

# The Journal of Stomal Therapy Australia

VOLUME 41 NUMBER 3 SEPTEMBER 2021

Peritonectomy: an overview

Chinese speaking patients' understanding of information and consent related to their surgical experience

Stomal therapy and the virtual hospital

South Australian ostomy support groups: observations and initiatives

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# The Journal of Stomal Therapy Australia

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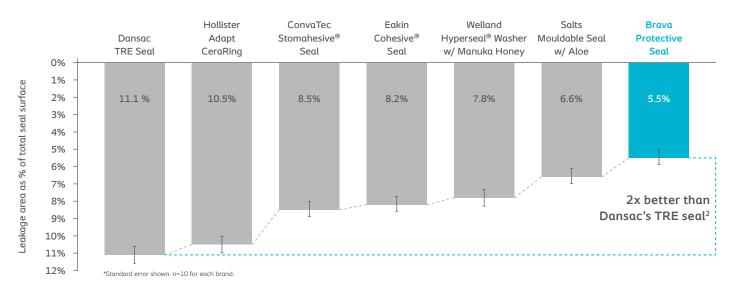
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<sup>1.</sup> Rolstad, B. S. & Erwin-Toth P. L. Peristomal Skin Complications: Prevention and Management. Ostomy Wound Manage. 2004;50(9):68-77.

<sup>2.</sup> TM7064 Leakage test. Coloplast. Data on file. Data from 2019. VV-0283280



# President's report

Fiona Bolton • AASTN President

**For referencing** Bolton F. President's report. Journal of Stomal Therapy Australia 2021; 41(3):4 **DOI** https://doi.org/10.33235/jsta.41.3.4

As I write this report South Australia is preparing for lockdown from 6pm tonight, New South Wales has been in lockdown for many weeks, and Melbourne has been in lockdown number 5 for over a week. The Delta strain of COVID-19 has been a challenge, keeping officials on their toes, having to learn from others' experiences and modifying processes to work towards safe and satisfactory outcomes.

The Tokyo Olympics have just commenced, and I find myself holding my breath as I wonder how the organisers are feeling right now. Each day they must embrace change, reassure the world and the athletes that all is under control, that all will be well. The pressure of coordinating the Olympic Games during a global pandemic must be immense. They must look at all possible issues/risks and future impacts of continuing for the host country and those participating. How can anyone know what the outcome will be?

COVID has had a huge impact on how we practise. In such a short time we have become much more computer savvy, from communicating with email and the occasional 'gotomeetings' for online committee and AGM meetings to all state branch and national committee meetings and Annual General Meetings online. We are reaching regional areas more frequently now, decreasing the tyranny of distance.

We are excited that we have made the swap to Zoom for our branch and Executive meetings from July. Each state has a Zoom account, as does the AASTN Executive and Education Committee, and we even have a spare licence for additional sub committees as required for AASTN business. We no longer have to be careful how many people attend meetings and for how long as we can meet all day and have up to 300 people attending. We can share documents on screen and even change the background on our screens so people can't see our office or bedroom! What other skills will we learn in the next 12 months?

We participated in an online conference last year thanks to Liberty Medical and we also saw how successful an online international conference can be with the Asia Pacific Enterostomal Therapy Nurses Association conference from Tokyo in July 2021. We have become proficient at Zoom meetings, Microsoft Teams meetings, and gained trust in online ordering. However, we have also reduced our commitments since we can't meet, socialise, or educate face to face. We are a small association that relies on each other so, as we gradually return to a semi-normal work

life post-pandemic, we hope to see people taking that leap to participate on state or national committees where we learn, create new networks, and consolidate our passion in stomal therapy nursing.

One last thing... watch out for the new AASTN website coming soon! Take care and thank you,

Fiona Bolton
AASTN President

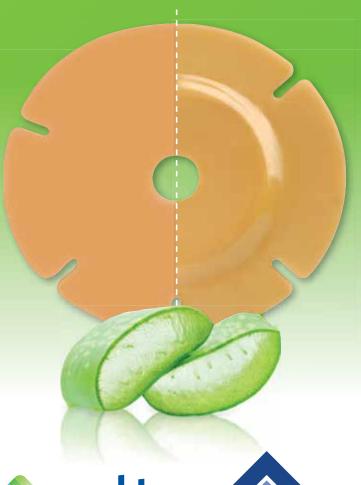
## What is this?

The answer is on page 24.



Photo from Brenda Christiansen from Shoalhaven, NSW

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## **Editorial**

Vicki Patton Royal Prince Alfred Hospital, Sydney Email v.patton@ecu.edu.au

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Over one quarter of the Australian population are immigrants and the majority live in urban centres.¹ Approximately 20% of the migrant population live in regional areas. As a group, immigrants living in urban centres are less likely to participate in cancer screening programmes such as a faecal occult blood test. In fact, immigrants from Asia and Europe are less likely to have a FOBT and even more so if they are female.² Whether this directly translates to later presentation with bowel cancers is unknown. However, it would be reasonable to suggest that there may be some impact for those at risk of bowel cancer. So how do we as health professionals encourage engagement in healthcare that is not always culturally appropriate or linguistically diverse?

The first barrier is the inability to appropriately communicate. In this issue Bothe and Chen examine the use of interpreters in the Chinese population attending a pre-admission clinic in a tertiary hospital in Sydney. This paper questions the poor utilisation of interpreters within this clinical scenario. It is unfortunate that despite patients being booked ahead of time for this clinic we still don't plan ahead and use the interpreting services available. Further information is needed into why health professionals don't use them.

I have no doubt that, like myself, others find it somewhat difficult when confronted with a non-English speaking patient. We are all pressed for time and when the family are there and willing to translate we take the opportunity rather than calling in the professionals. In private hospitals access to an interpreter may be even more difficult. At the bedside when we need an instant reply, I wonder how many stomal therapy nurses have utilised Google translate or other internet resources in designing a step by step guide for the patient.

Although these measures may be useful we don't really have any way of measuring the accuracy of the translations and the patients' level of understanding. Nuances within language such as different dialects may put a whole different spin on the meanings of words. My question is how do we measure understanding in patients as utilising teach-back is almost impossible without using a qualified interpreter?

Recently I have been seconded to work in a virtual hospital which monitors patients who are COVID positive in the community. As most will know, western Sydney has been hardest hit by the pandemic and also contains a high percentage of non-English

speakers. On the whole the use of the phone interpreter service has been very positive and most are professional and courteous. However, the frustration of trying to assess someone whilst the person interpreting is busy washing dishes or not concentrating on the task of interpreting or is in the midst of a noisy cross street is beyond belief. The answers we receive is the difference between calling an ambulance on these patients or letting them stay at home for 24 hours until we call again, and possibly deteriorating.

Not having faith in the quality of the interpreted word is concerning and this is especially so when only using the telephone. Visualising the patient on platforms such as Zoom has really assisted in improving the assessment. It has made me think that most facial expressions are universal. Hearing the translations and looking at the expressions of the patient's body language and face allow for a more thorough health assessment and brings meaning to the words. Seeing someone face to face, albeit on the computer, also allows for us to make a more human connection and improves the translation significantly.

Interpreters have a difficult job to relay information from one person to another, particularly when the words in one language do not exist in the other. Access to interpreters should not be obstructed with barriers and we as health professionals should utilise them, even if there is a remote possibility of a patient not understanding, regardless of the availability of family.

#### **REFERENCES**

- Australian Bureau of Statistics. A picture of the nation: the statistician's report on the 2006 census. Australian Commonwealth; 2009.
- Weber MF, Chiew M, Feletto E, Kahn C, Sitas F, Webster L. Cancer screening among immigrants living in urban and regional Australia: results from the 45 and up study. International Journal of Environmental Research and Public Health 2014;11(8):8251–66.

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# Peritonectomy: an overview

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#### **ABSTRACT**

Peritonectomy, a combination of cytoreductive surgery (CRS) with hyperthermic intraperitoneal chemotherapy (HIPEC), is performed to treat peritoneal carcinomatosis (PC) from multiple disease origins. Prognosis associated with PC is poor and the burden of disease has a debilitating impact on quality of life. Symptoms include ascites, pain, and bowel and bladder obstruction which historically have been palliated. Peritonectomy may be offered with curative intent to a select group of patients. It is associated with an approximate hospital stay of 3 weeks, morbidity of 30–40% and mortality of <1.5%. Treatment requires the perioperative management by a skilled multidisciplinary team. The description of the peritoneum, surgery procedure and perioperative care will be covered from the perspective of a high volume peritonectomy unit at St George Hospital (SGH) Sydney.

#### **INTRODUCTION**

This article will describe the peritoneal cavity and its function and relation to other structures, and will list cancers which commonly metastasise to it such as peritoneal carcinomatosis (PC). An overview then follows of the surgery involved, and the use of hyperthermic intraperitoneal chemotherapy (HIPEC) and normothermic early postoperative intraperitoneal chemotherapy (EPIC).

#### WHAT IS PC?

The term PC, originating in 1931, was coined by American surgeon J Sampson to describe the metastatic spread of ovarian cancer to the peritoneum. He noted that, with small volumes of ascitic fluid, ovarian disease primarily manifested within the pelvis, while with larger volumes of fluid moving about with gravity and patient posture, disease could be found under the diaphragm.<sup>1</sup>

PC is now commonly the descriptive term for Stage IV spread of any cancer to the peritoneum. These cancers include gastrointestinal origin (i.e. gastric, small intestine, appendix and colon), ovarian cancer and primary peritoneal cancers such as mesothelioma. The burden of peritoneal disease is commonly associated with bowel or bladder obstruction, pain, fatigue, shortness of breath and cachexia and holds poor prognosis.<sup>2</sup> In 10–30% of gastrointestinal cancer patients, PC is present at the time of primary diagnosis.<sup>3</sup> For up to 50% of patients, ascites is the first symptom of intra-abdominal malignancy. PC pathogenesis is thought to be a multipathway process.

 Transcoelomic: shedding of cancer cells from the primary tumour, e.g. cells that have invaded through bowel wall serosa into the peritoneal cavity from a spontaneous perforation.

- Iatrogenic: implantation of cancer cells e.g. due to incomplete resection of the primary cancer or contamination from, for example, laparoscopic instruments and biopsy sites.<sup>4</sup>
- Primary peritoneal: e.g. mesothelioma.

Once seeded in the peritoneal cavity, cancer cells are disseminated away from the site of origin by three mechanisms – gravity, negative pressure exerted by the respiratory movement of the diaphragmatic muscle, and peristaltic action of the gut.<sup>5</sup>

#### ANATOMY AND PHYSIOLOGY

#### The peritoneum

The peritoneum is the largest serous membrane in the body, equal to the surface area of skin up to 1.5–2m<sup>2</sup>.<sup>6</sup> It is a continuous serous membrane approximately 1mm thick which includes a parietal and visceral layer (Figure 1).<sup>7</sup> The parietal layer is attached to the abdominal wall and lines the abdominopelvic cavity. The visceral layer envelops major abdominal hollow and solid organs; it forms the mesenteries, ligaments and omenta which support the organs in the abdomen and serves as a conduit for blood vessels, lymphatics and nerves.<sup>8</sup> It is this cavity that is accessed during laparoscopic surgery when carbon dioxide gas is insufflated between the parietal and visceral layers to allow vision and access to the abdominal organs. This is known as pneumoperitoneum.

The peritoneum is analogous with the pleura, pericardium and tunica vaginalis and is comprised of three layers (the sites of mesothelioma disease):

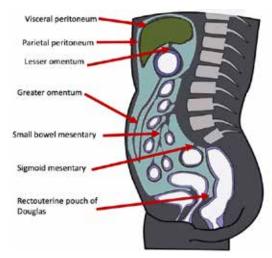


Figure 1. The peritoneal cavity  $^{9}$  reproduced with permission from St George Hospital

The peritoneum is analogous with the pleura, pericardium and tunica vaginalis and is comprised of layers (the sites of mesothelioma disease): 1. Single layer of epithelial cells - the mesothelium. 2. Basement membrane - the basal laminar layer and 3. Thick layer of connective tissue. 10

The peritoneal boundaries are the anterior abdominal muscles, diaphragm, pelvic floor and retroperitoneum (aorta, inferior vena cava, kidneys, pancreas, vertebrae etc). The peritoneal membrane is generally not visualised on radiological imaging unless there is presence of fluid and/or thickening by disease. <sup>10</sup> Under certain pathological conditions it becomes conspicuous with the presence of gas (pneumoperitoneum) in the event of hollow organ perforation (i.e. stomach, duodenum, colon small bowel) or fluid accumulation under such conditions as peritonitis, portal venous thrombosis, portal hypertension, malignant ascites or if a tumour mass is present. <sup>11</sup>

Between the visceral and parietal layers lies a virtual space holding approximately 100mls fluid rich in water, electrolytes, solutes and proteins. At a cellular level this peritoneal fluid contains macrophages, fibroblasts, mast cells, eosinophils and mesothelial cells. Approximately 1000mls is produced daily. Influenced by peristalsis and diaphragmatic movement, this fluid is directed upwards toward the diaphragm where it is predominantly absorbed though stomata into the main thoracic lymphatic ducts. Standard are gaps in the mesothelial lining found in high density in areas including the greater omentum, small bowel mesentery, the falciform ligament, inferior surface of the diaphragm and the pouch of Douglas.

The peritoneum's role was initially thought to be limited to support structures and lubricate, allowing passive movement of underlying structures without friction. However, it is now seen as a multifunction complex organ<sup>10</sup> that plays a role in defending against microorganisms.<sup>15</sup>

#### The omentum

The omentum is a complex structure consisting of a double fold of the peritoneum folded back on itself, hence has four mesothelial layers. It looks like a membrane but functions as an organ with immunoregulation and tissue generation functions. The omentum has the ability to move within the abdominal cavity and seal off areas of infection or perforation. British surgeon Rutherford Morrison recognised its role in the control of abdominal infection and wound isolation, referring to the omentum as "the policeman of the abdomen". More recently it has been dubbed the "intestinal thymus" for its immune regulation. Beneath its mesothelial surface is a rich supply of convoluted blood vessels, the omental glomeruli, akin to the renal glomeruli. Surrounding these vessels are clusters of cells known as milky spots derived from macrophages, lymphocytes, mast and stromal cells.

The lining of these glomeruli and the mesothelial layer are specially adapted to allow the passage of leukocytes and exchange of interstitial fluid. Milky spots are responsible for filtering of the peritoneal fluid as it drains through the lymphatics. They may become hotbeds for tumour cells providing a microenvironment for tumour metastases. They become clogged, preventing drainage of fluid resulting in malignant ascites. <sup>17,18</sup>

Omental caking is frequently seen in the setting of PC (Figures 2 & 3). Omentectomy is therefore routinely performed during peritonectomy to reduce risk of the microscopic tumour load developing into macroscopic disease.<sup>19,20</sup>



Figure 2. Omental cake in the setting of PC reproduced with permission from St George Hospital



Figure 3. Removing omental cake reproduced with permission from St George Hospital

The risk of sepsis increases when the omentum is removed. It is therefore still debated whether it should be removed even in presence of malignancy.<sup>21</sup> However, this risk is balanced against the risk of metastatic disease.

During an abdominal assault such as a visceral perforation or intra-abdominal infection, the omentum becomes 'activated' with increased blood flow resulting in an absorption and cleansing action of the peritoneal cavity. Teamed together, the stomata and milky spots are responsible for cleaning the peritoneal cavity during an inflammatory response. The stomata provide a physical channel through which bacteria and inflammatory debris pass while specialised milky spots regulate the inflammatory/immune cascade to eliminate the causative agent.<sup>22,23</sup>

Cytokines are released by the omentum. This includes the potent vascular endothelial growth factor (VEGF), a key regulator of angiogenesis. In the peritoneal malignancy setting VEGF promotes tumour angiogenesis and increases vascular permeability/hypersecretion, resulting in increased accumulation of ascites. Phis is known as malignant ascites. Malignant ascites results in an accumulation of fluid in the peritoneal cavity from two actions. The first is cancer cells clogging the outflow to the lymphatics through the stomata and milky spots. The second is the increased presence of VEGF secreted by the peritoneal tumour and omentum. This causes an increase in tumour volume and peritoneal fluid by raising the permeability of vessels. Phis onset of malignant ascites is a grave prognostic sign, with a mean survival of 5.2 months depending on the primary cancer.

#### WHAT IS A PERITONECTOMY?

Considered as an aggressive loco-regional treatment, a peritonectomy is the combination of CRS (resecting a diseased peritoneum and any visceral and solid/or organs) to remove macroscopic cancerous peritoneal deposits with the instillation of HIPEC to address residual microscopic cancer cells.

The first extensive resection with HIPEC on a patient with low grade adenocarcinoma (pseudomyxoma peritonei) of unknown origin was performed by Dr Spratt in 1979. Interestingly, the pathology was later reported as a pancreatic primary cystadenoma.<sup>31</sup> Over the last 40 decades since Spratt's reported case, improved therapeutic intervention has brought hope to a condition viewed as dismal, and with limited options other than palliation. Since the 1990s the CRS plus HIPEC, led by American surgical oncologist Paul Sugarbaker, has been refined with impressive results and is often referred to as the Sugarbaker technique. A successful outcome is reliant on resectability of the disease to achieve complete cytoreduction.

Sugarbaker devised a scoring system to calculate the volume of tumour burden, calling it the peritoneal cancer index (PCI). The peritoneal cavity is divided into 13 sections; the abdominal and pelvic area are divided into nine sections and the upper and lower small bowel into a further four sections. The largest tumour nodule of each section is identified and given a score from 0–3 according to size. If there is no tumour the score is 0. For nodules less than 0.5cm the score is 1, nodules between

0.5cm and 5cm the score is 2 and for any larger than 5cm the score is 3. The aim of surgery is complete resection of all visible peritoneal disease; success is measured using the completeness of cytoreduction score (CC score) as devised by Sugarbaker. This CC score is seen to be a prognostic indicator of survival:<sup>32</sup>

- CC-0 is the optimal resection with no visible disease remaining.
- CC-1 refers to remaining nodules less than 2.5mm. For low grade cancers this may be considered within optimum resection range when HIPEC is used.
- CC-2 refers to nodules remaining between 2.5mm 2.5cm.
- CC-3 refers to nodules >2.5cm or a confluence of continual tumour at any area within the abdomen and pelvis (Figure 4).<sup>3,33</sup>

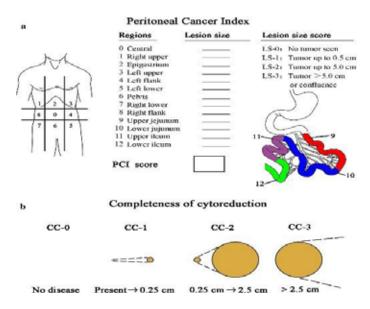


Figure 4. PCI and completeness of the CC score reproduced with permission from St George Hospital

Operability is reliant on volume of disease, i.e. PCI, and resectability, i.e. CC score. Types of cancers treated with peritonectomy and HIPEC are listed in Table 1.

Table 1. Types of cancers treated with peritonectomy and HIPEC as per current SGH Sydney protocol 2021

Cancer type	PCI cap	<b>Optimal CC score</b>
Colorectal	PCI ≤15	CC-0
Colorectal with <4 liver metastases	PCI ≤10	CC-0
Appendix	Any PCI	CC-0/1
Epithelial mesothelioma Any PCI		CC-0
Cystic mesothelioma	Any PCI	CC-0
Ovarian	Any PCI	CC-0
Gastric	PCI ≤7	CC-0

#### WHY HIPEC?

#### **Curative intent**

Once all macroscopic disease has been resected, HIPEC provides

locoregional treatment to residual microscopic cells. It has been shown to be able to penetrate depths of 3–5mm. <sup>34,35</sup> Obstructed by the peritoneal-plasma barrier, the large molecular weight chemotherapy agents used do not pass through the mesothelium layer or the blood vessel walls, thereby preventing systemic uptake. This peritoneal plasma barrier therefore allows for the safe instillation of topical high strength chemo directly into the abdominal cavity. <sup>36–38</sup> Chemotherapy agents used include oxaliplatin, mitomycin C, and cisplatin +/– doxorubicin. Choice is dependent on the disease type and previous chemotherapy treatment. Current literature research shows there is no 'standard' chemotherapy regime. <sup>38</sup>

#### Surgical procedure

Using the 'colosseum' technique, the abdominal wall is raised and fixed to a framework forming a reservoir and, depending on the size of the patient, capable of holding several litres of fluid (Figure 5). Thermometer probes and fume/smoke extractor tubing are placed to carefully monitor temperature and extract cytotoxic fumes (Figure 6). Plastic sheeting is used to seal the



Figure 5. 'Colosseum' technique reproduced with permission from St George Hospital



Figure 6. Placement of thermometer probes and extractor tubing reproduced with permission from St George Hospital

open abdomen (Figure 7). Ice packs may be placed around the patient's body to lessen the risk of heat stress during the heated phase. Perfusate fluid, e.g. normal saline or Plasma-Lyte, and the chemotherapy drug is then pumped into the open peritoneal cavity, heated and circulated via a modified heart–lung bypass

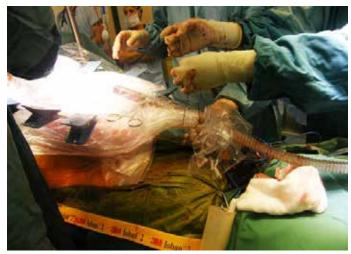


Figure 7. The open abdomen is sealed off with plastic sheeting reproduced with permission from St George Hospital

pump for 30–90 minutes, depending upon which chemotherapy agent is used. At intervals, the solution is manually stirred to ensure all surfaces of organs are directly in contact with the HIPEC. The HIPEC fluid is heated to about 42°C which is the optimum temperature. According to González-Moreno and colleagues:

Heat augments the cytotoxic effect of the chemotherapy and assists the chemotherapy to penetrate deeper into local tissue. The heat has a direct anti-tumour effect.<sup>38</sup>

The open colosseum method as described above has been endorsed by Sugarbaker as a safe procedure with no detectable aerosols following several rigorous environmental studies.<sup>39</sup> At some institutions HIPEC is performed using a closed abdomen technique.<sup>40</sup> Both techniques are equivocal in regards to safety.

#### Palliative intent

HIPEC can also be administered to treat malignant ascites and improve quality of life in a palliative setting. At our institution there has been impressive results achieved in otherwise inoperable mesothelioma cases. HIPEC has proven to be 91% effective in a study on 80 patients<sup>41</sup> and 94% complete resolution on 52 patients from a multi-institutional retrospective study.<sup>2</sup> Laparoscopic palliative HIPEC may successfully treat malignant ascites regardless of origin of cancer.<sup>2</sup>

#### WHY EPIC?

EPIC, using the drug Fluorouracil at room temperature, is selected as an on-going treatment process following HIPEC. It is given during the first few days post-surgery to arrest the slow cell mitosis of low grade cancers. Unlike the intra-operative chemotherapy it does not require heat to augment its effect.<sup>38</sup> Watertight abdominal closure needs to be ensured for EPIC to proceed. The aim is to instil a litre volume of chemotherapy daily, for 5 days, over 1 hour, directly into the abdominal cavity via a Tenckhoff catheter. To be effective, EPIC treatment needs to be completed before the development of adhesions.

Prior to delivery of EPIC, abdominal drains are clamped to allow retention of chemotherapy which has a planned dwell time of 23 hours. The patient is then repositioned half hourly on alternate sides over a couple of hours to encourage movement of fluid through the abdominal cavity. The chemotherapy is released under gravity via the surgical drains approximately an hour before each daily EPIC.

#### PERITONECTOMY PROCEDURE

The operation takes an average of 8–10 hours to complete but may be extended to more than 12 hours with transfusion of multiple blood products in the event of a high-volume case. The patient is placed in the supine position with careful position of upper and lower limbs to avoid compartment syndrome or nerve compression/damage.<sup>42</sup> A mid-line incision is made from xiphoid process to pubis, excising prior scars suspected of malignant implant. The umbilicus and abdominal port sites are frequently excised in patients who have had prior laparoscopy. It is the practice at SGH to place port sites along the midline during diagnostic, thereby minimising risk of abdominal wall seeding.

The operation itself may be divided in to three stages. Stage one is an exploratory laparotomy, adhesiolysis and cytoreduction. Stage two is the delivery of HIPEC. The third stage is the reconstructive phase and closure following repair of defects such as bowel anastomosis, repair of serosal tears and insertion of drains.

#### Stage 1

Diseased peritoneum is resected during surgery (Figures 8 & 9). The omentum is routinely resected if curative intent is intended as it is commonly involved by malignant cells.<sup>42</sup>

Extensive adhesiolysis over several hours may be required to gain access into the abdominal cavity, resulting in multiple serosal bowel tears. Once the abdominal cavity is opened an assessment is made. The decision to proceed with CRS is determined upon assessment of the disease type, volume of disease (PCI) and resectability.



Figure 8. Opening the peritoneal cavity reproduced with permission from St George Hospital

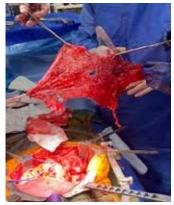


Figure 9. Resection of diseased parietal peritoneum reproduced with permission from St George Hospital

Common resections include:

- Colon: total or subtotal colectomy, Hartmann's resection, anterior resection.
- Appendicectomy.
- · Omentectomy, greater and lesser.
- Small bowel, may be multiple resection sites, minimum 1.5m to remain
- Partial or subtotal gastrectomy.
- Liver: stripping, metastectomies and or partial resection.
- Cholecystectomy.
- Splenectomy.
- Hysterectomy/salphingo/oophorectomy.
- Nephrectomy, full or partial.
- Partial resection of ureter.
- Bladder resection, full or partial, with reimplantation of ureters.
- Partial abdominal wall resection with mesh repair or component separation.
- Partial diaphragm resection.

Once all visible tumour has been removed the abdominal cavity is irrigated with warm saline and gentamicin to assist with the removal of debris, to reduce circulating tumour cells and to allow inspection for bleeding (Figure 10 pre-resection and Figure 11 post-resection).

#### Stage 2

On completion of cytoreduction, chemotherapy is instilled into the abdomen heated to approximately 42°C and, depending on the chemotherapy drug, remains in situ for 30–90 minutes (Figure 12).

#### Stage 3

Depending on the extent of the CRS that has taken place, the reconstructive phase commences to complete repair work with anastomosis and over sewing of enterotomies. Drains are inserted which include:

- Intercostal drains if diaphragm muscle has been repaired.
- Intraperitoneal drains strategically placed at resection sites, e.g. splenic bed, liver or pelvis.

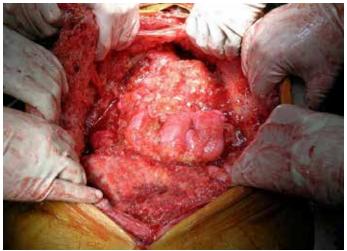


Figure 10. High volume disease pre-resection reproduced with permission from St George Hospital



Figure 11. Post-resection reproduced with permission from St George Hospital

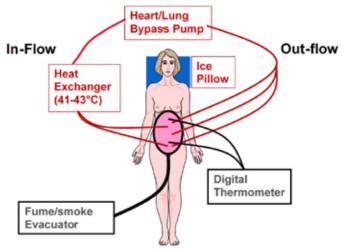


Figure 12. HIPEC process reproduced with permission from St George Hospital

- Extra-peritoneal drains, i.e. subcutaneous drains are placed if mesh insertion or component muscle separation techniques have been used to close the abdominal wall.
- Stoma formation as required:
  - End /loop ileostomy.
  - End colostomy.
  - · Ileal conduit.

At the completion of surgery the patient is transferred to the intensive care unit.

#### **CONCLUSION**

This concludes the description of the anatomy and physiology of the peritoneum, listing the cancers which metastasise to it and how they may be treated using a combination of CRS with HIPEC and EPIC.

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#### **CONFLICT OF INTEREST**

The authors declare no conflicts of interest.

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#### **REFERENCES**

- Sampson JA. Implantation peritoneal carcinomatosis of ovarian origin. American Journal of Pathology 1931 Sep;7(5):423–444.39.
- Sangisetty SL, Miner TJ. Malignant ascites: a review of prognostic factors, pathophysiology and therapeutic measures. World Journal of Gastrointestinal Surgery 2012 Apr 27;4(4):87–95.
- Harmon RL, Sugarbaker PH. Prognostic indicators in peritoneal carcinomatosis from gastrointestinal cancer. International Seminars in Surgical Oncology (ISSO) 2005 Feb 8;2:3.
- Gresham E, Don Parsa F. Iatrogenic implantation of cancer cells during surgery. Hawaii Journal of Health and Social Welfare 2020 Jan;79(1):4–6.
- Kusamura S, Baratti D, Zaffaroni N, Villa R, Laterza B, Balestra MR, et al. Pathophysiology and biology of peritoneal carcinomatosis. World Journal of Gastrointestinal Oncology 2010 Jan 15;2(1):12–8.
- McLaughlin PD, Filippone A, Maher MM. Neoplastic diseases of the peritoneum and mesentery. American Journal of Roentgenology 2013 Apr 25;200(5):W420–30.
- 7. Sheldahl. 2016 [cited 2021 Aug 13]. Available from: https://commons.wikimedia.org/wiki/File:Peritoneum.png
- 8. Kalra A, Wehrle CJ, Tuma F. Anatomy, Abdomen and Pelvis, Peritoneum. [Updated 2021 Jul 31]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2021 Jan-. Available from: https://www.ncbi.nlm.nih.gov/books/NBK534788/
- 9. Sheldahi: 2016 https://commons.wikimedia.org/wiki/File: Peritoneum.png. Accessed August 13 2021
- van Baal JOAM, Van de Vijver KK, Nieuwland R, van Noorden CJF, van Driel WJ, Sturk A, et al. The histophysiology and pathophysiology of the peritoneum. Tissue and Cell 2017 Feb;49(1):95–105.
- 11. Solass W, Struller F, Horvath P, Königsrainer A, Sipos B, Weinreich F-J. Morphology of the peritoneal cavity and pathophysiological consequences. Pleura and Peritoneum 2016 Dec 1;1(4):193–201.
- 12. Pannu HK, Oliphant M. The subperitoneal space and peritoneal cavity: basic concepts. Abdominal Imaging 2015;40(7):2710–22.
- 13. Blackburn SC, Stanton MP. Anatomy and physiology of the peritoneum. Seminars in Pediatric Surgery 2014 Dec;23(6):326–30.
- 14. Stommel MWJ, Strik C, van Goor H. Response to pathological processes in the peritoneal cavity: sepsis, tumours, adhesions, and ascites. Seminars in Pediatric Surgery 2014 Dec;23(6):331–5.

- 15. Young VJ, Brown JK, Saunders PTK, Horne AW. The role of the peritoneum in the pathogenesis of endometriosis. Human Reproduction Update 2013 Sep 1;19(5):558–69.
- 16. Di Nicola V. Omentum a powerful biological source in regenerative surgery. Regenerative Therapy 2019 Dec 1;11:182–91.
- 17. Liu J, Geng X, Li Y. Milky spots: omental functional units and hotbeds for peritoneal cancer metastasis. Tumor Biology 2016 Jan 29;37(5):5715–26.
- 18. Meza-Perez S, Randall TD. Immunological functions of the omentum. Trends in Immunology 2017 Jul;38(7):526–36.
- Oosterling SJ, van der Bij GJ, Bögels M, van der Sijp JRM, Beelen RHJ, Meijer S, et al. Insufficient ability of omental milky spots to prevent peritoneal tumor outgrowth supports omentectomy in minimal residual disease. Cancer Immunology, Immunotherapy (CII) 2006 Sep;55(9):1043–51.
- Cao L, Hu X. 61. Omental milky spots screening gastric cancer stem cells. Translational Gastrointestinal Cancer 2012 Jun;0(0). Available from: https://tgc.amegroups.com/article/view/770
- 21. Platell C, Cooper D, Papadimitriou JM, Hall JC. The omentum. World Journal of Gastroenterology 2000 Apr 15;6(2):169–76.
- Isaza-Restrepo A, Martin-Saavedra JS, Velez-Leal JL, Vargas-Barato F, Riveros-Dueñas R. The peritoneum: beyond the tissue a review. Frontiers in Physiology 2018;9. Available from: https://www.frontiersin.org/articles/10.3389/fphys.2018.00738/full
- Clark R, Krishnan V, Schoof M, Rodriguez I, Theriault B, Chekmareva M, et al. Milky spots promote ovarian cancer metastatic colonization of peritoneal adipose in experimental models. American Journal of Pathology 2013 Aug;183(2):576–91.
- 24. Masoumi Moghaddam S, Amini A, Morris DL, Pourgholami MH. Significance of vascular endothelial growth factor in growth and peritoneal dissemination of ovarian cancer. Cancer and Metastasis Reviews 2012 Jun;31(1–2):143–62.
- 25. Solass W, Horvath P, Struller F, Königsrainer I, Beckert S, Königsrainer A, et al. Functional vascular anatomy of the peritoneum in health and disease. Pleura and Peritoneum 2016 Oct 4;1(3):145–58.
- 26. Fushida S, Oyama K, Kinoshita J, Yagi Y, Okamoto K, Tajima H, et al. VEGF is a target molecule for peritoneal metastasis and malignant ascites in gastric cancer: prognostic significance of VEGF in ascites and efficacy of anti-VEGF monoclonal antibody. OncoTargets and Therapy 2013 Oct 16;6:1445–51.
- Hicklin DJ, Ellis LM. Role of the vascular endothelial growth factor pathway in tumor growth and angiogenesis. Journal of Clinical Oncology 2016 Sep 21. Available from: https://ascopubs.org/doi/ pdf/10.1200/JCO.2005.06.081
- 28. Halkia E, Spiliotis J, Sugarbaker P. Diagnosis and management of peritoneal metastases from ovarian cancer. Gastroenterology Research and Practice 2012 Jul 19;2012:e541842.
- Zebrowski BK, Liu W, Ramirez K, Akagi Y, Mills GB, Ellis LM. Markedly elevated levels of vascular endothelial growth factor in malignant ascites. Annals of Surgical Oncology 1999 Jun;6(4):373–8.
- Dvorak HF. Vascular permeability factor/vascular endothelial growth factor: a critical cytokine in tumor angiogenesis and a potential target for diagnosis and therapy. Journal of Clinical Oncology 2002 Nov 1;20(21):4368–80.
- Ayantunde AA, Parsons SL. Pattern and prognostic factors in patients with malignant ascites: a retrospective study. Annals of Oncology 2007 May 1;18(5):945–9.
- Spratt JS, Adcock RA, Muskovin M, Sherrill W, McKeown J. Clinical delivery system for intraperitoneal hyperthermic chemotherapy. Cancer Research 1980 Feb;40(2):256–60.
- 33. Lin Y-L, Xu D-Z, Li X-B, Yan F-C, Xu H-B, Peng Z, et al. Consensuses and controversies on pseudomyxoma peritonei: a review of the published consensus statements and guidelines. Orphanet Journal of Rare Diseases 2021 Feb 13;16(1):85.

- Valle SJ, Alzahrani NA, Liauw W, Sugarbaker PH, Bhatt A, Morris DL. Hyperthermic intraperitoneal chemotherapy (HIPEC) methodology, drugs and bidirectional chemotherapy. Indian Journal of Surgical Oncology 2016 Jun;7(2):152–9.
- 35. Coccolini F, Gheza F, Lotti M, Virzì S, Iusco D, Ghermandi C, et al. Peritoneal carcinomatosis. World Journal of Gastroenterology 2013 Nov 7;19(41):6979–94.
- 36. Jacquet P, Sugarbaker PH. Peritoneal-plasma barrier. Cancer Treatment and Research 1996;82:53–63.
- 37. Lansom J, Alzahrani N, Liauw W, Morris DL. Cytoreductive surgery and hyperthermic intraperitoneal chemotherapy for pseudomyxoma peritonei and appendix tumours. Indian Journal of Surgical Oncology 2016 Jun;7(2):166–76.
- 38. González-Moreno S, González-Bayón LA, Ortega-Pérez G. Hyperthermic intraperitoneal chemotherapy: rationale and technique. World Journal of Gastrointestinal Oncology 2010 Feb 15;2(2):68–75.
- 39. Sugarbaker PH, Van der Speeten K. Surgical technology and pharmacology of hyperthermic perioperative chemotherapy. Journal of Gastrointestinal Oncology 2016 Feb;7(1):29–44.
- 40. Neuwirth MG, Alexander HR, Karakousis GC. Then and now: cytoreductive surgery with hyperthermic intraperitoneal chemotherapy (HIPEC), a historical perspective. Journal of Gastrointestinal Oncology 2016 Feb;7(1):18–28.
- 41. Jiao J, Li C, Yu G, Zhang L, Shi X, Yan J, et al. Efficacy of hyperthermic intraperitoneal chemotherapy (HIPEC) in the management of malignant ascites. World Journal of Surgical Oncology 2020 Jul 22;18(1):180.
- 42. Mercier F, Mohamed F, Cazauran J-B, Kepenekian V, Vaudoyer D, Cotte E, et al. An update of peritonectomy procedures used in cytoreductive surgery for peritoneal malignancy. International Journal of Hyperthermia 2019 Jan 1;36(1):743–51.





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# Chinese speaking patients' understanding of information and consent related to their surgical experience

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#### **ABSTRACT**

The aim of this qualitative study was to explore the use of interpreters among Chinese speaking inpatients having a surgical procedure at an Australian metropolitan hospital. The summary of the findings are:

- Patients often understood it to be their obligation to seek language assistance from their family members or friends. For this reason
  patients did not request an interpreter either during their visit to the surgeon (when written consent is routinely completed) or
  during hospitalisation.
- It is common practice for 'bilingual' surgeons to obtain informed consent even if the patient perceives that the surgeon cannot speak the language fluently.
- Staff under-utilised interpreters even if they were available and their benefits understood.

These findings provide valuable information in which to plan for improvement in the stomal service and the wider organisation. Education and information can be shaped to improve the use of healthcare interpreters to the non-English speaking population at key milestones in their hospital journey.

#### **INTRODUCTION**

The international code of ethics for nurses outlines nurses' responsibility to promote an environment where the individual, family and communities' human rights, values, customs and spiritual beliefs are respected. As nurses specialising in stomal therapy, we are bound by this code of conduct. Within this code four principle elements are outlined; the first of these is particularly significant within the context of the preoperative stomal therapy education. The first principle outlines the right of patients and families to be given information about their health management in a way that they can understand. It is our duty as a nurse to ensure "that the individual receives accurate, sufficient and timely information in a culturally appropriate manner on which to base consent for care and related treatment".

However, assessing comprehension or a patient's understanding of preoperative stomal education is frequently overlooked. In reality, patient understanding is more often presumed and rarely assessed for understanding.<sup>2</sup> In addition, even when patients demonstrate reasonable comprehension at the time of

the information sharing, their understanding may diminish over time.<sup>3</sup> This has been shown to occur especially when patients are burdened with a life threatening cancer diagnosis.<sup>4</sup>

Stomal therapy nurses need to have a heightened awareness of patient factors that could impact on their understanding. These factors include anxiety, level of education, availability of support, resilience and coping skills.<sup>2</sup> Furthermore, greater complexity is added for individuals and families who do not speak English as a first language and require additional time and resources (such as interpreters) to ensure an understanding of their health management.

Ensuring an understanding of their preoperative education that explains the proposed surgery also forms part of a valid consent. Stomal therapy nurses are pivotal in ensuring valid consent by informing patients of the consequences of their surgery when a stoma formation is planned. In Australia, a valid written consent is required from any person who is to undergo a significant treatment or procedure.<sup>5</sup> The four criteria for obtaining a valid consent are that the patient must have capacity, that

consent is freely given, that the consent is sufficiently specific to the procedure proposed, and that the consent is informed.<sup>5</sup> In general, it is the responsibility of the medical officer who performs the procedure to undertake a valid consent process. Where a stoma is a potential outcome of that surgery, referring to a stomal therapy nurse can help to ensure informed consent.

Throughout Australia policies and consent forms provide a level of consistency in the consent process. They guide the healthcare worker in providing appropriate and adequate information and provides evidence that the person has been given the appropriate level of information which they have understood. However, a valid consent process can be challenging for any medical officer or nurse managing a patient who speaks limited English.

In New South Wales consent from those who are not fluent in English must be obtained through the use of an professional interpreter.6 A consent obtained without the presence of a professional interpreter may be invalid; using a family member or a non-accredited staff member to act as an interpreter may void the criteria for a valid consent. However, there has been little exploration, in the Australian context, of the perception of non-English speaking patients' experience of consenting to a surgical procedure. Therefore the purpose of this study was to describe the perspective of Chinese speaking (non-English fluency) patients receiving information before undergoing a colorectal surgical procedure. The study also aimed to explore the how Chinese speaking inpatients perceived the information, in particular at the time of consent.

#### **METHOD**

Approval to conduct this study was obtained from the Human Research Ethics Committee 2013 (LNR/13/POWH/314) and 2019/ETH08691 All ethical procedures were adhered to.

#### Study design

This was a mixed methods study which comprised of an audit of clinical notes and a semi-structured interview. Merging of the two forms of data provides more useful and informative results.<sup>7</sup>

#### Recruitment and consent

Potential participants were identified from the daily operating room list by their Chinese derivative sounding name. All patients undergoing colorectal surgery requiring a minimum 2-night stay in hospital were identified. Two researchers who are multicultural health workers, one Mandarin and one Cantonese speaking, attended the surgical ward in which the potential participant was a patient 1 day after surgery. Only those patients who were deemed by the nurse caring for them to be well enough were approached. Patients with cognitive impairment or who were too unwell to be interviewed were excluded from this study.

At the bedside the researchers gave potential participants the translated written information. If the patient was literate, the information was left with the patient, after which the researchers answered any questions. If the patient was illiterate, the researchers read the information sheet and answered any questions. The researchers returned the next day, answered any further questions and, if the patient agreed to participate, they were asked to sign a consent form. Face validity of the translated information sheet and consent form was obtained prior to recruitment.

#### **Documentation audit**

The medical record of each consented participant was examined for completeness. Note was made of preferred language, country of birth, religion and the need for an interpreter. This information should be forwarded from the treating surgeon at the time of request for admission and entered into the patient's electronic medical file. The data contained within the electronic medical file was compared to those verbally reported to the researchers during the semi-structured interview for validation.

#### Semi-structured interviews

All of the patients' experiences were explored using a semistructured interview. Questions asked during the interview process were informed by the NSW Policy regarding working with interpreters,8 the NSW Plan for culturally and linguistically diverse communities,9 interpreter use audit results, and consumer feedback (Figure 1).

Firstly the researcher verified with the participant the information on the front admission page. This allowed for comparison with the document audit. Interview questions were asked in Mandarin or Cantonese by the bilingual researchers. All responses were then documented in traditional Chinese. All responses were then translated into English for analysis by an independent researcher.

#### Data analysis

Qualitative data underwent thematic analysis by examining for recurring words and phrases which were batched to form themes and sub-themes. Themes and sub-themes were confirmed with the co-researchers. To enable tracking of the themes and quotations a simplistic coding numbering method was used. Commonalities and difference between the themes were identified.

#### **RESULTS**

A total of 120 Chinese speaking inpatients were identified; 56 males and 61 females (the demographic data of three patients is missing). Sixty of these were recruited in 2014 and 60 in 2019. At recruitment, the average age participants was 59 years old (28-86 years old). Of these, 81 spoke Mandarin and 39 spoke Cantonese.

#### **Documentation audit**

The front admission page was checked for accuracy with the patient reported data. Accuracy of the patients' language other than English was 89.2% (n=107). Of the 120 patients, only 40% (n=48) used a professional interpreter to gain consent, 38.3% (n=46) signed the consent with a bilingual doctor and, for the other 21.7% (n=26), a family member or friend of the patient acted as the interpreter. Figure 2 depicts the consent documentation findings.

#### Semi-structured interviews

The qualitative results of the interviews yielded four main themes:

- That there was an under use of interpreters.
- That patients thought they had an obligation to get language assistance from their family/friends.
- That 'bilingual' surgeons are not always fluent.
- That the patients were unaware of free interpreter services.

#### Theme 1: Under use of interpreters

The majority of participants (94%; n=113) had not been offered the use of a healthcare interpreter by a member of the healthcare team. As a result, 53 patients (44%) reported they had not used a professional healthcare interpreter at all during their stay. Only four participants (3%) had used a professional interpreter more than three times during their pre-admission and hospitalisation. The participants perceived that staff were aware of their need for language assistance but were not offered an interpreter if staff thought there was an English-speaking family member available:

I'm aware of the free interpreter service in hospital, but 5 or 6 times I was told no interpreter available. Last time, at the preadmission, I asked for an interpreter and was told 'No' [#24: 2014].

When making the appointment, I requested an interpreter, but was told 'no' and a staff member asked my daughter to come with me [#26: 2019].

It was said on the letter from hospital, bring an English-speaking family or friend [# 53: 2019].

Patients tried their best to communicate their interpreter needs to staff. Some wrote their own key words in Chinese and had their visitors translate these into English to communicate with staff [#8, #33, #29]. Others called their children who then spoke to staff on the telephone [#27, #36, #27, #33, #58, #25]. Some

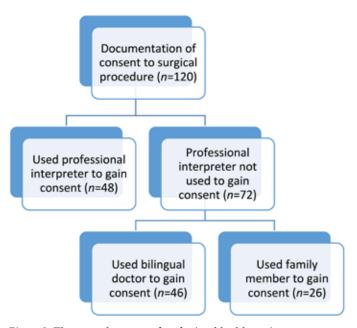


Figure 2. The use and non-use of professional healthcare interpreters to gain consent for a surgical procedure

sought help from bilingual nurses to communicate their needs [#16, #36, #38, #40, #47, #49, #52].

#### Theme 2: Language assistance from family/friends

Many participants (66.7%) used their English-speaking family members/friend as an 'interpreter' for their doctors' appointments and visits to the hospital:

As my daughter can interpret for me, I think no need for an interpreter [#25: 2014].

My daughter interprets for me every time [#44: 2014].

However, patients who were parents voiced concerns that their children were taking time from work to accompany them to their appointments or visit them in hospital. However, this group of participants perceived that they needed this support to deal with the language barrier:

My son always comes with me for appointments, he has to take time off from work, but if he can't come with me, I can't speak English so can't communicate with staff members [#33: 2014].

My daughter always interprets for me, although she is busy with work but she has to come with me [#38: 2014].

Always my daughter or brother interpret for me, they have to take time off from work [#49: 2014].

My daughter comes for all my appointments; my wife and I feel bad as she has to take time off from work [#38: 2019].

If my daughter is not with me for appointments, I feel anxious as I can't speak English. However, I'm worried she has to take time off from work [#9: 2019].

In 21.7% (n=26) of cases the patients' family or friend assisted with interpretation when visiting the surgeon. However, using a family or friend can be problematic as shown in this example:

My son, interpreted... things like taking three sachets of medication before my procedure today has been overlooked and I was told that I could not undertake the procedure today [#36: 2014].

Some patients said that even though their family members did not understand 100% of the conversation with healthcare staff, they perceived that they did not miss any important information. If they did they trusted that healthcare staff would always do the 'right thing' in some cases, reflecting the power relationship of the health professional over the patient:

It's hard to ask questions, if you don't understand medicine, you don't know how to ask questions, I believe the Doctor would look after me, I trust the Doctor 100% [#38: 2014].

I asked few questions, if I have no knowledge about this condition, how do I ask questions, I don't know what to ask? [#58: 2014].

Each time my daughter takes time off from work and accompanies me for appointment. Sometimes she doesn't understand medical terms, so she can't tell us [#34: 2019].

# Theme 3: Issues with language knowledge of 'bilingual' surgeons

In 46 cases (38%) bilingual surgeons obtained consent from patients using their Cantonese or Mandarin language. Of note, is that some patients experienced 'bilingual' surgeons who could not speak their language fluently; however, they still signed the consent form. When asked if they understood everything the surgeon explained during the consultation most participants (89.2%) answered yes. However, the level of understanding of the information that the 'bilingual' doctors gave varied greatly:

If I didn't understand, I asked questions, but felt sometimes the explanation didn't answer my questions, so I doubt about the accuracy of interpretation [#9: 2014].

Without an interpreter, I understand about 30%. But I believe the Doctor knows how to handle the risk, so I'm not worried too much [#45: 2014].

Understood 80%? If not, my husband explained for me [#11: 2014].

The interpretation was not accurate, I want to ask about the blood flow of my leg, but the answer from Dr didn't mention this [#8: 2014].

Some medical terms which I didn't understand [#43: 2014].

If I didn't understand, I asked questions, but felt sometimes the explanation didn't answer my questions, so I doubt about the accuracy of interpretation [#9: 2014].

#### Theme 4: Lack of awareness of the free interpreter service

Fourteen participants were not aware of the free interpreter services that are available in both the consulting rooms and in the hospital. Eight participants did not receive the use of an interpreter at all either before or during their hospitalisation and were unaware that they could access an interpreter. Of the 80.8% (n=97) who were aware of the free service only 40% (n=48) used an interpreter to gain consent:

Because my request of interpreter in the past has not been looked at, so I'm not confident to request in the future [#20: 2014].

#### Further improvement suggestions

Participants provided a number of comments to improve interpreter use. These included having more "long-term interpreters on site at the hospital" [#14: 2014] that provided a range of languages [#28: 2014] in particular for ward rounds [#31: 2014]. This would assist families who take time from work to interpret for their limited English-speaking family during rounds [#49: 2014, #51: 2014, #52: 2014]. Bilingual cards with Chinese/English translations [#29: 2014, #44: 2014] would also be helpful. Overall, the increased use of professional interpreters would be of great benefit to patients, family members and healthcare staff.

#### **DISCUSSION**

Significant improvement can only come from those who

- 1. Are you aware of free and confidential professional interpreter services provided in public hospital?
- 2. How were you admitted to hospital?
  - Were you referred by your GP to see the Specialist?
  - Admitted through the Emergency Department?
- 3. When making an appointment to see the Specialist, did you inform the Specialist staff that you would require a Mandarin or Cantonese interpreter?
- 4. When you signed the consent form, was a professional interpreter present?
- 5. If there was no professional interpreter present:
  - Was a phone interpreter explaining the informed consent?
  - Did your family member interpret for you?
  - Did the Doctor speak your language?
  - Was the appointment rescheduled?
- 6. Did you understand everything the Specialist explained to you during the consultation? If no, what didn't you understand?
- 7. Did you ask any questions during the consultation? If no why not?
- 8. Since your admission to hospital, has any staff member asked if you needed an interpreter?
- 9. How did you communicate with staff members when your family was not present?
- 10. How many times have you used a professional interpreter during this admission?
  - Nil, Once, Twice, Three or More than three times
- For those who had a professional interpreter what difference did it make?
- 11. Have your family members interpreted for you at medical appointments before? If yes, who interpreted for you?
- 12. Now that you know that a free interpreter service is available, are you confident asking staff members for an interpreter in the future? If no why not?
- 13. Do you have any suggestions that can help us to improve access to the interpreter services?
- 14. Any other comments about how you communicate with staff with or without a professional interpreter?

Figure 1. Interview questions in English

are responsible for gaining informed consent. These health professionals must understand and actively engage in the use of professional interpreters for an informed consent to be gained for those who do not speak English as a first language.

The overall results help to put into context an understanding of the involvement of hospitalised patients who have limited English. Although the participants of both studies were Chinese, the results can be generalised across all linguistically diverse populations, and across all facets of healthcare where there is a requirement (ethical or legal) to understand their management. Every patient must receive relevant information at key points in their hospital journey in a way that they can understand. This process is complex for those with low health literacy<sup>10</sup> but especially complex for those who have limited English. The consequences of not receiving professional interpreter access has been highlighted in a systematic review of interpreter services and the quality of healthcare.11 It showed that care is compromised when patients with limited English are not given access to interpreters, and that errors are attributed to insufficient patient language proficiency.12

This study revealed poor compliance with the interpreter use even when healthcare workers had access to a free healthcare interpreter. An example of this was that despite many patients having requested an interpreter when booking their appointment with the surgeon they did not receive one. This omission may be a result of surgeons' past experience of difficulties in accessing interpreters or the time taken to interpret aspects of the consent.

The lack of attention to patient understanding of the English language was also evidenced by the rarely completed fields of 'preferred language' and 'interpreter required' on the RFA form. It is the responsibility of the surgeon completing the consent to document on the request for admission (RFA) that an interpreter is required. This information should then be transcribed onto the front information sheet, the repository of accurate and important information for staff to refer to throughout the patient's hospital stay.

At key points during a patient's pre- and hospital stay, either family members or bilingual healthcare workers acted as the 'interpreter' to explain processes and procedures to patients. A key example is the evidence that surgeons often used their own language skills to gain consent; this is consistent with the findings of a national US study.<sup>13</sup> It was evident that sometimes the surgeon could not speak the patient's language fluently and yet the consent form was signed. There is no mechanism to ensure that the community language used by 'bilingual' healthcare workers is proficient. This finding is consistent with others<sup>14,15</sup> who also found that patients reported that the 'bilingual' healthcare workers could not always speak their language well. Thus, using 'bilingual' healthcare workers does not demonstrate the principles of informed consent or the ICN code of ethics and thus guidelines are required to address language competency of bilingual healthcare workers. While the use of the healthcare workers' language skills may be appropriate in the ordinary course of care, the surgeon must make a professional judgment on their own fluency of the patient's language if they are to use this language skill to gain informed written consent for a

procedure. <sup>13</sup> Using a teach-back method in which information is confirmed by the patient and/or the family member is a reliable technique for checking the consent content has been understood. <sup>16</sup> It was evident that some healthcare workers did not routinely check on the patient's understanding of information given as shown in previous studies. <sup>2</sup> Teach-back is an appropriate method to check understanding as patients, even with good English language skills, are often very anxious reducing their capacity to ask questions and understand medical terminology.

In the majority of situations staff members did not proactively offer an professional interpreter service to those with limited English; this is consistent with other authors. 13,14 Regular mandated audits across the state of NSW indicate that only around 43% of linguistically diverse patients receive the service of an interpreter when requested.<sup>17</sup> In fact this study showed that some patients were actively denied access to an interpreter as reported by Czapka and colleagues.<sup>18</sup> More education and information is required to ensure that all staff are aware of their obligation to this patient group; it is important to take the time and assume the responsibility to assess patients for language literacy and to initiate professional interpreters at key points during the patients' pre- and hospital stay, for example when siting patients in the pre-admission clinic for a potential stoma. Those who do receive the use of a professional interpreter often feel more satisfied with their experience than those who do not receive access.19

#### Limitations

A limitation of this study was that the participants were inpatients and so may have perceived that their answers might affect their care. However, the resources to carry out the interviews in the patients' home were not available. A further limitation was the small number of participants. Due to restricted resource allocation a larger cohort was not possible.

#### **CONCLUSION**

All healthcare staff should be encouraged to use interpreters at key points during patients' hospitalisation. As stomal therapists this is especially important as most patients are about to go through life altering surgery who will require the therapists' skill, education and support on an ongoing basis.

#### **CONFLICT OF INTEREST**

The authors declare no conflicts of interest.

#### **FUNDING**

The authors received no funding for this study.

#### **REFERENCES**

- International Council of Nurses. The ICN code of ethics for nurses. International Council of Nurses; 2012. Available from: https://www.icn.ch/sites/default/files/inline-files/2012\_ICN\_ Codeofethicsfornurses\_%20eng.pdf
- Mulsow JJ, Feeley TM, Tierney S. Beyond consent: improving understanding in surgical patients. American Journal of Surgery 2012 Jan;203(1):112–20.

- Hutson MM, Blaha JD. Patients' recall of preoperative instruction for informed consent for an operation. Journal of Bone and Joint Surgery 1991;73:160–2.
- Cartwright LA, Dumenci L, Siminoff LA, Matsuyama RK. Cancer patients' understanding of prognostic information. Journal of Cancer Education: the official journal of the American Association for Cancer Education 2014;29(2):311–7.
- 5. NSW Ministry of Health. Consent to medical and healthcare treatment manual. Sydney: NSW Ministry of Health; 2020.
- NSW Ministry of Health Integrated Care. Standard procedure for working with health care interpreters. Sydney: NSW Ministry of Health; 2006.
- Wisdom J, Creswell J. Mixed methods: integrating quantitative and qualitative data collection and analysis while studying patientcentered medical home models. In: Agency for Healthcare Research and Quality, editor. Rockville, MD: AHRQ Publications; 2013.
- 8. NSW Ministry of Health. Standard procedure for working with health care interpreters. Sydney: NSW Ministry of Health; 2017.
- NSW Ministry of Health. Health and social policy. NSW plan for healthy culturally and linguistically diverse communities 2019–2023. Sydney: NSW Ministry of Health; 2019.
- Australian Bureau of Statistics. Health literacy Australia 2006. Canberra: Australian Bureau of Statistics; 2008.

# Important information regarding the Braden Scale®

8 SEPTEMBER 2021



Many of you may be using the Braden Scale for Pressure Injury Risk Assessment in your practice. The Scale is now managed by Health Sense Ai Inc., an affiliate of HD Nursing LLC. You might recall that the Braden Scale was previously owned by Prevention Plus

LLC that was overseen by Dr Barbara Braden and Nancy Bergstrom. With this change of management, HD Nursing is now the sole licensor of the Braden Scale©, so facilities using this internationally recognised tool as well researchers and publishers will need to seek permission from the new owners. We understand that they will be releasing new educational products including a risk assessment scale specifically designed for the ICU.

Please go to www.hdnursing.com or www.bradenscale.com for more information and details.

The WCET® is also saddened to learn that Dr Barbara Braden is seriously ill. We have recorded a message of encouragement to Dr Braden which has been added to a collection of video wishes being compiled in the USA. We have also mailed a card directly to Dr Braden expressing both WCET®'s appreciation of this important scale in multiple languages as well as our concern for her during this difficult health time. Please keep her in your thoughts and prayers.

Sincerely,

Elizabeth and Laurent

Elizabeth A Ayello WCET® President 2020–2022 Laurent O Chabal

WCET® President Elect 2020-2022

- 11. Flores G. The impact of medical interpreter services on the quality of health care: a systematic review. Medical Care Research & Review 2005;62(3):255–99.
- 12. Betancourt J, Renfrew M, Green A, Rockville M. Improving patient safety systems for patients with limited English proficiency: a guide for hospitals. In: Disparities Solutions Center Mongan Institute for Health Policy at Massachusetts General Hospital and ABT Associates, editor. Rockville: Agency for Healthcare Research and Quality; 2012.
- 13. Diamond L, Wilson-Stronks A, Jacobs E. Do hospitals measure up to the national culturally and linguistically appropriate services standards? Medical Care 2010;48(12):1080–7.
- Schenker Y, Pérez-Stable E, Nickleach D, Karliner D. Patterns of interpreter use for hospitalized patients with limited English proficiency. Journal of General Internal Medicine 2011;26(7):712–7.
- 15. Wasserman M, Renfrew M, Green A, Lopez L, Tan-McGrory A, Brach C, et al. Identifying and preventing medical errors in patients with limited English proficiency: key findings and tools for the field. Journal for Health Care Quality 2014;36(3):5–16.
- 16. Kornburger C, Gibson C, Sadowski S, Maletta K, Klingbeil C. Using "teach-back" to promote a safe transition from hospital to home: an evidence-based approach to improving the discharge process. Journal of Paediatric Nursing 2013;28(3):282–91.
- 17. NSW Ministry of Health. NSW multicultural health policy and implementation plan: health for a culturally diverse community 2012–2016. Sydney: NSW Ministry of Health; 2012.
- 18. Czapka E, Gerwing J, Sagbakken M. Invisible rights: barriers and facilitators to access and use of interpreter services in health care settings by Polish migrants in Norway. Scandinavian Journal of Public Health 2019;47(7):755–64.
- 19. Juckett G, Unger K. Appropriate use of medical interpreters. American Academy of Family Physicians 2014;90(7):476–80.





Pouch security is crucial to successful stoma management, and that can be difficult, even impossible, once skin is damaged. This can occur whenever the skin is exposed to moisture and irritants, and irritant dermatitis (known as peristomal MASD) can make up to 70% of all peristomal complications, with damage ranging from mild irritation to severe erosion.





Creating a highly durable barrier<sup>5</sup> designed to hold up to corrosive irritants - even liquid stool.



Attaching to wet, weepy damaged skin <sup>4,5</sup> creating an environment that allows healing <sup>4</sup> and enables pouch adhesion.



Eliminating the need for time-consuming crusting techniques.

# Stomal therapy and the virtual hospital

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#### **ABSTRACT**

Virtual healthcare has come to prominence during the pandemic. Previously it was most commonly utilised in rural and remote settings to enable access for geographically isolated patients. This paper outlines how virtual health has been utilised within the stomal therapy department within a large metropolitan teaching hospital. The paper demonstrates how stomal therapy is a highly specialised and essential service that crosses into all types of healthcare.

Telehealth has been available in Australia for many years. It has primarily been used to enable rural and remote patients access to specialist medical and nursing care including postacute discharge follow-ups and management of chronic conditions including mental health.<sup>1,2</sup> Telehealth utilising digital technologies has come to prominence during the pandemic<sup>3</sup> in order to reduce the number of face to face medical consults<sup>4</sup> to minimise the spread of COVID-19. In the community, virtual healthcare has been utilised to monitor those in the community to reduce hospital presentations.<sup>5</sup> Health services in Australia have been quick to adopt this practice.

In response to COVID-19, Royal Prince Alfred Hospital (RPAH) in Sydney was able to establish and implement a virtual service rapidly because the service already existed in the form of a virtual hospital. RPA virtual (RPAV) manages and monitors patients in the community with chronic wounds, tuberculosis and chronic diseases. It was established in early 2020, prior to the pandemic, as an alternative, sustainable solution to an increasing demand for healthcare in Sydney. It has won multiple health awards for innovation as it acts as a bridge between hospital specialist services and patient care in the community.

At this time RPAH's virtual hospital has approximately 90 nurses engaged in the Telehealth management of those who are COVID positive in the community. There are also medical officers providing consultation and assessment services through virtual consults. RPAV also provides nursing and medical support for the nurses managing those within the special health accommodation (SHA). The patients within the accommodation are not only those arriving from overseas and completing mandatory quarantine, they are also members of the community who needed additional support or were unable to safely isolate at home. These patients are from a varied background and a high percentage do not have English as their first language. Included within these patients are those with a stoma.

RPAV receives referrals from the department of public health for patients who have been admitted to the SHA or who have had a positive COVID swab with our local health district. These patients are then called by the nurses from RPAV and a comprehensive health assessment is performed in order to complete a risk assessment. For those patients who are COVID positive, the risk assessment looks at high risk criteria such as diabetes, hypertension, age over 50 years, and current symptoms the patients are experiencing in order to plan the contact needs of the patient.

All patients isolating at home who are COVID positive are sent a portable pulse oximeter to allow for the identification of any deterioration of respiratory function. Initially, a digital temperature patch were also supplied. However, as the numbers increased, a logistical problem in providing new patches every 3 days was untenable and this was discontinued. There was also an issue with digital literacy as it involved downloading an app. Currently, we request the patients download Zoom or access it through a message with a hyperlink sent to their phone using a messaging system. Most patients are able to manage this as it is a one-click process to enable the patient and the nurse to speak face to face.

Patients who are deemed high risk are called three times per day using Zoom. This allows the nurse to visualise the patient to assess perfusion and overall wellness. Speaking to someone face to face also personalises the contact over just making a phone call. Throughout the call the nurses assess for any shortness of breath, gastrointestinal symptoms, fevers and general wellbeing. The oxygen saturations are read at rest as well as after walking on the spot for 30 seconds as a major alert for predicting deterioration is the asymptomatic fluctuations in the oxygen levels.

As well as physical assessment, the nurses ask about any problems the patients may be experiencing, and they are able to refer to other services such as psychology or food hampers as required. It was during one of these calls that a nurse identified that Mr MD was having a significant difficulty unrelated to his current COVID isolation. The following case study outlines how RPAV and the stomal therapy service combined to provide care and education to one of these patients.

#### **CASE STUDY**

Mr MD is a 66-year-old male Australian citizen. He and his wife, a Thai national, flew from Bangkok, Thailand to Sydney on 27 May 2021. During the flight, his ileostomy appliance began to leak and he and his wife were unable to manage this. He was taken from the airport to RPAH emergency department having one appliance in his possession. He had never before changed his appliance independently.

Three weeks earlier, Mr MD underwent an ultra low anterior resection on the background of colorectal cancer at a major hospital in Bangkok. His postoperative period was uncomplicated; however, the nurses changed his ileostomy appliance for him. Prior to discharge he and his wife observed the appliance changes. They were not given any literature in English or Thai and were informed that the appliance needed changing every 4–5 days.

Once home, he went to the closest hospital when the appliance was beginning to lift or was due for change, approximately 2–3 times a week. He attended the outpatient clinic where he was seen by a doctor, followed by a nurse, who attended his bag change. A fee was charged and he was given an appliance, yet remained uneducated in working toward self-care and had no information regarding obtaining supplies. Mr MD required adjuvant chemotherapy and radiotherapy which was quoted at a cost. He could not afford the treatment; therefore, they made the decision to return to Australia.

After arriving in Australia Mr MD's wife was transferred to the SHA while Mr MD was taken to the emergency department. RPAH's emergency department attempted to contact the stomal therapy department for advice and support for Mr MD; however, it was after hours and the team was not available. The colorectal ward was contacted for supplies and he was encouraged to change his appliance independently for the first time. He was then transferred to join his wife at the SHA for 14 days' isolation.

With the minimal number of stoma appliances given and the lack of confidence felt by Mr MD, RPAV sourced the stomal therapy department seeking assistance. The stomal therapy department was contacted on Day 2 of isolation and a plan of managing Mr MD was initiated. The SHA driver would pick up supplies and an education package, including ileostomy literature and a training pack, to deliver to Mr MD. A Telehealth phone consult was arranged with the patient. Mr MD was a good historian and was able help identify the appliance he had been using. Ileostomy education was given, working through the information booklet together. He was managing his stoma and not experiencing any leakage. Arrangements were made for a face to face consult once he was discharged from the SHA.

Mr MD and his wife attended the stomal therapy clinic 11 June 2021. His ileostomy was assessed and found to be healthy; however, the peristomal skin was circumferentially erythematous with denuded patches secondary to seepage of effluent under the baseplate. Mr MD had been using a flat drainable appliance since formation of the stoma. His appliance was changed to soft convexity. Information brochures were given and discussed, including care of ileostomy, eating and drinking for ileostomy, hints and tips for a faecal stoma, fluid and electrolyte management, and a rehydration solution recipe. A Medicare stoma appliance scheme and stoma association paperwork was completed. Mr MD had arranged for him and his wife to stay with his brother in regional NSW where he would have adjuvant chemotherapy. His supplies would be express posted there directly. He and his wife expressed their gratitude for the support and education they had received.

RPAV utilises the multidisciplinary team to optimise the care of patients while they are in quarantine. In this case, it enabled the stomal therapy department to provide support to a novice ostomate. Once discharged from the SHA patients are then able to have thorough assessment and planning of their ongoing care.

#### CONFLICT OF INTEREST

The authors declare no conflicts of interest. Informed consent was obtained by the patient included in this article.

#### **FUNDING**

The authors received no funding for this study.

#### **REFERENCES**

- Perkins DA, Roberts R, Sanders T, Rosen A. Far West Area Health Service mental health integration project: model for rural Australia? Australian Journal of Rural Health 2006;14(3):105–10.
- 2. Moffatt JJ, Eley DS. The reported benefits of telehealth for rural Australians. Australian Health Review: a publication of the Australian Hospital Association 2010;34(3):276–81.
- O'Brien M, McNicholas F. The use of telepsychiatry during COVID-19 and beyond. Irish Journal of Psychological Medicine 2020;37(4):250–5.
- Reicher S, Sela T, Toren O. Using Telemedicine during the COVID-19 pandemic: attitudes of adult health care consumers in Israel. Frontiers in Public Health 2021;9:653553.
- Fisk M, Livingstone A, Pit SW. Telehealth in the context of COVID-19: changing perspectives in Australia, the United Kingdom, and the United States. Journal of Medical Internet Research 2020;22(6):e19264.

## Answer to what is this?

From page 4.

The answer is a severe case of contact dermatitis.

# South Australian ostomy support groups: observations and initiatives

David Swift • Secretary, Ileostomy Association of South Australia

Over the past 2 months I've attended three regional South Australian ostomy support groups – Southern Fleurieu, Port Pirie and Yorke Peninsula. I'll be going to the metro and other regional groups over coming months. I am the Secretary of the Ileostomy Association of South Australia (IASA) and it was in this capacity that I attended the groups. I am also the Secretary of the Australian Council of Stoma Associations (ACSA). I acknowledge that the groups include ostomates from within SA and that not all the attendees are members of the association I represent.

I wanted to find out how they operate and get some firsthand feedback from those who attend. Already, there are some common themes emerging. Here's some of my observations:

- Most members attend as couples, either with a partner or a
  friend. It is clear that for them a stoma is a shared experience.
  They are both involved with managing life with a stoma,
  changing products, doing the ordering, and fully supporting
  each other no matter what situations arise. Above all they
  are accepting of their circumstances and incredibly positive
  about life.
- Those who attend as singles clearly enjoy the camaraderie
  of being with others in similar situations. They openly talk
  to people they have only met via the support group; it offers
  them a sense of mutual support they otherwise wouldn't
  have access to.
- Some meetings are highly structured, others are very informal. Either way, everyone gets the chance to tell a story, ask a question or hear a solution for a problem that someone has creatively solved. Again, I am amazed at the collective positivity and support that flows across the room.
- So the first big plus is that, for those who attend, they see these groups as being important in their lives. They get reassurance that they are not the only people in their community with a stoma. In fact, some who have had a reversal still attend so they can help support others. The organisers also maintain a communication network amongst the attendees letting them know about next meetings, invited guests and local stoma-related news.
- The second big obvious plus is the huge respect they have in their local communities for the STN. Without fail, they talked in glowing terms about initially not knowing there was a STN to talk to, then making contact and finding out that some difficulties they were having could be fixed with a different appliance (or similar), then maintaining an ongoing relationship and praising the accessibility they had to their local STN. Many stated they never knew there was an afteroperation support in the form of a STN.
- Public toilets got raised regularly in regard to the difficulties for ostomates. I won't go into much detail about this other

than to say there are improvements that can be made.

- Ostomy Australia Journal. Everyone spoke about how much they liked the magazine and they saw it as a great source of relevant information. However, not every member receives a copy and they would really like to see a process that ensures one is sent to every member. Even the STNs said they don't get a copy and rely on a member mentioning something to them that was in the latest edition.
- Those who have used the IASA website like how easy it is to do their ordering now. They like the reassurance of the immediate feedback (email) about what they have ordered. Some are not computer literate and will still order the old way, but some are going to get their son/daughter to do it for them online.
- There was a comment about the minimum postage fee, \$15, being too much when they only wanted to order something like two small sprays or some seals. They wondered if there was a cheaper way to deal with very small postal orders.
- There was a general consensus that once they had their operation and were 'bagged' up and given a few bags to take with them from the hospital, they were on their own. They knew that they had been joined up to an association that they could order more products from, but that was it. They didn't know if what they continued to order were the right products, they didn't know STNs existed other than the one they saw in the hospital, they assumed the organisations they ordered from weren't there to provide them with any advice, and they generally felt very much on their own.
- An indigenous woman at one of the meetings explained that there are a growing number of indigenous people having stomas and they are very reluctant to talk about their situation with others. They are culturally embarrassed and are very reluctant to seek any help or support no matter how bad their problem has become.

I am thoroughly enjoying the opportunity to meet and talk with the people who attend. They all had stories to tell and I genuinely felt that they enjoyed the chance to meet and talk with me and my wife who is also travelling with me to the groups.

I am incredibly impressed with the organising of these meetings, of the friendships that have been built amongst previous strangers, about the willingness to support each other, and the overall positive attitudes of ostomates and their partners/carers/friends.

Travelling to the regional support groups has highlighted that we need more of these elsewhere across the State. It has also provided me with first-hand feedback on things that are working well and on initiatives where things could be improved.

# **AASTN** website report

Michelle Carr • Chairperson AASTN Education and Professional Development Sub-Committee

The new AASTN website is almost ready to go live! Thank you to our website manager Phil Morton and our previous AASTN website coordinator Renee Matthews for all their hard work in redesigning and updating our website. Thank you also to the clinicians who have reviewed the website content to ensure the new website is user friendly, contemporary and as accurate as possible. We are looking forward to the launch.

Our website continues to be a well-utilised resource. In the period January – June 2021, there were about 18,000 individual (unique) visits made to the website (Figure 1). Of these, there were approximately 10,000 new visitors, while nearly 3,000 people made multiple return visits to the site. Australians made 11,000 of the visits to the website, with people from China and USA making about another 1,000 visits each; India, UK, Germany, South Africa, Brazil, Nigeria and other non-specified countries made an additional 4,400 visits. Making our new website mobile friendly has been a priority as an increasing number of visits are made from mobile devices; two thirds of visits were made from a computer and one third of visits were accessed by a mobile phone.

While currently the focus of our work is on translating the old website over to the new website, the modernisation of the AASTN website is just the beginning. I am keen to add additional content and am seeking your opinion on what you would like to have available to make this site functional, useful and engaging. Think big, as almost anything is possible in the virtual world! What do you imagine could be in the password-protected area of the members' area?

I would also like to see each state have a dedicated page that is expanded to be more than just a calendar of events. We have the opportunity to make this a dynamic and interactive hub for whatever is going to be useful for the individual state's members. I have asked each of the state branches to consider what could be on their webpage and to discuss with their branch members what they would find useful to be on that page, e.g. links to local events, links to scholarships, photos of branch activities, spotlights on influential/active members of your branch etc. I have also asked each state branch to provide a photo and a short bio of the branch committee executives so that members can put a face to the name and know a little about who is representing them.

If you have any other ideas, I would love to hear them or share them with your state branches. Stay safe.

Michelle Carr AASTN Website Coordinator

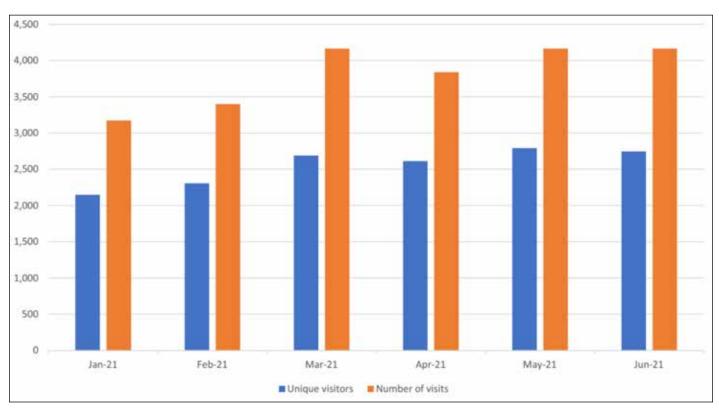


Figure 1. AASTN website visitors per month

#### Tasmania

I think we all hoped this year would be better, but 2021 is no better than 2020. We are lucky here in Tasmania to be COVIDfree at the time I write this. Our government reminds us every day it is probably just a matter of time until the Delta variant is in our state too. Our thoughts are with our colleagues on the mainland that are dealing with lockdowns.

Teams meetings are keeping our members in contact regularly. We have had lots of opportunities for online education. We have been very lucky to have some get-togethers for education which has felt like a luxury with the way the world is currently. It has been particularly great for Tasmanian ostomates who have been able to attend support group meetings once again throughout the State.





Tess Bond's stand and cupcakes for Stomal Therapy Week.

Thank you to Tess Bonde who shared a couple of photos from Stomal Therapy Week.

Another short and sweet report. On behalf of all Tasmanian STNs, we send our regards

**Andrea Hicks Tasmanian Branch President** 

#### **New South Wales**

Despite COVID, NSW has been very busy over the past few months promoting awareness and providing education on stomal therapy. We were able to celebrate Stomal Therapy Awareness Week which culminated in a very successful, informative, well-attended study day in Sydney. A report by Carol Stott was published in our last journal; however, I would like to acknowledge the organisational team of Carol Stott, Julia Kittsha, Lisa Graaf, Helen Richards and Donna Heggie. They managed to arrange and hold this professional event for over 80 delegates just before the recent lockdown occurred in Sydney. Well done team.

We have continued to meet bimonthly via GoTo but will be moving to Zoom meetings along with all the other states. Vicki Patton presented the results of a study on *Ordering practices of ostomates* which generated much discussion. Jenny O'Donnell presented an educational session *The Nubbin,* relating to a peristomal skin injury and its treatment. NSW STNs and our associations continue to provide support to ostomates both online and face to face when we are able. There is also a strong commitment to the education of nursing staff and the public in relation to stomal therapy.

The following reports have been sent in from our colleagues.

#### **RNS HOSPITAL**

#### Rachel Hodgkins

To raise awareness for Bowel Cancer Awareness Month and Stomal Therapy Nurses Week, Ward 8B organised a fundraising event on Tuesday 15 June 2021. Ward 8B at Royal North Shore Hospital is a gastroenterology, upper GI and colorectal surgery ward that provides care for patients with various surgical and medical conditions including bowel cancer. The nursing staff raised awareness of Australia's second deadliest cancer and fundraised for the leading community-funded charity, Bowel Cancer Australia, which is dedicated to prevention, early diagnosis, research, quality treatment and the best care for everyone affected by bowel cancer. There were displays of education booklets and fact sheets for visitors, patients and staff to see. Baked goods were provided by the ward nursing staff and included poo emoji cupcakes, cookies with "We give a crap" stamp, Krispy Kreme donuts with raspberry jelly to imitate a stoma, high fibre sultana bran loaf / date slices and more. The bestselling cupcakes were the Bristol Stool Chart cupcakes displaying all types of bowel motions, with Type 3 being the most popular. There were also Bowel Cancer Awareness ribbons and wristlets and raffle tickets for everyone to have a chance to win a variety of hamper boxes full of goodies, including Who gives a crap toilet roll. Baskets full of red apples were also for sale but unfortunately they weren't as popular as the baked goods. The bake stall and raffle ticket sale were very successful and we raised more than \$2100. All funds were donated to Bowel Cancer Australia to support them and show our appreciation to their commitment in raising awareness of bowel cancer in Australia.

#### STOMAL THERAPY WEEK IN THE ILLAWARRA

Julia Kittsha, Helen Richards and Sam Lawrie

Stomal therapy awareness was raised in several ways by stomal therapy nurses in the Illawarra. It was hard to miss with the decorations on the colorectal ward! Bold red Tshirts conveyed the message clearly, with many staff asking about stomas as we went about our work in the hospital and others wishing us a 'happy stomal therapy week'. Brown food day was held on the colorectal ward which saw tempting treats including stoma cakes and cookies with stomas.

The Illawarra ostomy support group saw Helen, Sam and Julia wearing their new Tshirts while we supported our community of ostomates. A raffle conducted by one of the members raised \$1097 for Ostomy NSW, a massive effort by support group





Jenny O'Donnell from John Hunter Hospital and her Stomal Therapy Awareness Week display

member Jacky Carusi organising prizes and selling tickets over the preceding months. The money was received by Ian Kerr, longtime group member and Board member of ONL.

The week ended with a joint venture of a study day in Sydney which is reported on in this journal by Carol Stott.

#### **BOWEL CANCER AWARENESS**

June is bowel cancer awareness month; 296 Australians were diagnosed with bowel cancer this week (15,352 people a year). Stoma nurses Julia and Sam did their bit in raising awareness among staff of Australia's second deadliest cancer. Sam raised funds for the leading community-funded charity, Bowel Cancer Australia, by running a half marathon. She says, "After 15 years of caring for patients with bowel cancer I am inspired by their courage, taking on the tough challenges they face. This will be my first half marathon and I know it will be hard but nothing compared to what our incredible patients tackle". Julia was spotted wearing her fancy 'bum pants' around the hospital. Staff reported they have, or know someone in their family who has not done their 'poo test' to screen for blood in their stool, proving that the pants are working as a timely reminder.



Royal North Shore Hospital's Stomal Therapy Awareness Week display and cookies

#### **JHH NEWCASTLE**

Karen Cole and Jenny O'Donnell

For the month of June we ran a Stomal Therapy Roadshow. This involved education for hospital staff on basic stoma care each Friday afternoon in four different locations. Afternoon tea and information was provided by a different company rep each week. Our aim was to raise awareness of stoma care and reduce confusion regarding the multitude of different products etc available. Feedback on the sessions was positive and we were able to reach a good number of staff over three different hospitals.

In other news, Jane Kulas has commenced in the position CNS2 stomal therapy and complex wound management at Grafton Base Hospital, and we welcomed a new student member, Holly Ravenscroft.

May you all stay safe and continue to have the strength to face each day and the uncertainty that COVID brings.

Take care Karen Cole





Rachel Hodgkins, Amanda Kelly and Hanna (Boh-Yong) Chun

#### Queensland

I would like to say a big hello from the new Executive in Queensland. We are very much dedicated to keeping the branch prospering. As the saying goes; we have big shoes to fill and thank the outgoing executive for their support through the hiccups of transition time as well as the members for their patience!

This is why we do it. Last week I had the privilege to assist a sprightly young 87-year-old gentleman visiting from interstate (a long visit). He had run out of bags while in our hospital for a procedure. With a few questions (he didn't know the bag his stoma nurse recommended but it worked), I was able to produce

the exact bag. He was so happy. He said "You girls [sorry guys – his words] are the best. I don't know what it is but your group all have an extra special care for your patients". What a wonderful end to the week. I consider myself very lucky to be part of this dedicated group of stoma nurses.

News from around the ridges... to celebrate Stomal Therapy Awareness Week / Bowel Cancer Week, Toowomba had a great week with fun workstations, a bake sale and patients telling their stories. Mackay is having an Ostomy Awareness Day on 1 October 2021. Luke Escombe is to be their keynote speaker. The event is being organised by Jenny Richards, Mackay Base Hospital, and Sandra Pascual Ortiz, Mackay Base, with Dr Graham Stabler from the Mackay Ostomy Support Group. Reports are it was a huge success in 2019 so am sure this year's will be as well. If members have any news or upcoming events, please share.

In Queensland committee news, our branch meetings/education sessions will be held quarterly on a Tuesday for the next year due to the study commitments of some of the executive. We are keen to have as many clinicians attend our meetings/education sessions as possible and will be asking the membership what time of the day suits them best. Please keep an eye out for our upcoming survey monkey; we want your opinion. All branch meetings/education sessions will be via Zoom. Education sessions will also be included with all upcoming branch meetings:

- Tuesday 5 October 2021 Paediatric stomas and securing clinician funding
- Tuesday 18 January 2022 Peristomal dermatology
- Tuesday 5 April 2022 AGM and *Pharmacology considerations* with stomas

We have a new generic email aastnqsecretary@gmail.com. We ask that all correspondence relating to AASTN Queensland Branch matters be directed through the new generic email address above. Please check your email spam folders for emails from our new generic email account as some systems will not allow gmail past their firewalls (mark as not spam so will appear in your in-box). We are also asking for ideas from members about what they would like to see on the Queensland page on the AASTN website – please email our Queensland secretary at the same address aastnqsecretary@gmail.com

As we are a large state we encourage members to get together in local 'hubs' for the meetings/education sessions – there will be one at the Sunshine Coast University Hospital if anyone would like to join us or create your own with stoma nurses from your local area. What a great way to strengthen the connections between local members of community and hospital services who often share common patients; getting a shared vision while enjoying education and a pizza.

Please stay safe during these crazy times! Our hearts are with those on the front line wherever you are!

Henrietta Martin AASTN Queensland President



To celebrate Stomal Therapy / Bowel cancer week



Towoomba patients telling their stories



QLD display



QLD patients get together for stomal therapy week



St Vincents in Brisbane mada avatars of themselves to celebrate



St Vincents Private in Bribane

#### Western Australia

Greetings from what is currently a very damp WA, having the highest rainfall recorded in 20 years!

With the ups and downs and unknowns of COVID we were fortunate to be able to run our study day Gut instinct on 29 May. There was a terrific turn out of over 50 participants and we were supported by various trade. Topics included the management of sarcoma, IBD, Pyoderma gangrenosum and sexual health. We were also fortunate to hear from two ostomates sharing their powerful experiences of life with IBD, living with a stoma and stoma reversal. This was a very successful half day with plenty of discussion, networking and positive feedback.

The 18 WA graduate certificate WOC nurses have been able to finish the first semester clinical practice despite the lockdowns. The five interstate students have had some challenges meeting this; however, there are plans for health agencies in Victoria, NSW and Queensland to accommodate them.



Presenter at GUT instinct WA





Education day had a some interesting speakers in WA



Ostomy on display in WA

We would like to farewell Bronwyn from Dansac who has supported the ostomy community for many years and also a fond farewell to Myra who has been with Omnigon for 15 years. Both have been integral members of the ostomy family in WA for many years. We wish them well and welcome their successors.

Finally, work is in progress for the joint conference with APETNA in April 2023 in Fremantle WA. The scientific and social committees are hard at work in developing a comprehensive and engaging program and hope that you will be able to join us either in person or virtually.

Shareen

# Making Secure Fit Easy



Case Study

#### **Abstract**

Achieving a secure, reliable and leakproof fit is one of the hallmarks of caring for a patient with a stoma. Failure to achieve this can negatively impact peristomal skin and the patient's quality of life (QOL). However, clinicians may need to also consider the simplicity of the pouching system application to ensure the patient achieves positive outcomes in skin health. Some patients rely on others to manage their pouching system, or in some cases have to adapt to new techniques of application. This case study discusses one such patient where a simplified fit for his pouching system was essential.

#### **Background & Surgical History**

Michael (name changed to protect privacy) is a sixty-one-year-old male living with Cystic Fibrosis (CF), and a previous brain tumour resulting in a left-sided deficit, who resides in a nursing home. He requires assistance with his activities of daily living, especially with his left hand, and was admitted to hospital with suspected pseudo bowel obstructions twice within the space of a month and was eventually found to have a sigmoid volvulus causing him pain, bowel obstruction, and constipation. He underwent urgent surgery for the volvulus and a laparoscopic loop colostomy was fashioned to divert the faecal stream from the affected area.

Post-operatively, Michael's stoma was red, warm and functioning, with the initial output being fairly loose. It was 38mm in size, and oedematous, and his peristomal skin was intact. (See Figure 1) His stoma was well spouted, but it was anticipated that this would change as the post-operative swelling reduced.<sup>2</sup> In discussions with both Michael's family and the nursing home, the easiest possible set up was requested, as there was no other resident at the facility with a stoma, and the staff expressed some concerns about looking after his pouching system.

#### **Nursing Interventions**

Initially, a Hollister New Image™ two-piece skin barrier, that was cut-to-fit and flat, was used with an Adapt CeraRing™ barrier ring for additional protection, and a drainable pouch while the output was loose. Staff at the nursing home also stated they would prefer a transparent drainable bag from the beginning while they became familiar in caring for his stoma, and they would evaluate closed pouches at a later date once the output was more consistent and routine. The liquid output caused the seal to swell through the front of the pouch and was visible through the transparent pouch. (See Figure 2) However, knowing there would be some changes in his stoma size, and that a more secure fit with fewer steps was needed, a proactive decision was made in order to ensure Michael's system was as easy and straightforward as possible. Instead of a flat base and seal, a Hollister two-piece soft-convex skin barrier was determined as a better alternative. (See Figure 3) Staff needed to become more confident in their care and to help minimise the chance of errors this system was chosen for its overall simplicity of application and use.



**Figure 1** Post-operative stoma with some oedema



**Figure 2** New Image flat skin barrier. Note the swelling of the seal through the barrier opening



Figure 3 Hollister New Image two-piece soft convex pouching system

# Making Secure Fit Easy

Liz Meakin RN STN

Clinical Nurse Consultant Stomal Therapy

Epworth Eastern, VIC, Australia

#### **Outcomes**

The pouching system sat 'perfectly' on his abdomen, was secure around his stoma, fitted well, and only basic cutting to size steps were involved. (See Figures 4&5) The skin barrier is routinely changed each Monday and Thursday, and the pouch as required (generally every couple of days). The skin barrier would swell in the presence of fluid and could be seen absorbing the output through the front of the transparent pouch. The staff have found this set up easy and have expressed greater confidence as a result. The family are very happy as they were worried this could be a difficult scenario in the nursing home and have stated it is actually much better now than it was previously.

#### Conclusion

As an experienced Stomal Therapy Nurse, this case really highlights the importance of using ostomy pouching systems that are functionally appropriate in terms of a secure and reliable fit, and also easy to manage not only for patients, but often others. Being able to instill confidence in Michael's carers to manage his system also engendered greater faith from his loved ones that he was receiving the best of care.



**Figure 4** New Image soft convex skin barrier newly applied



**Figure 5** New Image transparent drainable pouch applied

#### References

- 1. Hoeflok, J & Purnell, P 2017, 'Understanding the role of convex skin barriers in ostomy care', Nursing 2017, vol. 47, no. 9, pp. 51-56.
- 2. AASTN Clinical Guidelines; Stomal Therapy Nursing Practice 2013, 'Oedematous Stoma Management', p. 15.

Prior to use, be sure to read the Instructions for Use for information regarding Intended Use, Contraindications, Warnings, Precautions, and Instructions.

Disclaimer: This case study represents this nurse's experience in using the Hollister New Image soft convex pouching system with the named patient, the exact results and experience will be unique and individual to each person.

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<sup>1</sup>Maria Teresa Szewczyk, MD, PhD; Grazyna Majewska, RN, ETN; Mary V. Cabral, MS, FNP-BC, CWOCN-AP; and Karin Holzel-Piontek, RN; The Effects of Using a Moldable Skin Barrier on Peristomal Skin Condition in Persons with an Ostomy: Results of a Prospective, Observational, Multinational Study, Ostomy Wound Management 2014;60(12):16–26.