

## The role of the clinical nurse specialist in stoma care: a scoping review

Jennie BURCH St Mark's Hospital, Andrew BIRD, Gabrielle THORPE

### **ABSTRACT =300words max**

**Aim:** Rapidly evolving roles within nursing require exploration and description. This review aims to examine the role of the clinical nurse specialist (CNS) stoma care from the UK perspective.

**Design:** A scoping review was undertaken using the Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) guidelines. Data were synthesised using content analysis to derive meaning units and themes.

**Data sources:** Three electronic databases were used to conduct the search in August 2022: Embase, AMED and Ovid MEDLINE. Additional sources identified through reference lists of included studies and guidelines were also included if meeting the eligibility criteria.

**Review methods:** Two reviewers undertook the search for eligible articles, which described the role of the UK based CNS Stoma Care. Any disagreements were resolved with discussion.

**Results:** Of 102 potentially eligible papers, seven met the eligibility criteria. Analysis resulted in 184 unique meaning units. Meaning units were grouped into themes reflecting the four pillars of advanced practice: 1) advanced clinical practice, 2) leadership, 3) facilitation of education and learning and 4) evidence, research and development. The least meaning units were attributed to the evidence theme (n=13) such as uses evidence-base. Most meaning units related to advanced clinical practice (n=107) such as possessing specialist knowledge and skills to manage complications including a high output stoma.

**Conclusion:** The scoping review suggests the CNS Stoma Care role reflects the four pillars of advanced practice.

**Impact:** Findings suggest the role of the CNS Stoma Care is complex and involves high-level, specialist decision-making skills and demonstrates the worth of the CNS Stoma Care. The results from this scoping review are potentially useful in future service developments. Furthermore, results will be used to inform the ASCN UK modified Delphi consensus to examine the views of the clinicians currently working in CNS Stoma Care roles.

### **INTRODUCTION**

There are an estimated 600 Clinical Nurse Specialist (CNS) stoma care in the UK (Hodges 2022), predominantly working within England. The CNS Stoma Care provides care for people preparing for and living with a stoma preoperatively, postoperatively and in the long-term. Preoperative practice includes stoma siting, where the CNS Stoma Care will mark the place on the abdomen for the surgeon to form the stoma and preoperative counselling (White 2021). Postoperative care includes preparing the person with a newly formed stoma for stoma self-care, identifying and managing complications and planning a safe discharge from hospital to the community (Swash 2022). In the long-term, care may include assessing and managing complications, such as a prolapsed stoma or parastomal hernia (Skipper 2021), evaluating care interventions and providing psychosexual and social support. At each stage of the care pathway, the CNS Stoma Care role is likely to involve advanced clinical reasoning and

decision-making knowledge and skills tailored to the individual needs of patients, many of whom are vulnerable (Swash et al 2022a), such as people with dementia and a stoma (Swash et al 2022b). Not all CNS Stoma Care roles and settings are the same in the UK or worldwide. In other countries the role can also incorporate continence and wound care. Whereas, in the UK, it is recognised that CNS Stoma Care roles are dissimilar, reflecting the needs of the patients. Diversity in roles and settings such as the split between hospital and community care occurs in some areas for example. Additionally, there is blurring of roles encountered by the development of newer roles to include specialist but unregistered healthcare professionals. However, it is also uncertain what the essential and common roles are. The roles of the CNS Stoma Care require further evaluation to determine clear role boundaries and capture and clarify the complexities of the role.

## **BACKGROUND**

Defining the CNS Stoma Care role is difficult, due to the number and variety of roles that are undertaken and the rapid way in which nursing roles evolve. In the wider context, the International Council of Nurses (ICN) defined the role of the clinical nurse specialist in the context of possessing expert knowledge and decision-making skills (ICN 2020). This emphasises the difference between a novice and nurses working at an advanced level. Further compounding the challenge of defining specialist practice when there is a growing emphasis on advanced practice, with roles such as the advanced nurse practitioner. The International Council of Nurses (2020) also explores the need for additional graduate education. The Royal College of Nursing (RCN) described the four pillars of advanced practice to include clinical expertise, education, leadership as well as evidence (RCN 2021). It is of note that the ICN (ICN 2020) and the Royal College of Nursing (RCN 2021) descriptions concur in content. The Royal College of Nursing over 10 years ago described the role of the CNS Stoma Care (RCN 2009), but the role has evolved without recent exploration of these changes. Ensuring the CNS Stoma Care role is understood, what different roles are, as well as maintaining standards of care required for advanced nursing practice becomes important. Furthermore, it is useful to inform future service developments by showing the worth of the CNS Stoma Care. Additionally, the review was undertaken to inform a subsequent Delphi consensus undertaken in the UK national stoma conference.

## **THE REVIEW**

### **Aim**

The aim of the scoping review was to synthesise the available evidence to answer the question formed using the PCC (population, concept, context) acronym (JBI 2015) to establish “How is the role of the CNS Stoma Care in the UK described and understood within the published evidence?”

### **Design**

The original design was to undertake a systematic review, but it became clear during preliminary searches there was no published research on this topic. The review was revised to be a systematically undertaken scoping review. The Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) selection process (Figure 1) was used to inform the methodological approach used to conduct the systematic scoping review. The selection process included three steps 1) identification of papers, 2) inclusion/exclusion of papers and 3) review of included papers.

## Search methods

Three online databases Embase, AMED and Ovid MEDLINE, were considered relevant after preliminary searches to test the terms within these databases. These databases were systematically searched; with the final search on 26 August 2022, using the search terms *nurs\** AND (stoma OR ostomy OR ostomate OR ostomist) AND (role OR duty OR duties OR obligation OR accountability OR performance OR representation OR job OR function OR position OR skill OR task OR work OR responsibility) within the title of the paper.

Eligibility criteria (Table 1) were utilised to screen papers, firstly titles and abstracts of citations identified through the initial database search and then full-text papers identified for potential inclusion. No restriction on dates of papers was made, but it was not anticipated anything would be found before 1971 when the first UK stoma nurse was appointed (Black 2000).

**Table 1 – Eligibility criteria**

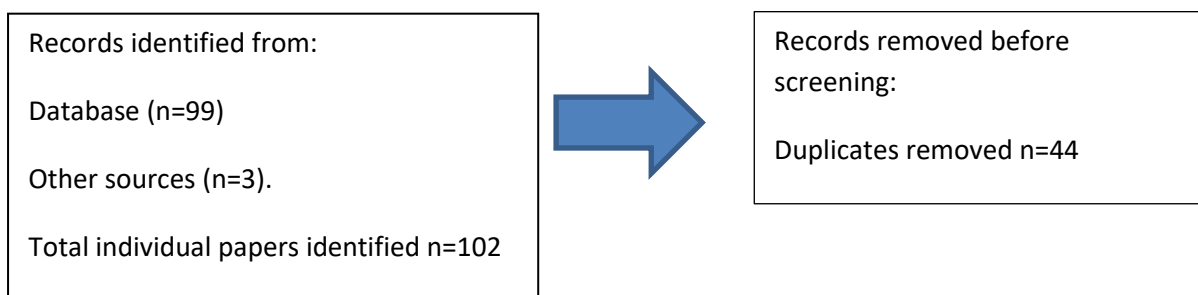
Inclusion criteria	Exclusion criteria	Rationale
Description of the role of the CNS Stoma Care in UK	Nurses outside of the UK	The study population is nurses working in the specialist field of stoma care within the UK
Papers written in English Full papers, including reviews, commentaries and guidelines	Conference abstracts	Authors can only read English. Important perspectives on the role of the CNS Stoma Care are likely to be captured within the wider literature as there was no available research

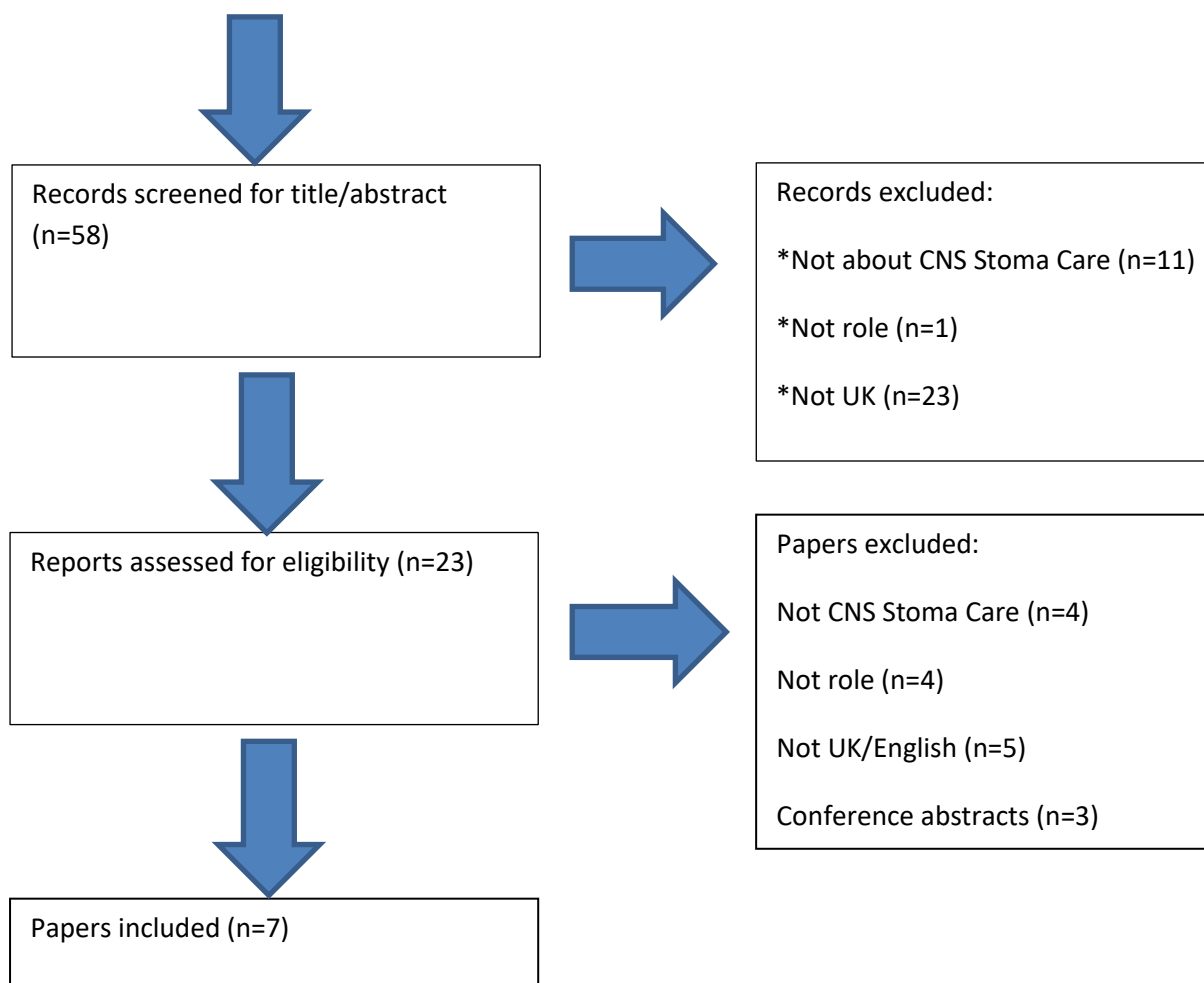
Further papers for inclusion were identified through relevant professional guidelines and through reference lists of included papers, if they met the eligibility criteria. Two reviewers (JB and AB) independently screened the title and/or abstract and then the full texts of each paper identified for review. Differences were resolved by discussion; discussion with the third author (GT) to resolve disputes was unnecessary.

## Search outcome

There were 99 articles identified from the initial search with three guidelines added and 44 duplicates were removed. Thirty-five papers not meeting the eligibility criteria were rejected at title and abstract screening. Twenty-three full-text papers were assessed for eligibility and seven (Table 2) were included for review.

**Figure 1 – PRISMA flow diagram**





### Quality appraisal

No critical appraisal of included papers was attempted as no research papers were identified. The authors recognised that wider literature would be appropriate to include, to answer the search question and the findings of the review were to be used to inform a subsequent consensus study through which appraisal of the findings would be indirectly assessed.

**Table 2 – Included papers**

Author (year)	Aim of paper	Design of paper	Meaning points
ASCN UK (2018)	To detail competencies for stoma nurses working at band 7	Competency framework	70
Comb (2003)	To explore the role of stoma nurses in cancer care	Case study	16
Henbrey (2021)	To explore the role of CNS Stoma Care in maintaining QoL in palliative care	Literature review	25
McGrath (2017)	To explore the role of the specialist nurse in managing stoma-associated problems	Narrative review of study follow-up	8
RCN (2003)	To provide guidance on documentation in stoma/ colorectal nursing	Narrative review	4
RCN (2009)	To improve documentation in stoma care nursing	Narrative review	32

Skingley (2004)	To describe improvements achieved by educating non-specialist, community-based nurses	Narrative review	29
-----------------	---	------------------	----

## Data analysis

The results from the review were synthesised using content analysis. The use of content analysis enabled the transformation of large amounts of text into a highly organised and concise summary of the key points (Erlingsson and Brysiewicz 2017). Data were broken down into meaning units; short text that maintained the original meaning. During the analysis process, each reviewer listed the meaning units from each source. JB and AB reviewed all included papers independently to identify meaning units, which were then discussed and agreed. If a meaning unit was identified in the same source more than once, the second and subsequent occurrences were ignored. Results were added to a purpose designed Excel spreadsheet by AB. Related meaning units, either through content or context, were grouped into sub-categories and categories. These categories were then grouped into themes. Discussion with all authors occurred until agreement was obtained about the meaning units, codes, categories and themes. As the findings were to be used in a consensus study, statements were formed to capture each of the 13 categories identified to describe the role of the CNS Stoma Care (described elsewhere).

## RESULTS

The seven included papers were published in the UK between 2003 and 2021 (Table 2). There were three guidelines (ASCN 2018, RCN 2003, RCN 2009), two narrative reviews (McGrath 2017, Skingley 2004), a case study (Comb 2003) and a literature review (Henbrey 2021).

The process of synthesis is summarised into Table 3. There were 184 individual meaning units and 30 codes derived from the seven papers. The codes were grouped into 13 categories. During data synthesis, it became clear that the 13 categories grouped effectively into four themes. The themes reflected the four pillars of advanced practice: *advanced clinical practice*, *leadership*, *facilitation of education and learning* and *evidence, research and development* (RCN 2018).

There was varied distribution of the categories, codes and meaning units within the four themes. *Advanced clinical practice* contained the most meaning units, *leadership* contained the most codes with *evidence, research and development* containing the least categories, codes and meaning units. *Advanced clinical practice* contained five categories, seven codes and 105 meaning units. *Facilitation of education and learning* contained two categories, nine codes and 35 meaning units. *Leadership* contained five categories, 11 codes and 31 meaning units. *Evidence, research and development* contained one category, three codes and 13 meaning units.

Each of the 13 categories contained between one and five of the 30 codes; the median was two. There was an average of 14 meaning units per category. Four of the categories contained 20 or more meaning points, predominantly in the theme *advanced clinical practice*. These categories were: *support provider* (n=32), *has specialist knowledge and skills* (n=27), *specialist point of contact for information and advice* (n=24) and *delivers care* (n=22). Five categories contained only one meaning unit; *mentor/preceptor*, *educate significant others*, *refer*, *role model* and *leader*. Discussions to try and

join meaning units revealed that topics such as manager and leader were distinctly different and should remain separate.

Of the 30 codes, three contained over 20 individual meaning units; *specialist knowledge and skills* (n=27), *provides care* (n=22) and *support* (n=21). These three meaning units were all in the theme *advanced clinical practice*.

**Table 3 – Relationships between themes, categories and meaning units**

Theme	Category	Code	Number of meaning units (n=184)
Advanced clinical practice	Has specialist knowledge and skills	Specialist knowledge and skills	27
	Support provider	Support	21
		Counsel	11
	Delivers care	Provides care	22
	Assesses, plans, documents and evaluates care	Assessor	13
		Plan, document, evaluates care	4
Skilled communicator with patients and their significant others	Collaborates and communicates with patients	7	
Facilitation of education and learning	Specialist point of contact for information and advice	Patient advisor	13
		Be a resource	5
		Provide patient information	5
		Mentor/preceptor	1
	Educator	Educate patients	3
		Educate healthcare professionals	3
		Educate others	2
		Educate significant others	1
Educator	2	2	
Leadership	Autonomous and collaborative	Collaborate/ communicate with multidisciplinary team and other healthcare professionals	7
		Signpost	2
		Autonomous	2
		Refer	1
	Advocate and role model	Patient advocate	3
		Speciality advocate	2
		Service improver	4
		Role model	1
	Steward of the NHS	Resource/ product management	5
	Manager	Manager	3
Leader	Leader	1	
Evidence, research and development	Uses and contributes to a specialist evidence base	Research	6
		Uses evidence base	4
		Audit	3

--	--	--	--

## **DISCUSSION**

This is the first scoping review to examine how the role of the CNS Stoma Care in the UK is described and understood within the published evidence base. The categories and themes identified reflect the diversity and complexity of the CNS Stoma Care role within the context of advanced specialist practice.

The CNS can be described as a registered nurse who is authorised to practice as a specialist; possessing advanced expertise in a branch of nursing that includes clinical, teaching, administration, research and consultant roles (Lowe and Plummer 2019). The role of CNS Stoma Care was first described in the UK in the 1970s (Black 2000). Initially the CNS role was developed to meet the changing needs of patients and the evolving healthcare workforce. Subsequently, this nursing role developed to enable nurses to extend their clinical knowledge, expertise and skills; to inform high-level, autonomous clinical reasoning and decision-making to improve care for patients with complex diseases or conditions (Chan and Cartwright 2014). Similarly, in colorectal cancer the role of the advanced nurse practitioner is described to include autonomous working (Carvalho et al 2022), showing an overlap in the different nursing roles. Although associated with a high level of clinical expertise, the CNS role has long been considered to extend beyond specialist clinical practice. There are role expectations that include quality improvement, service and system management. Additionally, education and leadership of staff including mentorship. These roles seamlessly combine to impact positively on the experiences and clinical outcomes of patients and their families (Kidner, 2022).

However, it is important to consider the transition from novice to advanced specialist practice. When the nurse first specialises in stoma care, they will have a degree of knowledge about the topic. However, it could be argued that nurses should not use the term CNS without first acquiring formal, specialist education. Health Education England (2017) describe that healthcare professionals working at an advanced level are required to work at master's level with the ability to make sound judgements in complex, ambiguous situations. Nonetheless, this scoping review suggests that the CNS Stoma Care role largely conforms to the RCN four pillars of advanced practice (RCN 2018). However, the extent to which each individual CNS Stoma Care meets these expectations, will be determined by their expertise, experience, specialist education and scope of practice.

### **Advanced Clinical Practice**

The largest reported interactions of the CNS Stoma Care related to the care and management of people living with a stoma. This included supporting preparation for stoma-forming surgery or working with significant others to optimise quality of life for people with a stoma, revealed by a prominence of advanced clinical practice within meaning units and categories. These results, however, may have been influenced by the nature of the publications. Henbrey (2021) for example, focussed only on the role of the CNS Stoma Care in palliative care. Palliative care is only a small part of most CNS Stoma Care roles, as many people live a long life with their stoma. Additionally, Comb (2003) included a large focus on building a rapport with patients to better enable the nursing process when issues arise. Rapport enables the patient to volunteer information to the CNS Stoma Care to enable assessment

and resolution of issues. Within clinical practice it is important to identify and define the scope of practice of the CNS Stoma Care in both direct and indirect care (ICN 2020). In the UK, doctors have a limited role in stoma care following surgery, with responsibility for care predominantly falling to the CNS Stoma Care. It is therefore unsurprising that the content analysis exercise identified the highest number of meaning units relevant to the possession of specialist skills and knowledge category. This involves managing complex situations such as choosing the most appropriate place for the stoma to be surgically formed (stoma siting). Alternatively, stoma complications that require complex decision-making skills such as the management of enterocutaneous fistulae. Excellent communication skills are fundamental in the provision of support and counselling as well as when conducting the essential roles required by the nursing process of assessing, planning, implementing and evaluating stoma care needs. Support is essential to enable adjustment to life with a stoma, which involves profound disruption in the sense of their embodied self. Counselling is necessary to enable relationships with others to enable the person living with a stoma to experience people and engage with the world around them (Thorpe et al 2016). A vast knowledge and understanding are necessary on the part of the CNS Stoma Care to enable this to occur, using sensitive and appropriate communication skills.

### **Facilitation of Education and Learning**

The CNS Stoma Care facilitates education within the clinical environment with patients and their significant others as well as with colleagues and self-education. The CNS Stoma Care also is a valuable resource being the specialist point of contact for information and advice on stoma care for patients, significant others, healthcare colleagues and others. This aspect of the role is also recognised by Kidner (2022), who describes the CNS role as a consultant to other healthcare professionals to enable quality care. The ICN (2020) also identifies the part that the CNS plays in the provision of education to colleagues.

Self-education is also an important aspect of the CNS Stoma Care. Historically, the English National Board (ENB) enabled training to be conducted in the UK to a set standard within all institutions that provided education in stoma care, with training available at diploma and degree level. Once the ENB was disbanded in the 1990's (Stronge and Burch 2019) specialist education was offered at the same levels, but the range of content varied considerably. With nursing becoming a graduate profession a greater importance is placed on senior nurses such as CNS Stoma Care to possess stoma-related qualifications at master's level. The RCN (2018) suggests that nurses working at an advanced level should be educated to master's level. The International Council of Nurses (ICN 2020) concur stating a CNS is a nurse who has completed a master's degree that is specific to their practice. However, there is no master's pathway for CNS Stoma Care to complete in the UK, only a stoma-related module that is incorporated into a Master's programme. It is currently uncertain how many CNS Stoma Care have completed a relevant Master's degree. Stronge and Burch (2019) in an audit reported 72% of CNS Stoma Care had a stoma-specific degree-level or above qualification. This is an increase on an earlier audit which reported 49% of CNS Stoma Care had a degree-level stoma-related module (Burch 2014). In the latter survey of CNS Stoma Care, results showed 25% held a degree and 30% a Master's as their highest qualifications (Burch 2014). It is likely that these figures will have altered in the years since this audit was undertaken. Stoma-related education was undertaken for three main reasons; professional development, to underpin clinical knowledge and to improve patient care (Stronge and Burch 2019). Thus, CNS Stoma Care recognise the importance of improving patient care as well as developing themselves professionally, through education.



## **Leadership**

Leadership in the CNS Stoma Care role includes being a steward of the NHS, particularly regarding the management of resources and stoma products. Careful and efficient use of stoma products is also described as important in the audit by Bowles et al (2022). One perception of nurses is that patients consider that stoma-related products available on prescription meaning they can “have whatever they want” (Bowles et al 2022: S17). It was interesting that in this review, there were limited meaning units related to being a manager or a leader, indicating that these aspects of the role are not explicitly recognised in some of the publications reviewed. ASCN UK (2021) identified a set of quality statements to set standards and ensure stoma care healthcare goals are met. Of note these standards do not include leadership or management, except within the foreword. Conversely, domain two of the ASCN UK band 7 CNS Stoma Care competency framework relates to leadership and management and includes management of the stoma service and being accountable for maintaining service standards (ASCN 2018). It is possible that the role of management is associated only with the department lead. Furthermore, that leadership is associated with management and therefore leadership was not recognised and identified separately. It is interesting that there was no discussion about sponsorship of nursing posts. A recent audit by Bowles et al (2022) showed that in England three quarters of a large sample of CNS Stoma Care (n=108) were directly or indirectly (sponsorship) funded by industry. The Association of Stoma Care Nurses UK do recognise leadership and management in their competency framework for CNS Stoma Care (ASCN 2018) but this is not depicted in other publications on the role of the CNS Stoma Care. This may reflect the topics of discussion of publications or possibly suggests these aspects of the role are less prioritised than other roles, by the CNS Stoma Care.

## **Evidence, Research and Development**

The CNS role needs to include assessment of relevant data and research (Kidner 2022) such as interpreting research into evidence-based guidelines. To enable service evaluation, the ASCN UK has undertaken work to improve an understanding of not just the care that should be provided but also described a set of standards with which CNS Stoma Care can benchmark their care (ASCN 2021). As part of service improvement Walker et al (2018) and Metcalfe (2017) in their separate audits using the ASCN UK standards and audit tool, both recognised areas of their service that needed improvement. The number of research, audits and evidence-based articles about stoma care that are written by or include the CNS Stoma Care are increasing; improving the available evidence to guide care and ensure that high standards are met and maintained. The International Council of Nurses (ICN 2020) consider the role of the CNS to include innovation and change facilitation. Change management and development of a service as well as undertaking research are not well described in the literature in relation to the role of the CNS Stoma Care. However, evidence-based nursing is essential for all nursing roles, which is evident in the ASCN UK guidelines that have been published to guide the CNS Stoma Care.

## **LIMITATIONS**

Lack of studies on this topic, meant that a systematic review was not possible, instead a scoping review was undertaken. None of these papers lent themselves to critical appraisal or would be deemed robust evidence on a hierarchy of evidence, nonetheless they were included within the review. Papers were included due to the rationale for undertaking the scoping review: to establish how the role of the CNS Stoma Care is described and understood within the published evidence to provide baseline criteria for a modified Delphi consensus study. However, as there was no research previously undertaken in this area, this shows a need for robust evidence, potentially useful to plan UK workforces.

Limitations of this scoping review include missing potentially important publications due to the search terms used. However, to establish how the role of the CNS Stoma Care in the UK is described and understood within the published literature, search terms were deemed to be appropriate. None UK publications were excluded, as it is known that there are disparities between roles and expectations in other countries such as the additional roles of wound and continence as well as care provided outside of the context of the National Health Service. Furthermore, the authors all have many years of experience in stoma care and education and carefully considered the terms and no known articles were excluded.

To reduce bias associated with poorly conducted reviews, review of the papers was robustly undertaken to ensure results were reliable. Achieved by discussion and documentation of methods prior to undertaking the review. Additionally, bias can occur during data analysis. Content analysis is useful to interpret meaning of the data but there is the risk of themes being based upon the frequency of occurrence rather than its importance. This was avoided by discussion during the analysis process to ensure that the meaning of the sources was not lost. Additionally, it was considered that the subsequent consensus study would enable the importance of each theme to be captured.

## **IMPLICATIONS FOR PRACTICE**

Blurring healthcare roles in the UK as roles progress and evolve has resulted in disparity and confusion about nursing roles. It was considered necessary to define the CNS Stoma Care role, but currently there is no research into this topic, making role definition difficult. Requiring further empirical enquiry.

There was some resonance between job roles within the reviewed papers. However, most papers were not written with defining the complete role of the CNS Stoma Care as an outcome, instead with a focus on select aspects of the role. This limited perspective may have contributed to a fragmented understanding of the role. Also, anecdotally fragmentation of the role may be perceived by work colleagues and patients. For example, colleagues might only see aspects of the CNS Stoma Care role being undertaken; such as on the ward or in clinic for example. This can result in an incorrect perspective of what is included in the role, excluding care provided within the community or management roles undertaken in the office. This limited perspective, seeing the CNS Stoma Care role through only one lens does not enable a full understanding of the role. A broader more holistic role description and understanding is needed, to include all aspects of the CNS Stoma Care role; with a comprehensive definition of the role, through further research.

## **CONCLUSION**

In conclusion this scoping review identified a range of non-research papers to answer the question: “How is the role of the CNS Stoma Care in the UK described and understood within the published evidence?” It was identified that the CNS Stoma Care role is complex and involves all four pillars of advanced practice: clinical, education, management and leadership and research. The greatest proportion of the CNS Stoma Care role appears to be clinical practice, reflecting the patient-centeredness of the CNS Stoma Care role, with education of themselves and others also highlighted as important. Management and leadership components of the role were identified but less well defined. The least prominent pillar of practice in the CNS Stoma Care role was research and evidence-based practice. The review findings highlight that the CNS Stoma Care can be a novice or experienced specialist nurse and that consequently, the clinical pillar is likely to be most prominent in nurses with less experience and expertise, with the other pillars developing with time, developing expertise and continuing professional development. Confirmation of these role descriptors is required by the CNS Stoma Care, through qualitative enquiry to ensure they are current and relevant.

### **CLINICAL IMPACT**

This is the first scoping review undertaken to examine the CNS Stoma Care role. Although only UK roles were examined the findings might be transferrable to other settings. Consideration needs to be made about the need to move from specialist into advanced practitioner roles. This requires gaining advanced skills to enable transition into advanced roles through shadowing, networking and formal teaching (Gee et al 2018). It could be suggested that the CNS Stoma Care should have a Master’s degree and additionally be expanding their scope of practice towards an advanced practitioner with an increased focus on education, research and leadership, to match their clinical skills. There are Master’s programmes available which include specialist clinical modules such as stoma care as well as core modules that include clinical assessment, leadership, education, prescribing and research. Obtaining such as education would create a fully rounded advanced practitioner.

Results from this scoping review were subsequently used to inform a consensus study. A modified Delphi consensus was undertaken within the Association of Stoma Care Nurses UK conference in October 2022 to vote on the results of this review to see if they reflected the opinions of current CNS Stoma Care in the UK. However, more research is needed to examine the CNS role in stoma care.

### **REFERENCE LIST**

ASCN UK (2021). Stoma care, Nursing standards and audit tool for the newborn to elderly. ASCN UK, Edinburgh.

ASCN UK (2018). ASCN UK stoma care competency framework; band 7 stoma care nurse. ASCN UK, Edinburgh.

Barrios M., Guilera G., Nuno L. & Gomez-Benito J. (2021). Consensus in the Delphi method: What makes a decision change? *Technological Forecasting & Social Change*, 163, 120484. <https://doi.org/10.1016/j.techfore.2020.120484>

Black P., (2000). *Holistic stoma care*. London. Balliere Tindall.

Bowles TM, Moses C and Perry-Woodford ZL (2022) The voice of stoma care nurses: an exploration of stoma care in England. *British Journal of Nursing*. 31(22): S14-S24.

Burch J. (2014). Current nursing practice by hospital-based stoma specialist nurses. *British Journal of Nursing*, 23(5), S31-S34.

Carvalho F., Stone J, Munoz-Mozas G, Mendes C, Thompson S, Jupp P, Appadu L, Collantes L, Odlin M, Dallimore P, Tighe J, Rixen-Osterbo J, McLaren N, Martin R (2022) Advanced nursing practice: a review of scopes of practice in cancer care. *British Journal of Nursing*. 31(21): 1104-1110.

Chan G.K. & Cartwright C.C. (2014). The Clinical Nurse Specialist. In Hamric A.B., Hanson C.M., Tracy M.F., O'Grady E.T. (eds.) *Advanced Practice Nursing: An Integrative Approach*. 5th Edition. St. Louis: Elsevier Saunders. pp. 359 – 395.

Comb J. (2003). Role of the stoma care nurse: patient with cancer and colostomy. *British Journal of Nursing*, 12(14), 852-856.

Currie E.J. & Carr-Hill RA (2013). What is a nurse? Is there an international consensus? *International Nursing Review*, 67-74.

Erlingsson C. & Brysiewicz P. (2017). A hands-on guide to doing content analysis. *African Journal of Emergency Medicine*, 7, 93-99. <http://dx.doi.org/10.1016/j.afjem.2017.08.001>.

Gee Caroline, Andreyev J, Muls A (2018) Developing advanced clinical practice skills in gastrointestinal consequences of cancer treatment. *British journal of nursing*. 27(5) 237-247.

He D., Liang W., Yao Q., Zhao J., Liu R., Chen G., Wang H., Ye X. & Huang R. (2021). The effect of stoma education class on peristomal dermatitis in colorectal cancer patients with defunctioning ileostomy— a retrospective study of 491 patients. *Translational Cancer Research*, 10(2), 581-588. <http://dx.doi.org/10.21037/tcr-20-3267>.

Health Education England (2017) Multi-professional framework for advanced clinical practice in England. Available at: <https://www.hee.nhs.uk/sites/default/files/documents/multi-professionalframeworkforadvancedclinicalpracticeinengland.pdf>. [Accessed 15 December 2022].

Henbrey, R. (2021). Stoma formation as a palliative procedure: the role of the clinical nurse specialist in maintaining quality of life. *British Journal of Nursing*, 30(6), S4-S10.

Hodges K. (2022). UK Healthcare Strategies and Policies, Implications for stoma care. British Healthcare Trades Association.

International Council of Nurses (2020). Guidelines on advanced practice nursing. Available at: [https://www.icn.ch/system/files/documents/2020-04/ICN\\_APN%20Report\\_EN\\_WEB.pdf](https://www.icn.ch/system/files/documents/2020-04/ICN_APN%20Report_EN_WEB.pdf) [Accessed 17 August 2020].

The Joanna Briggs Institute (2015) Joanna Briggs Institute Reviewers' Manual: 2015 edition. The Joanna Briggs Institute. Adelaide.

Kidner M. (2022). Successful advanced practice nurse role transition. Springer. <https://doi.org/10.1007/978-3-030-53002-0>.

Lowe G. & Plummer V. (2019). Advanced practice in nursing and midwifery: the contribution to healthcare in Australia. In: McGee P. & Inman C. (eds) Advanced practice in healthcare. 4<sup>th</sup> edn. Wiley Blackwell. West Sussex. pp. 51-64.

McGrath A. (2017). Stoma-associated problems: the important role of the specialist nurse. *British Journal of Nursing*, 26(5), S30-S31.

Page M.J., McKenzie J.E., Bossuyt P.M., Boutron I., Hoffmann, T.C., Mulrow C.D., Shamseer L., Tetzlaff J.M., Akl E.A., Brennan S.E., Chou R., Glanville J., Grimshaw J.M., Hróbjartsson A., Lalu M.M., Li T., Loder E.W., Mayo-Wilson E., McDonald S., McGuinness L.A., Stewart L.A., Thomas J., Tricco A.C., Welch V.A., Whiting P. & Moher D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *The BMJ*, 372, n71. <https://doi.org/10.1136/bmj.n71>.

Metcalf C. (2017). Evaluating nursing standards in a stoma care service: results of an internal audit. *Gastrointestinal Nursing*, 15(4), 35-41.

RCN (2009). Clinical nurse specialists, stoma care. Royal College of Nursing. London.

RCN (2003). Documentation in colorectal and stoma nursing; RCN guidance for nursing staff. Royal College of Nursing. London. Publication code 002 212.

RCN (2009). Clinical nurse specialist, stoma care. Royal College of Nursing. London. Publication code 003 520.

RCN (2018). Advanced level nursing practice. Royal College of Nursing. Publication code 007 038.

RCN (2021). Advanced level nursing practice. Section 2: advanced level nursing practice competencies. Royal College of Nursing. Publication code 006 896.

Skingley S. (2004) Changing practice: the role of the community stoma nurse. *British Journal of Nursing*, 13(2), 79-86.

Skipper G. (2021). Prolapsed stoma. ASCN UK guidelines. Available at ASCN UK website <https://ascnuk.com>.

Stronge K. & Burch J. (2019). Education in stoma care: a survey and interviews with nurses. *Gastrointestinal Nursing*, 17(8), 26-31.

Swash C. (2022). Discharge guidelines. ASCN UK guidelines. Available at ASCN UK website <https://ascnuk.com>.

Swash C., Parker M. & Russell-Roberts P. (2022a). Vulnerable patients with a stoma. ASCN UK guidelines. Available at ASCN UK website <https://ascnuk.com>.

Swash C., Parker M. & Thorpe G. (2022b). Dementia and the person with a stoma. ASCN UK guidelines. Available at ASCN UK website <https://ascnuk.com>.

Thorpe G, Arthur A., McArthur M. (2016) Adjusting to bodily change following stoma formation: a phenomenological study. *Disabilities and rehabilitation*. 38(18):1791-1802. <https://doi:10.3109/09638288.2015.1107768>.

Walker K., Watkins R., Newman S., Pullen J., Osborne D., Milton S., Davies T. (2018). Sharing the results of a patient satisfaction audit. *British Journal of Nursing*, 27(5), S4-S14.

White M. (2021). Siting a stoma. ASCN UK guidelines. Available at ASCN UK website <https://ascnuk.com>.