

Evolution and evidence in convexity

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While convexity products for ostomy care have been available now for decades, until recently, there has been a dearth of evidence and fragmented citations supporting their usage.^{1,3} Additionally, product descriptors and accompanying nomenclature have been both primarily subjective and, as such, confusing.¹ Relying on clinician interpretation of such descriptors and the clinician's individual experiences in using these products neither supports evidence-based practice, nor aids in developing educational frameworks for the novice clinician when choosing convex skin barriers.

The first concept to reach the market in around 2001, of the more compressible and flexible convex products² (commonly referred to as 'soft'), was quickly followed by products from other manufacturers and proved a boon to the clinician in helping solve clinical challenges. Often seen as the 'safer' option to their less compressible and flexible counterparts¹ ('firm convex'), this wider range of options now helps to further complete the clinician's armamentarium in managing their patients. However, while these newer convexity additions have quickly become popular, they also lacked clinical guidance and once again, descriptors and indications for use lack objectivity.^{1,3} Furthermore, there are no regulatory bodies, such as the International Standards Organisation (ISO), governing any convex products for ostomy product manufacturers regarding specific measurements.^{1,3} While more products are being introduced and accompanying evidence is being produced, standards have yet to follow.

In 2013, a comprehensive literature review was undertaken with an accompanying publication that identified these gaps in evidence and nomenclature.¹ Myths around convexity use in the clinical setting were explored, questioned and in part debunked based on the paucity of evidence.¹ Such myths included the historical recommendations that convexity was the cause of mucocutaneous separation in the post-operative period and thus, should be avoided. Additionally, contraindications led to cautionary statements around specific peristomal skin disorders, such as pyoderma gangrenosum or caput medusae, and the use of convexity. This publication became the catalyst in generating the more recent evidence that was soon to follow.

This supplement explores the current landscape in the journey of the evolution of evidence in convexity products and their use, the potential for the future, and changes to clinical practice resulting from such evidence – evidence-based practice. In the first section, *The role of standardised*

product terminology in product development and clinical practice, Czaplewski and Smitka revisit the five characteristics of convexity. Published in 2021, these product characteristics and clinical practice impact statements have been instrumental in how clinicians and manufacturers frame discussions about convexity products.³ Setting common nomenclature will be influential for both research opportunities and novice nurse education, as clinicians can now describe specific convexity attributes and the clinical decision making for correct product selection.³ Also described are how these descriptors are already influencing current and future product development with recommendations for the future.

In the next article, *The World is No longer flat*, authors Malandrino, Skountrianos, Simmons, Walker and Drolshagen fuse together the existing pieces of evidence regarding convexity products, peristomal skin complication rates, and link to the need for creating evidence-based practice. Additionally, they discuss the impact evidence has had on clinical practice, as well as discussing the rationale for choosing convexity earlier in the patient journey to help optimise patient outcomes.

In the third article, *Translating the evidence into clinical practice – a journey through change*, author Hill describes her recent journey in making changes to her practice based on evidence. Recent publications and conference symposia describing convexity earlier in the patient journey were catalysts in triggering her recognition of the significant physical and psychological challenges placed on her patients by early leakage. She describes using the Lewin Model of Change in facilitating transformation in practice and prescribing at her institution. Change can be both arduous and daunting, yet vital, if a real, positive change is to occur and Hill discusses her process and suggests recommendations for the future.

In conclusion, Purnell summarises these findings with recommendations for future opportunities in both evidence generation and product development. There are still significant developments to occur concerning manufacturing standards for convexity products, new product introductions, proactive decision-making vs reactive decision-making, as well as ongoing evidence generation supporting evidence-based practices.

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