A previous citywide cross –sectional survey conducted in 2011 identified pressure ulcers as the most frequent wound type in the city (N=236). This equated to 23% of all complex wounds (point prevalence 0.31 per 1000). Pressure ulcers were the most prevalent wound type in women (point prevalence 0.39 /1000) and the second most prevalent wound type in men (point prevalence 0.23/1000). Our point prevalence was lower than previous estimates from studies using a geographically defined population. Our lower estimate was probably in part due to the focus on

pressure ulcer at a local and national level and early implementation of local improvement tools in the city. This survey was not however designed to describe our trust at risk population as it was completed across the whole city including our local acute hospitals and all GP practices.

Since the development of the PT questionnaire we are now able to describe our at risk and not at risk % population in real time and this is also flagged visually using a green amber or red icon on the patient record to ensure this risk is communicated to the healthcare professionals involved in that patients care.

Our performance team ran a report in March 2019 to identify the risk profile of the patients being cared for in our large community NHS Trust. According to the information our population distribution across all 3 risk level in accordance with the Purpose T red, amber, green risk classification system is 45% not at risk (green) 36% at risk of pressure ulcers on the primary prevention pathway(amber) and 13 % assessed as having a pressure ulcer or previous scarring (red, secondary prevention pathway). This data also enables us to identify those who have not been assigned a risk level (6%).

Discussion and further steps: Since the development of purpose T we have been contacted by several other NHS and independent sector organisations' wishing to 'pinch with pride' and adopt the same questionnaire, we have been happy to share our work in order to progress the adoption of this evidence based tool nationally. We have more recently adopted the paediatric version of the Purpose T tool and developed this into a questionnaire for use in our children's business unit.

Clinical relevance: In order to fully appreciate the data described above. I asked the performance team to provide numbers associated with the percentages in order to bring this data to life. In terms of the 6% with no risk assigned, this equates to 60 patients per week. In terms of overall activity within the organisation there are 29,430 face to face contacts per week. Based on high levels of activity and relatively low patients numbers we are hopeful that the majority of 'at risk' patients have been assessed and have a plan in place to manage risk. However we are not complacent and are working with our clinical staff and performance team to identify easy ways to identify those patients with an unassessed/unassigned risk. One approach to this has been to design a coloured lozenge (red, amber or green) which appears on the patient's addressograph on our electronic patient record system once their risk assessment has been completed. This helps staff to visually identify patients with no assessment. This data has also helped to inform current and future demand for equipment and to do some forward financial planning to support this. Another benefit has been that we are now able to better describe normal and abnormal variation using SPC charts which support Board reports and to our Quality Committee.

References:

Cullum N, Buckley H, Dumville J, Hall J, Lamb K, Madden M, *et al.* Wounds research for patient benefit: a 5-year programme of research. *Programme Grants Appl Res* 2016;4(13)

Nixon J, Nelson EA, Rutherford C, Coleman S, Muir D, Keen J, *et al.* Pressure UlceR Programme Of reSEarch (PURPOSE): using mixed methods (systematic reviews, prospective cohort, case study, consensus and psychometrics) to identify patient and organisational risk, develop a risk assessment tool and patient-reported outcome Quality of Life and Health Utility measures. *Programme Grants Appl Res* 2015;3(6)