



Manual of **Perioperative Care**

An Essential Guide

Edited by Kate Woodhead and Lesley Fudge



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Kate Woodhead RGN DMS

Lesley Fudge MSc BA(Hons) RGN

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Contents

About the Editors	viii
Contributors	ix
Foreword 1 Jane H. Reid	xv
Foreword 2 Professor Lord Ara Darzi	xvii
Section 1 Foundation for Safe Perioperative Care	1
1 The Context of Perioperative Care <i>Kate Woodhead and Lesley Fudge</i>	3
2 Preoperative Assessment <i>Jane Jackson</i>	11
3 Communication <i>Libby Campbell</i>	23
4 The Perioperative Environment <i>Hazel Parkinson</i>	33
Section 2 Infection Prevention in Perioperative Care	41
5 Infection Prevention <i>Martin Kiernan</i>	43
6 Introduction to Decontamination and Sterilisation <i>Wayne Spencer</i>	56
7 Wound Healing and Surgical Site Infection <i>Melissa Rochon</i>	70
Section 3 Patient Safety and Managing Risks in Perioperative Care	83
8 Preoperative Care <i>Mark Radford and Ross Palmer</i>	85
9 Anaesthetic Care <i>Russell Chilton and Ross Thompson</i>	101
10 Medicines Management <i>Joanne Dickson</i>	117
11 Fluid Replacement and Blood Transfusion <i>Fiona Martin</i>	127

12	Intraoperative Care <i>Paul Rawling</i>	135
13	Safer Moving and Handling and Patient Positioning <i>Susan Pirie</i>	141
14	Pressure Area Care and Tissue Viability <i>Zena Moore</i>	151
15	Thermoregulation <i>Eileen Scott</i>	157
16	Venous Thrombosis Prophylaxis <i>Sue Bacon</i>	163
17	Care of Surgical Instruments <i>Jane Smith</i>	171
18	Swab and Instrument Count <i>Diane Gilmour</i>	177
19	Care of Specimens <i>Rosanne Macqueen</i>	184
20	Managing High-Risk Equipment <i>Chris Earl</i>	190
21	Medical Imaging and Radiation <i>Johnathan Hewis and Sarah Naylor</i>	203
22	Death in the Perioperative Environment <i>Kevin Henshaw</i>	213
23	Postoperative Care <i>Pat Smedley and Natalie Quine</i>	219
24	Pain Management <i>Felicia Cox</i>	239
	Section 4 Different Patient Care Groups	253
25	Neonatal Surgery <i>Helen Carter</i>	255
26	Paediatric Surgery <i>Helen Carter</i>	263
27	Care of the Adolescent in Surgery <i>Liz McArthur</i>	271
28	Care of the Elderly Patient <i>Rita Hebir</i>	279

29	Bariatric Surgery <i>Saheba Iacofano</i>	285
30	Perioperative Care of the Pregnant Woman <i>Adrienne Montgomery</i>	293
	Section 5 Different Approaches to Surgery	299
31	Key Principles of Laparoscopic Surgery <i>Joanne Johnson</i>	301
32	Key Principles of Endoscopic Surgery <i>Louise Wall</i>	308
	Index	320

About the Editors

Kate Woodhead RGN, DMS

Kate qualified as a nurse in London in late 1970s. After she had undertaken her specialist perioperative qualification, she travelled and worked in Australia for two years. She progressed into theatre leadership at The Radcliffe Infirmary Oxford in 1986. She left the National Health Service in 1998. Kate now runs her own healthcare consultancy business, specialising in the perioperative field.

She is a former President of the International Federation of Perioperative Nurses (2002–2006), and between 1998 and 2001 served as Chair of the National Association of Theatre Nurses (now the Association for Perioperative Practice).

She has recently been involved as a temporary advisor with WHO Patient Safety Global Challenge 'Safe Surgery Saves Lives'.

In her spare time, she is Chairman of Friends of African Nursing, which has been delivering perioperative workshops in Africa since 2001, in conjunction with Ministries of Health.

Lesley Fudge MSc, BA(Hons), RGN

The majority of Lesley's career has been spent in theatres, with a short spell in the community. Lesley was Theatre Manager at Frenchay Hospital in Bristol with a clinical background in plastic and reconstructive and neurosurgery. She then became one of the first procurement nurses in the UK and her final NHS post was as Head of Clinical Purchasing for three major Trusts.

Lesley became an independent consultant in 2003 and links with a large range of clients.

She is a past National Secretary of the Association for Perioperative Practitioners (AfPP) (formerly NATN) and is the Vice Chairman of the Latex Allergy Support Group. She was also a co-founder and past CEO of Friends of African Nursing and served as Treasurer of the International Federation of Perioperative Nurses. Lesley has a BA(Hons) degree in Philosophy and Art and a Master of Science degree in Biomedical Ethics and Healthcare Law.

Contributors

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Sue trained at St Thomas's Hospital in London 1972 followed by midwifery training at Queen Charlotte's Hospital in 1976. She holds a Diploma in Health Studies from York University 2010 and was a specialist nurse in thrombosis in Scarborough from 2005 to 2009, when she moved to North Bristol NHS as a specialist nurse in 2009, her current role. Sue is a member of the steering group of the UK Thromboprophylaxis Forum and is a previous member of the VERITY steering group on thromboembolism.

Libby Campbell OBE, MPhil, MSc, RN, RM

After specialising in operating theatre nursing, Libby pursued a career in NHS management and leadership, holding various operational and strategic posts, most recently, as Director of Nursing for Acute Services in Lothian based at the Royal Infirmary of Edinburgh. Previously National Chairman of NATN (now the Association for Perioperative Practitioners), she has been a motivational speaker, has published work on leadership, communication and legal issues and completed a Master of Philosophy in Medical Law and Ethics in 2007. Libby has now retired from full-time NHS practice and is working on a consultancy basis on legal and health-related projects.

Helen Carter RSCN/RGN

Helen trained at Great Ormond Street Hospital, London and the Royal Berkshire Hospital, Reading and has over 20 years of paediatric theatre experience. For the past five years she has worked as a paediatric surgical care practitioner at the Leeds Teaching Hospitals following training at Manchester University.

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Felicia Cox MSc, RN

Felicia is the lead Pain Management Nurse Specialist at Royal Brompton & Harefield NHS Foundation Trust. She is regularly invited to write and speak on pain and is the Editor of the *British Journal of Pain* for the British Pain Society and has a seat on the RCN Pain and Palliative Care Steering Group.

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Lead Nurse – eMedicines, Leeds Teaching Hospitals NHS Trust. Jo has had a varied career in adult nursing, including working in general and neurosurgery, and as a pain management nurse specialist. She now works as a medicines management nurse, leading on electronic prescribing and medicines administration, as well as continuing to support non-medical prescribers in a large acute teaching hospital trust.

Chris Earl RGN, ENB176 and 998, ENB N77 & D10 (SCP qualification), MSc (Cardiff) Advanced Surgical Practice, BA(Hons) Humanities and Classical Studies

Chris trained in 1987 and worked in theatres until training as a surgical care practitioner in 2001, working mainly in trauma and emergency theatres. He worked as a surgical care practitioner in the renal transplant unit at Manchester Royal Infirmary 2002–2012 and recently emigrated to Queensland, Australia to work as a clinical nurse in theatres at Mt Isa Hospital. Chris served as a Nursing Officer (Major) in the TA medical services, having been commissioned since 1992.

Diane Gilmour RN, PGCEA, BN, DANS, Diploma in Infection Control Nursing, ENB 176

Diane was President of AfPP 2009–2010 and has had an extensive portfolio of roles within the perioperative environment over 25 years, including those in practice development, education, managerial as well as having led key projects in this area. Diane has published and presented nationally and internationally and is now involved in commissioning services for patients in the community and primary care.

Rita Hehir RN, RM, BA(Hons) Health and Nursing studies. MA. Sociology and Social Policy

Programme Leader Operating Department, Edge Hill University, Ormskirk. Rita has a special interest in social policy, social inclusion and discrimination in healthcare settings. She is currently researching the transition in the gender make-up of operating department practitioners, which is perceived as a 'male' role to the present recruitment trends which indicate a bias towards females.

Kevin Henshaw BSc(Hons), PGCHETL, Cert Ed RODP

Kevin has been a senior lecturer in operating department practitioner (ODP) education at the Faculty of Health and Social Care at Edge Hill University for five years and previously worked as an ODP at the Walton Centre for Neurology and Neurosurgery (WCNN) Liverpool for 12 years. He spent two years working as an anaesthetic technician at the Rhyiad al Kharj (RKH) Military Hospital in Saudi Arabia and was actively involved in brainstem testing at RKH and taking part in many organ donations at the WCNN. These experiences helped to raise his awareness of some of the differences in cultural attitudes when dealing with perioperative deaths.

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Saheba Iacifano RGN, MBA, Oncology Cert

Saheba has extensive knowledge and experience as a clinical lead in operating theatres, endoscopy and ambulatory care, where she has project managed new builds and development of new services. As the Surgical Services and Decontamination Lead for 13 years at the Princess Grace Hospital, which is part of HCA International, she was involved in developing and managing bariatric surgery within the independent sector, covering all aspects of care pathways. Her role at HCA International – London included being the designated Lead for Human Tissue Authority and Decontamination for which she has ISO 13485 Leaders' training. Saheba also has expertise and interest in change

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Jane Jackson SRN, MPhil, MCGI

Immediate Past Chair Preoperative Association and Consultant Nurse Preoperative Assessment, West Hertfordshire NHS Trust. Jane qualified in 1980 from SRN training at University College Hospital, London and has since worked in the field of surgery – both within acute and elective ward areas as well as intensive care. Jane is passionate about patient preparation as being an essential element in safe admission for elective surgery, creating this as a service in 1993, working with the inter-professional team to create a service that provides patient preparation, including health education, for every patient prior to admission. Jane works with the Department of Health operational board on Patient Reported Outcome Measures and the Enhanced Recovery programme.

Joanne Johnson EN, RN, Dip ENB 176, BA(Hons), PG Cert Ed

Leeds Institute for Skills Training and Assessment, Leeds Teaching Hospitals NHS Trust. Joanne has worked in the perioperative environment since qualifying in 1985. In 1991 she moved to the Leeds Teaching Hospital NHS Trust, where she specialised in upper gastrointestinal and colorectal surgery (laparoscopic and open). She currently manages LISTA, the Leeds Institute for Skills Training and Assessment.

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Martin is Nurse Consultant, Infection Prevention at Southport and Ormskirk NHS Trust. He has worked in the field of infection prevention and control for 22 years in a variety of settings. Martin is a member of the Department of Health Expert Advisory Committee on Antimicrobial Resistance and Healthcare-associated Infection and is a past President of the Infection Prevention Society.

Liz McArthur RSCN, Dip Paediatric Pain Management, BSc Advanced Nursing, MSc Pain Management, Extended and supplementary Prescribing, Paediatric clinical examination

Liz trained in Edinburgh and initially worked in burns and plastic surgery, which awakened her interest in pain management. This led to her most recent post from which she has now retired as a clinical nurse in pain and sedation at the Royal Liverpool Children's NHS Trust. For many years running alongside this work was a project looking at how to gain the views and experiences of children and young people in the healthcare setting. This work has been facilitated with experts such as the Children's Society and Investing in Children.

Rosanne Macqueen RGN, BN Pg Cert THE

Rosie has recently taken up a post at NHS Greater Glasgow and Clyde as Patient Safety Programme Coordinator. This position is linked to emergency care and medical services as well as regional services. Her role is designed to help deliver the Scottish Patient Safety Programme. She holds Chairmanship of the Royal College of Nursing Perioperative Forum and within AfPP holds positions on the governance committee, education and research group and is Educational Lead for the regional team in East of Scotland. Rosie is a reviewer for the *Journal of Perioperative Practice* and for the RCN's *Nursing Standard*. She has 12 years of perioperative experience.

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Zena is a registered nurse from Dublin, Ireland, and has worked as a lecturer in wound healing and tissue repair and research methodologies at the Royal College of Surgeons in Ireland since 2002. She has undertaken a number of systematic reviews with the Cochrane wounds group and the Cochrane renal group and has also published over 70 articles and book chapters. She has over 20 years of clinical experience in the field of tissue viability, where her research focus is specifically on pressure ulcer prevention and management.

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Sarah is a senior lecturer at Sheffield Hallam University. She has been a diagnostic radiographer for over 25 years, working in various teaching, management and advanced practice roles. Sarah currently teaches on a variety of undergraduate and post graduate modules. Her previous teaching experience at post graduate level was at the Nottingham International Breast Education Centre and at National Vocational Qualification level for assistant practitioners at Nottingham City Hospital. Advanced practice interests have been in breast cancer diagnosis and bladder pressure studies.

Ross Palmer RGN, BSc(Hons) in Nursing Studies

Modern Matron for Trauma and Orthopaedics, UHCW NHS Trust. Ross is currently studying for an MSc in Advancing Healthcare Practice. He has 16 years' experience working in vascular, colorectal, general surgery and trauma and orthopaedics.

Hazel Parkinson RGN, BSc(Hons), MSc

Hazel trained at the Queen Elizabeth Hospital in Birmingham and has over 20 years' experience of the perioperative environment. For the past 10 years she has been Professional Development Practitioner for Operating Theatres across the Leeds Teaching Hospitals NHS Trust, responsible for the education and training of all perioperative staff.

Susan Pirie RGN, MA in Healthcare Ethics and Law

Susan is an experienced nurse with over 20 years' experience in perioperative practice in many specialities, in both the private sector and the NHS. She is a published author on the importance of safe patient positioning in relation to the safety of the patient and staff, and currently developing a bespoke manual handling course for theatre staff. She is currently a Practice Educator at Surrey and Sussex Healthcare NHS Trust.

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Melissa has worked for many years as a clinical nurse specialist in surveillance for the Royal Brompton and Harefield NHS Foundation Trust. Current projects include developing surveillance for wound infections in implant devices (pacemakers, internal cardiac defibrillators and loop systems) and maintaining surgical site infection reporting as a quality indicator for the Trust.

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Pat Smedley MSc Nursing, BA(Hons), RGN, RN, PGCE

Pat is an independent consultant in post-anaesthetic care, with many years of practical experience in this speciality. Until recently Pat was Senior Lecturer in Perioperative Care at Kingston University. Currently she is President of the British Anaesthetic and Recovery Nurses Association and has worked to raise the profile and knowledge base of post-anaesthetic care nursing in the UK for over 20 years.

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Wayne is an independent decontamination consultant based in the UK. He is also an Authorising Engineer (Decontamination), a UK-specific role for independent review of decontamination validation processes. Wayne worked for the Department of Health as a technical advisor until 2005 and chaired the department's decontamination investment process that delivered £90 million to the NHS.

Ross Thompson Dip HE, ODP, Cert Ed

Resuscitation Officer, Royal Devon & Exeter NHS Foundation Trust. Ross has worked in the NHS for over 17 years, across community services and critical care. Has spent six years within NHS education and training, with a paper published in *CODP Journal*

'The Technic'. Ross believes in expanding the career options for all health practitioners and developing transferable skills.

Louise Wall RGN

Louise is an independent nurse practitioner in upper and lower endoscopy and is facilitator for the Gastrointestinal Endoscopy for Nurses (GIN) programme for North Bristol NHS Trust. Having worked in theatres and endoscopy from 1985 to 1998, she then moved to endoscopy full time as a clinical nurse manager. She completed upper and lower nurse endoscopist training in 2001.

Foreword 1

Perioperative practice unifies the many disciplines that work toward the assurance of good clinical outcomes and patient safety in operating rooms of inpatient and ambulatory services, providing elective, urgent and emergency surgery. Surgical suites are unquestionably exciting, energy charged and stimulating environments and highlight on a daily basis the priorities of accountability, advocacy and ethical care, the challenges of complexity and human error that can so easily be compounded by complacency or disregard for patient and staff safety, the aggressive march of technology and innovation that tests us all, the contribution of effective teamwork and communication and the vital importance of compassion and professional commitment to safeguard patients, when they are at their most vulnerable.

Throughout my career first as a student enjoying placement, a 'newbie' staff nurse, post-qualifying green hat or 'course nurse' (a title reserved those fortunate to pursue a JBCNS or ENB programme in the 1980s), Sister, Manager, Commissioner, Educator and National Advisor, I have been engaged in and associated with the perioperative arena. I could not imagine working in a speciality more rewarding, stimulating and exciting and I consider myself privileged to have enjoyed the career path that I have and to have worked with so many exceptional perioperative staff and leaders, willing to take the risks that they have to benefit patients, to ask the difficult question to safeguard safety and who have championed change, to realise service improvements at scale.

Although my current portfolio means I am engaged in research and Board Assurance, and less frequently involved in direct patient care (regular bank shifts still keep me current and clinically credible), I am acutely aware that the central tenets of perioperative practice (clinical quality, patient safety, governance, controls assurance and clinical effectiveness) are enduring and focused themes of my work, as relevant to my practice today as they were when I first set foot in an operating theatre. I also know in my heart that my passion for our discipline is as strong today as it was when I started out 30 years ago and that the many opportunities and challenges I have encountered working in this environment have shaped who I am, how I think, how I care, how I lead and the career choices I have made over the years.

Would I have done anything differently? Not a bit of it. Might another speciality have given me and tested me as much? No way. As all the students I have encouraged to take up this discipline will testify, this environment, our practice, is like no other and gets under your skin. While surgery is not without stress, and delivering patient care in the circumstances and conditions that we do can be uniquely challenging, it is none the less an incredible privilege that encourages us to give of our best every day.

Sound knowledge and honed skills are key to us giving of our best and underpin our individual clinical competence and team effectiveness. This manual outlines the background knowledge required of staff who wish to ensure they deliver good safe and effective perioperative care, and have ambitions on advancing their career through the specialty.

It is practical in focus, addressing principles rather than procedures and logically structured around the patient's journey, the five discrete sections providing further structure to guide the reader. Each chapter, prepared by respected leaders and academics

of the field, contains useful guidance and the theoretical underpinning of the core subjects pertaining to perioperative practice; as an 'essential guide' it provides nurses and operating department practitioners (ODPs) with answers and rationales to many of the questions that arise in the day-to-day delivery of care. Although aimed principally at nurses and ODPs, the quality and depth of the information is so extensive it will prove an excellent reference resource for those (medical and nursing students, surgical trainees and industry partners) seeking to understand the dimensions and diversity of the discipline.

At a time when the rising popularity of handheld electronic devices raises questions regarding the long-term future of hard copy, I think we can be confident that however we avail ourselves of the information we need, the greater priority will always concern the quality and validity of what we access rather than how. The principles and foundations of each chapter, once understood, internalised and practised will facilitate the delivery of high-quality, evidence-based, patient-focused perioperative care and I commend them to you.

Jane H. Reid, RN, DPNS Enb 176, BSc(Hons), PGCEA, MSc
President International Federation of Perioperative Nursing
Visiting Professor Bournemouth University
Fellow NHS III Safer Care and Improvement Faculty

Foreword 2

Teamwork in the perioperative environment is a fundamental aspect of professionals working together to deliver the best care possible for patients undergoing surgery. One of the key aspects of good surgical practice, from all team members is situation awareness; the ability to 'see' or hear the clues in the environment, analyse the situation with sufficient knowledge to apply it to what is occurring and be able to make judgements about their relevance to the patient, at that moment. As a practising surgeon, it goes without saying that reducing risks to patients and awareness of patient safety is implicit in each practitioner's practice in the perioperative environment.

There has been a renewed emphasis on the importance of patient safety within the surgical environment since the work undertaken by the World Health Organization's second Global Challenge 'Safe Surgery Saves Lives'. The National Patient Safety Agency's publication of the surgical checklist and the subsequent acceptance of this in operating theatres throughout the UK and beyond has without doubt helped teams to focus on what is important in the minutes before surgery starts. This has ensured that everyone in the team concentrates on the patient not only at that point in the surgery but as the operation proceeds.

Organisations need to be flexible in order to demonstrate that they understand the requirement to continuously improve the quality of care to patients. Clinicians should focus on the evidence and being knowledgeable practitioners so that they have the ideas and energy to innovate. Many of the actions which denote quality care and an improved patient experience can be shown to come from ideas generated in clinical practice, such as the redesign of care pathways and the changing roles and responsibilities of staff delivering the care. Innovation may come from inspired leadership or quite simply from a group of staff asking the question 'how can we do this differently?'

For the individuals and team members, answers to that question may come from ideas gleaned from any number of sources. The expertise of the authors in this book, the *Manual of Perioperative Care – An Essential Guide*, should help to generate solutions and be the inspiration for innovation.

Patient safety is a key theme running through almost every chapter of this book. The book is helpfully divided into sections, so that the key subjects are highlighted. All the customary chapters that you would expect to find in a perioperative text book are included and in addition a section on different patient care groups which further defines how perioperative practice can be delivered with particular focus on the patient's age or specific physiological considerations. A final section on the new approaches to traditional surgical approaches highlights the dynamic and ever changing face of surgery.

The purpose of new textbooks especially when a fundamentally practical approach is taken to the topics in hand is to add to the body of knowledge which is practised every day and for every patient. All practitioners in the team are expected to maintain and improve their knowledge in order to provide evidence-based care, focused on each individual patient. Lifelong learning is a concept which is well rehearsed within healthcare in the twenty-first century and applies to each member of the team.

Professor Lord Ara Darzi PC, KBE
Paul Hamlyn Chair of Surgery, Imperial College London

Section 1

Foundation for Safe Perioperative Care

Chapter 1 The Context of Perioperative Care
Kate Woodhead and Lesley Fudge

Chapter 2 Preoperative Assessment
Jane Jackson

Chapter 3 Communication
Libby Campbell

Chapter 4 The Perioperative Environment
Hazel Parkinson

CHAPTER 1

The Context of Perioperative Care

Kate Woodhead and Lesley Fudge

What is Perioperative Practice?

The word ‘perioperative’ is a fairly recently devised term. The Association for Perioperative Practice (AfPP 2005) describes the perioperative environment as the area utilised immediately before, during and after the performance of a clinical intervention or clinically invasive procedure.

Previously, the care of the patient undergoing a surgical procedure was separated into distinct and separate areas of care. In the case of elective surgery the majority of patient journeys began with a visit to the GP, followed by a wait, hopefully appropriate to the urgency of their disease needs, for a referral to a specialist surgeon to come to fruition and then again, subject to urgency, another wait for an admission date to a hospital for surgery possibly after a series of investigations. Once admitted, the patient started on another journey in less familiar surroundings which, dependent on age, ethnicity and language, competence and understanding may have caused anxiety and fear which the healthcare professionals responsible for the care of the patient must make every effort to resolve as part of their service to the people who need their help and support.

It was then at this point that the perioperative care in anaesthesia, surgery and postanaesthetic recovery took place as suggested by the AfPP.

More recently, the patient has been considered holistically and the term ‘perioperative’ now much better describes the care of the patient from initial referral and diagnosis to full recovery, or as full as that recovery might be for their physical condition. That final outcome may inevitably be death and it is not necessary to deem that conclusion as a failure.

The word ‘peri’ derives from the Latin ‘around’, so perioperative means around the operation or intervention. Therefore perioperative care should start with good-quality information-giving and sharing with the patient from the first time they interact with a healthcare professional in the doctor’s surgery or possibly in the emergency department of a hospital. Today’s elective patients are likely to have investigated their own symptoms, often using unregulated internet sites and may arrive for their first healthcare consultation believing that they have already discovered their own diagnosis. The patient’s first interaction and continuing care may be as part of the caseload of a surgical

nurse consultant or advanced surgical care practitioner, who may care for the patient throughout their surgical journey and should be considered as perioperative.

All patients should be treated as individuals and not as a diagnosis or surgical operation. Sometimes, in this busy pressurised world, there may a tendency to forget that the patient does not experience the surgical environment every day as do the specialised healthcare professionals. Even the least complex procedure in the perioperative environment may be a major event for the patient.

Where Does it Take Place?

Historically, perioperative care was undertaken in an operating theatre or suite of theatres in an acute hospital, but more recently the settings for surgery have expanded after recognition that as long as the allocated area meets standards required for asepsis and infection management, conventional environments are not necessarily the only available option. These various settings can include doctors' surgeries and treatment centres for routine and more minor cases, keeping the acute or tertiary setting for the most complex and urgent surgeries. Patients can therefore access their surgical care closer to home and with less personal inconvenience and, it is hoped, with reduced waiting times. Healthcare is unfortunately enmeshed with the political system, but one of the better outcomes for patients over the last decade is that they usually have to wait less time than previously to see a specialist and receive appropriate treatment for non-urgent surgery.

In addition, in the current climate of global unrest, life-saving surgery is undertaken in conflict zones across the world and standards expected in more settled places may not be able to be fully met, the first priority being the saving of life. For example, surgery takes place in mobile operating rooms, in vehicles and ships, tents and other settings which will be completely alien to the practitioner who works in a standard hospital operating room. Working in the armed forces, for non-governmental organisations, charities and the like can broaden the practitioner's experience at the same time as engendering appreciation of their own high-quality operating suites within a recognised standard situation. Many advances in care and treatment have been innovated and initiated in times of conflict because of the needs of the patient with multiple trauma injuries.

Perioperative practice caregiving is delivered by a range of professionals who work collaboratively towards the best-quality outcome for the patient. There is a confusing range of these roles; names may differ across organisations and countries, but despite the differing titles their functions are similar. Boundaries have been crossed in recent times, with role expansion and development for many perioperative practitioners.

Many practitioner roles now have their own patient caseload and perform tasks within the surgical field that were previously only performed by medical staff. Through training and supervision, continuing assessment and quality outcome measurements, it has been shown that practitioners other than medical staff can perform many surgical procedures competently. The medical staff are then freed to perform more complex procedures. These less difficult cases are being performed competently and the stability or care delivery has been shown to have better outcomes for patients and the practitioners undertaking these advanced roles often become the instructors for junior medical staff, given their expertise and the stability of their role.

The Patient's Perspective – Consent and Competence

At all times it must be remembered that the patient must be at the centre of individualised care and unless their capacity to make decisions is compromised, their autonomy to make decisions for themselves must be respected. From an ethical perspective, each

competent adult is an autonomous person and their own decisions about ‘self’ must be respected and followed.

Coercion to undergo treatment is unacceptable but difficult to avoid in a healthcare setting. With admission on the day of surgery becoming common practice, if consent has not been taken preadmission, then the patient has had insufficient time to ask further questions should they wish to gain the necessary information on which to base a decision. Decision-making on the morning of surgery or when the patient has already changed into a theatre gown is not appropriate or good practice.

As Martin Hind, senior lecturer in critical care, states ‘it may be difficult to prevent some degree of coercion in securing consent from a patient, but misrepresentation of the facts or overt manipulation of the patient should be avoided’ (Woodhead and Wicker 2005). What healthcare professionals must also always accept is that refusal to consent is as valid as agreement to consent to treatment, even if that decision is contrary to what they would advise.

Consent should be taken recognising the following conditions; these are not exclusive but examples of what may block fully informed consent being made by the patient:

- *Language:* Does the patient understand the person taking consent? Is the patient, deaf, blind, lacking understanding of the language being used or might they require support from a translator or signer? Does the consent taker, speak the patient’s language sufficiently well? In a multi-ethnic system real comprehension of information given and received can be difficult.
- *Understanding:* Has the healthcare professional used medical terminology that can be understood by the patient? Without understanding of what the treatment entails, including any likely complications, the patient is not sufficiently able to make a fully informed decision. With good planning, the patient can be given language- and age-specific information about their disease, treatment, outcomes and complications along with frequently asked questions. Written information along with a verbal interaction between the patient and a competent information-giver, while sounding like utopia, is best practice and should be a clinical aspiration.
- *Capacity:* Is the patient a child or do they suffer from learning difficulties or another impairment such as unconsciousness or brain injury? Consent for minors under the age of 16 in the UK is taken from parents, legal guardians and legal caregivers. In cases where there are difficulties best interest principles must be used or the intervention of the legal system to ensure that the patient is at all times at the centre of the process and outcomes.
- *Best interest principles:* These have to be taken into account in a range of situations where the patient does not have the capacity to make a decision for themselves. The UK Mental Capacity Act 2005 identifies a single test for assessing whether a person lacks capacity to take a particular decision at a particular time.

So, for example a patient may be admitted unconscious and unidentifiable to an emergency department. Following examination, only emergency surgery will give the person a chance to survive. In other circumstances, this person may be competent and able to make decisions for themselves but in this situation and at this time the patient cannot, therefore others must make that decision for them and consent to surgical intervention will be foregone and surgery performed. As in any clinical situation, contemporaneous documentation must be made and the rationale for the decision recorded and signed by more than one clinician.

As in so many healthcare situations, unless decisions, actions and possibly rational omissions are contemporaneously documented, if the care records become part of a

legal process at sometime in the future, the responsible carer will not be able to prove what they did or did not do for the patient.

The Nursing and Midwifery Council (2008) published principles of good record-keeping for nurses and midwives that is relevant for all healthcare professionals. They state that good record-keeping, whether at an individual, team or organisational level, has many important functions. These include a range of clinical, administrative and educational uses such as:

- helping to improve accountability
- showing how decisions related to patient care were made
- supporting the delivery of services
- supporting effective clinical judgements and decisions
- supporting patient care and communications
- making continuity of care easier
- providing documentary evidence of services delivered
- promoting better communication and sharing of information between members of the multi-professional healthcare team
- helping to identify risks, and enabling early detection of complications
- supporting clinical audit, research, allocation of resources and performance planning
- helping to address complaints or legal processes.

Evidence-Based Practice and Clinical Effectiveness

All care delivery should be based on evidence of its effectiveness by all healthcare professionals in the many multi-professional spheres. Where the evidence is derived from and how broad and deep the research has been behind the evidence should determine the practice delivered. Cochrane Reviews gather global information and create a matrix of the strength of the evidence based on the number of clinical papers that reach a similar outcome with comparable levels or breadth and depth and putting them into a scoring system to suggest efficacy (www.cochrane.org/cochrane-reviews).

Even with evidence, not all practitioners observe best practice principles. To cite a specific scientifically proven best practice perioperative principle – that shaving of body hair prior to surgery should be undertaken as close to the time of surgery as viable but not in the operating room – this is flouted on a daily basis across the world, while at the same time the antibiotics needed to protect the patient from postoperative infection possibly caused by bacteria introduced through shaving continue to outwit the scientists (Tanner *et al.* 2006).

Being fixed to the idea that all practice must be derived from clinical evidence and published science may, however, slow innovation in the clinical field and this, along with global and specific financial pressures in healthcare, carries a risk of a lack of progress. McKenna *et al.* (2000) make some valid points about considerations that should be taken into account in their paper on demolishing myths around evidence-based care and practice.

Staffing and skill mix

Staffing levels in nursing have always been a bone of contention. Nurses frequently, especially when asked, say that they have insufficient numbers to provide the quality of care that they would like to provide. Staff numbers on wards and in operating theatres have never been mandated in the UK, although in Victoria, Australia, unions and governments have agreed minimum levels of staff patient ratios which hospitals have

to adhere to. In the UK we have an NHS Constitution which is enshrined in law, which states that patients have a right to be cared for by appropriately qualified and experienced staff in safe environments. The National Health Service Act 1999 ensures that the Board of any hospital is responsible for the quality of care delivered. In addition, regulatory bodies, such as the Nursing and Midwifery Council, stipulate nurses' responsibilities for safe staffing levels. In England, being able to demonstrate safe levels of staffing is one of the essential standards which all healthcare providers must meet to comply with the Care Quality Commission Regulations (Care Quality Commission 2010).

In operating theatres, recommendations from the AfPP make available online a formula for managers to use to ensure safe staffing levels (AfPP 2008). These include:

- one qualified anaesthetic assistant practitioner for each session involving an anaesthetic
- two qualified scrub practitioners as a basic requirement for each session, unless there is only once planned case on the operating list
- one trained circulating practitioner for each session
- one qualified post anaesthetic recovery practitioner for the immediate postoperative period. There may be occasions where two qualified staff are required if there is a quick throughput of patients requiring minor procedures, such as in a surgical day unit (AfPP 2011).

Skill mix

The term 'skill mix' is often used to describe the mix of posts, grades or occupations in an organisation or for a specific care group (e.g. within a department such as an operating suite or in a speciality ward).

Skill mix needs to be examined on a regular basis, so that managers and practitioners account for changing patient demographics, the skills of the practitioners available and acuity in the patient population. It is difficult, therefore, to give specific guidance on an ideal skill mix for a given situation. Reviewing the evidence, Buchan and Dal Poz (2002) identified that increased use of less-qualified staff would not be effective in all situations. Evidence on the nurse/doctor overlap suggests that there is unrealised scope in many systems for extending the use of nursing staff. In addition, they cite that many of the studies regarding skill mix are poorly designed and are often biased towards the qualified/unqualified argument focused on cost containment (Buchan and Dal Poz 2002).

Training and education

It is vital that, in order to provide the appropriate level of quality care, all staff have the necessary capability, skills, knowledge and competence to perform the role which they are employed to undertake. In order to reach, maintain and develop the appropriate level of skill and knowledge there needs to be a system in place that provides access to continuing professional development. This may include a level of mandatory education, on-the-job skills training and a continuing mechanism to ensure that competence is regularly assessed. Six main areas for consideration have been outlined by the AfPP (2011):

- educational support
- orientation and induction
- resources
- assessment

- professional development
- pre-registration learners.

Accountability and responsibility

The duty of care which nurses and other registered professionals owe to their patients can be found iterated within Codes of Conduct. The Nursing and Midwifery Council Code states ‘As a professional, you are personally accountable for actions and omissions in your practice and must always be able to justify your decisions’ and ‘You must always act lawfully, whether those laws relate to your professional practice or personal life’ (Nursing and Midwifery Council 2008).

If a nurse or midwife is asked to deliver care they consider unsafe or harmful to a person in their care, they should carefully consider their actions and raise their concerns to the appropriate person. Nurses and midwives must act in the best interest of the person in their care at all times (Nursing and Midwifery Council 2008).

The Health Professions Council, which regulates operating department practitioners, Code of Proficiency states that registrant operating department practitioners must:

- be able to practise within the legal and ethical boundaries of their profession
- understand the need to act in the best interests of service users at all times
- understand the need to respect, and as far as possible uphold the rights, dignity, values and autonomy of every service user including their role in the diagnostic and therapeutic process and in maintaining health and wellbeing (Health Professions Council 2008).

Accountability is integral to professional practice. Judgements have to be made in a wide variety of circumstances, bringing professional knowledge and skill to bear in order to make a decision based on evidence for best practice and the patient’s best interest. Professionals should always be able to justify the decisions that they have made.

New roles

During the last 20 years many new roles have emerged to meet identified needs within the patient population as well as perceived needs for professionals to remain in clinical practice. The roles are many and varied. Roles change as professionals expand existing roles; many of the new roles fit within existing scope of professional practice, or they may be completely new and need specific developments and education. Whichever of the approaches an organisation decides is appropriate, a structured means of development is essential. The Career Framework sets out to standardise and describe roles at different levels of responsibility, supervision and knowledge and to illustrate career progression routes (Skills for Health 2006). Further detail has been identified into the Knowledge and Skills Framework, which is now the basis of job descriptions and competence assessment.

Nurses and others who develop their roles to include tasks or roles currently undertaken by other healthcare professionals must be aware of their legal boundaries. ‘The rule of law’ requires professionals to act within the law and ‘the rule of negligence’ requires the task or role to be delivered to the same standard as undertaken by another. Sufficient education and training are required to ensure the health professional is competent to perform the role to the required standard. In perioperative care, various roles are likely to be encountered. These include the following.

Surgical care practitioner

The role of the surgical care practitioner (SCP) is as a non-medical practitioner, working as part of the extended surgical team, under the supervision of a consultant surgeon. The SCP must be previously registered as a healthcare professional with either the Nursing and Midwifery Council or the Health Professions Council.

SCPs perform a range of duties, including examination, clerking and requesting investigation. They can assist and perform delegated duties in theatres, manage patients postoperatively, adjust treatment plans, discharge and follow-up (Association of Cardiothoracic Surgical Assistants 2011).

Advanced scrub practitioner

The Perioperative Care Collaborative provides the following definition of an advanced scrub practitioner (ASP). The ASP role can be defined as the role undertaken by a registered perioperative practitioner providing competent and skilled assistance under the direct supervision of the operating surgeon while not performing any form of surgical intervention (Perioperative Care Collaborative 2007).

Assistant theatre practitioner

The assistant theatre practitioner (ATP) carries out all the tasks of a senior theatre support worker but is also trained and competent to perform the scrub role for a limited range of cases. In addition, some ATPs work within the post-anaesthetic care unit, taking delegated care from registered practitioners (NHS National Practitioner Programme 2006).

Advancing practice

In recent years there has been a proliferation in the number of innovative advanced roles such as clinical nurse specialists, nurse practitioners and the broader role of consultant nurse. Role diversity is valuable if it improves health and well-being for patients and workers. The purpose of the consultant role is to improve practice and patient outcomes, strengthen leadership in the professions and help retain nurses by establishing a new clinical career opportunity. Some overlap occurs with specialist nursing posts in that half the consultant's time is spent in expert practice, but where the specialist works principally with patients in a clearly defined area of clinical practice, the consultant role is expected to be more strategic and broad based, to improve the practice of others and occupy a leadership position in nursing similar to that held by medical consultants (National Nursing Research Unit 2007). Examples of all the specialist roles can be found within perioperative care across the UK.

Professional development

There are a variety of definitions of continuing professional development (CPD) across the professions but it is usually taken to mean learning activities that update existing skills. CPD requirements should be identified on the basis of the needs of individuals, within the context of the needs of the organisation and patients.

In the NHS, CPD is determined through appraisal with a personal development plan agreed between the individual professional and his or her manager with the commitment of the necessary time and resources. A key development in ensuring that health professionals maintain their competence is the move among the regulatory bodies to develop CPD strategies for the revalidation/recertification of their members (Department of Health England 2007).

In perioperative practice, CPD is required by the regulators to ensure that competence is maintained. For this purpose, resources and support should be made available within the work environment. Development needs are usually identified during the annual individual performance review and are recorded by the individual practitioner within his or her personal development plan. Registrants are also required to record continuing development in their portfolios, which may be requested by the regulator at regular re-registration to prove the practitioner's education and training on an ongoing basis.

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