Essentials of Nursing Management

Quality Assurance

Diana Sale

Quality Assurance

ESSENTIALS OF NURSING MANAGEMENT

Titles in the series

Barbara Scammell: Communication Skills

Communication in society
The communications continuum: forms and skills
The communications continuum: coaching and counselling
Planning and organising
Staffing
Co-ordinating
Communication in nurse management at the point of service delivery
Communication in nurse management in different areas of medical care

Verena Tschudin with Jane Schober: Managing Yourself

'Know thyself'
Valuing yourself
Motivating yourself
Asserting yourself
Stressing yourself
Supporting yourself
Celebrating yourself
Your career – making the choices

Sheila Marson *et al.*: Managing People

The science and function of management
Team building: a practical approach
Leadership
Creating a climate for learning
Quality and its control

Annabel Broome: Managing Change

Principles of complex change
Leadership and creating change from within
Imposed change
The nurse as a change agent
Identifying training and development needs
Appendix A: Health of the organisation questionnaire
Appendix B: Role effectiveness profile – tool for self-assessment

Diana Sale: Quality Assurance

An introduction to quality assurance
Standards of care
Quality assurance measures – performance. Nursing audit
Quality assurance measures – performance. Quality patient care scale
Quality assurance measures – performance. Monitor – an index of the quality of nursing care
Quality circles
Measuring outcome standards – using a computerised nursing system (Excelcare)

Financial Budgeting

(in preparation)

ESSENTIALS OF NURSING MANAGEMENT

Quality Assurance

Diana Sale

M
MACMILLAN

© 1066 Publications Ltd 1990

All rights reserved. No reproduction, copy or transmission
of this publication may be made without written permission.

No paragraph of this publication may be reproduced, copied
or transmitted save with written permission or in accordance
with the provisions of the Copyright, Designs and Patents Act
1988 or under the terms of any licence permitting limited
copying issued by the Copyright Licensing Agency,
33–4 Alfred Place, London WC1E 7DP.

Any person who does any unauthorised act in relation to
this publication may be liable to criminal prosecution and
civil claims for damages.

First edition 1990

Published by
MACMILLAN EDUCATION LTD
Houndmills, Basingstoke, Hampshire RG21 2XS
and London
Companies and representatives
throughout the world

Typeset by Latimer Trend & Company Ltd, Plymouth

British Library Cataloguing in Publication Data
Sale, Diana N. T.
Quality assurance.–(Essentials of nursing management series).
1. Great Britain. National health services. Quality assurance
I. Title II. Series
362.1'068'5
ISBN 978-0-333-46405-2 ISBN 978-1-349-10189-4 (eBook)
DOI 10.1007/978-1-349-10189-4

To my parents Maureen and Michael

Contents

Acknowledgements viii
Preface ix

Chapter 1 An introduction to quality assurance **1**
Historical background 1
Defining quality assurance 3
Evaluation of quality of care 3

Chapter 2 Standards of care **9**
Historical background 9
What are standards of care? 10
Who writes and sets standards? 10
Terminology 10
Classifying standards 13
Checking standards 15
Measuring standards 15
Questionnaires 16

Chapter 3 Quality assurance measures – performance. Nursing audit **18**
The nursing audit by Phaneuf 18
Audit committee 18
Carrying out the audit 19

Chapter 4 Quality assurance measures – performance. Quality Patient Care Scale (Qualpacs) **24**
Using Qualpacs 24
The process of the evaluation 26
Scoring Qualpacs 26

Chapter 5 Quality assurance measures – performance. 'Monitor' **29**
Rush Medicus 29
Monitor 30

Chapter 6 Quality circles **37**
How a quality circle works 37
Roles of people involved in quality circles 38
Training 39
Planning the programme 40

Chapter 7 Measuring outcome standards **42**
How a computerised nursing system works 42
Using a computerised nursing system 43

Chapter 8 Quality now and the future **49**
Resource management 49
Quality assurance programmes 50
Total quality management 50
Conclusions 51

Glossary of terms **52**
Index **55**

Acknowledgements

I should like to thank the following people who kindly gave me permission to reproduce some of their work: Dr Alison Kitson (The Royal College of Nursing) and Helen Kendall; Sister Pam Homer and Mary Clements, West Dorset Health Authority, for allowing me to reproduce their standards; the publishers Appleton–Century–Crofts for the nursing audit by Phaneuf and the Quality Patient Care Scale (Qualpacs); Newcastle-upon-Tyne Polytechnic Products Ltd. for 'Monitor'; Pam Leggett for her article on 'Monitor'; Mike Robson for his quality circles; and finally Dr Elizabeth Mason and Price Waterhouse for Excelcare.

I should also like to thank Nan Kemp who patiently read through the book and offered both advice and encouragement. She has an enormous amount of experience in the quality assurance field and is someone I have known for many years and whose opinion I value greatly.

Diana Sale RGN RCNT

Preface

Select any nursing journal today and you are likely to find an article on 'quality assurance'. So much has been written about the subject that many nurses feel overwhelmed by the amount of information available and have difficulty selecting an appropriate method of measuring the quality of patient care for their particular clinical area. In this book, I have outlined some of the most commonly used methods for measuring the quality of care, together with their advantages and disadvantages, in order to help the charge nurse or ward sister choose the most appropriate measuring tool for his/her clinical area.

Nurses have always been concerned about the quality of care that their patients receive and the majority welcome the opportunity to measure the effectiveness of the care that is given. However, some nurses are put off the whole idea by the apparent complexity of the systems used and most of all by the jargon. Whatever subject you become interested in, whether it be computers, gardening or a foreign language, there will always be new terminology or jargon to learn. As student nurses, we all learned how to communicate in nursing jargon which very quickly became our second language. It is the same with quality assurance. If you want to read more about the subject, then you will need to understand the language. At the end of this book I have included a glossary of terms in order to explain the words most commonly used to describe quality assurance.

Every practitioner has a responsibility for ensuring a high quality of care for his/her patients or clients. Sometimes this is difficult in the face of reduced staffing and financial constraints, but by measuring the quality of care and establishing priorities for patient care, resources can often be used more effectively.

Measurement of the quality of patient care takes place in the clinical area. Therefore, it is important that staff working in these areas have an insight into the various methods of measurement in order to select the one that is most appropriate. The aim of this book is to give charge nurses and ward sisters enough information to enable them to make the right decisions in order to select the most appropriate tool to measure the quality of care in their clinical area.

All over the country, nurses and other professionals are setting and measuring standards of care as part of a quality assurance programme. In this book, I describe a method devised by the Royal College of Nursing (Kitson and Kendall) that we have used successfully in West Dorset to help us to set and monitor standards. The use of patient satisfaction questionnaires is becoming increasingly popular as a part of a quality assurance programme and the information in Chapter 2 should help you to develop some of your own.

There are tools designed to measure performance that you can 'take off the shelf', such as Monitor, Qualpacs, Phaneuf's Audit and I shall outline each of these and discuss their advantages and disadvantages. I shall also describe a quality circle which is a method of problem solving that may be used as part of a quality assurance programme. Finally, I shall look at the use of a computerised nursing system and the monitoring of outcome standards.

At the end of each chapter, there is an exercise designed to help you to decide if the methodology described is appropriate for your clinical area, and to give you some practical experience in its use.

The book starts by way of an introduction to the meaning of quality assurance and its historical background. Where did it come from? Why do we need it? Who should do it and how does one go about it?

Chapter 1 An introduction to quality assurance

Historical background

The earliest studies of quality assurance were probably undertaken by the Romans who must have reported on the efficiency of their military hospitals. It is also possible that the monks gave an account of their work in caring for the sick. Probably the first documented evidence of the evaluation of nursing care dates back to the eighteenth century when John Howard and Elizabeth Fry described the quality of patient care in the hospitals that they visited.

In the 1850s, Florence Nightingale[1,2] evaluated the care delivered to the sick. She kept notes on her observations and used the information to establish the level of care being provided and to improve care in areas that were below standard. During the American Civil War, Louisa M. Alcott[3] wrote about the quality of nursing care in *Hospital Sketches*, which was published in 1863. In this publication, she described the contrast between the chaos of the 'Hurly-Burly House' and that of the organised and compassionate care at the Armoury Hospital.

At the beginning of this century, between 1920 and 1940, Isabel Stewart[4] looked at ways of measuring the quality of nursing care and the effective use of resources. The theory that quality care is cost effective is still relevant today. She developed an eight-point list known as the Stewart Standards, using professional opinion rather than a rating scale. The eight-point list included:

- safety
- therapeutic effect
- comfort and general happiness of the patient
- economy of time
- economy of energy or effort
- economy of material and costs
- finished workmanship
- simplicity and adaptability.

In 1936, a book was written by Miss G. B. Carter and Dr H. Balme[5] on the importance of evaluating care. They recommended that a multidisciplinary team, consisting of the ward sister, the doctor and the administrator, should discuss the progress and evaluate the care of all patients, by reviewing the medical and nursing records, at the end of each month. This practice is still in use today when the multidisciplinary team hold a case conference or unit meeting. These meetings are more likely to take place on a weekly basis, when the patients currently being cared for are reviewed and their care evaluated. Discussion is often about the effect of care or treatment, what was effective and what could have been improved.

In the USA, in 1958, insurance companies sought to find a standard for assessing quality of care against staffing. As a result, a method was developed by Dr Faye Abdellah[6] that matched staffing levels to the measurement of quality of care in a large hospital. She chose to measure the level of dissatisfication observed by patients, nurses and other individuals. Over a period of time, she established fifty of the most common causes for dissatisfaction and developed a weighting value for each one. The area of dissatisfaction was rated from five to zero; so, for example, an unconscious patient who was left unattended – and therefore at risk – would have scored five whereas a minor dissatisfaction would have scored zero. The scores were then totalled: a high score indicated poor nursing while a zero score meant that the ward was excellent. Measuring what goes wrong is rather a negative way of evaluating a ward, as it does not measure the positive qualities. This method did not establish that the staffing levels equated with quality of care; in fact, it proved that there was little correlation between the number of staff members and the

quality of care. From your own experience, I am sure that you will have observed that having more nurses on a ward does not necessarily mean that patients receive a better standard of care. However, what is important is the skill of the nurses in providing good quality care. The other important point to note is that this system did not offer solutions to resolve dissatisfaction and improve the quality of care.

In the 1950s, Frances Reiter[7] developed a system based on the classification of patients into three categories. This classification looked at the way in which nurses plan to work with patients:

- Type 1 was professional, where the nurse worked with the patient as in rehabilitation.
- Type 2 was curative, where the nurse 'did things' for the patient, such as dressings, treatments and specific tasks.
- Type 3 was elementary, custodial or palliative care; that is, nursing care given to a comatosed or unresponsive patient.

Reiter then developed a series of questions to assess the effectiveness of each type. Her work was published in 1963 and led to a study of communications as a focal point of quality in nursing, which is something that we recognise as essential today.

Since then, nurses all over the world have evaluated the care given to their patients to a greater or lesser degree. In Europe, it is really only since 1960 that the evaluation of nursing care has become structured and resulted in systematic studies.

In the 1960s, British nursing underwent enormous change with the introduction of the recommendations of the Salmon Report. With the implementation of the Salmon Report came the introduction of industrial management techniques and the idea of improving efficiency and saving money in the National Health Service.

In the 1970s, accountability and cost effectiveness in the delivery of health care became a major issue and led to the development of systems to help nurses determine the quality of their practice. The 'nursing process' from the USA was also introduced in the 1970s and has been adapted and implemented, to a greater or lesser degree, throughout the UK.

In 1974, the Government reorganised the National Health Service and set up Area Health Authorities.[8] These were abolished in 1982 with the creation of District Health Authorities, each with its own Community Health Council.[9] All this change and development led to increased accountability for the quality of the service. In 1974, the Government also set up The Office of the Health Service Commissioner to investigate complaints of maladministration.[10,11] This did not include 'clinical judgement', but the Ombudsman was able to comment on the way complaints were handled and the quality of patient care management.

During the 1960s and 1970s, investigations were carried out concerning poor practice, particularly in large institutions caring for the mentally ill and mentally handicapped. This led to the formation of the Hospital Advisory Service for mental illness and elderly care groups, and the National Development Team/Group for the mentally handicapped. Both these bodies are responsible for inspecting clinical areas and establishing the level of clinical practice. They report on good practice and criticise bad practice. Other forms of audit of quality come from the regular inspection of the academic or validating bodies for training: The National Boards for nursing and the Royal Colleges for postgraduate doctors. They both promote good practice and have the ability to withdraw training from authorities if it is found to be unsatisfactory.

There are also government reports that reflect quality, including the Royal Commission on the National Health Service,[12] the Davies Report and the Griffiths Report. Since the implementation of the Griffiths Report, the progress on quality assurance programmes throughout the country has accelerated.

Most of the major research on measuring quality of care has been carried out in the USA and Canada. The first studies on quality of nursing care in the USA were developed in the early 1950s, but research on quality evaluation was not undertaken until some years later when measurement instruments or tools were developed by nurses and researchers from other professional backgrounds. These included the Slater Nursing Competencies Rating Scale,[13] which is a tool designed to measure the nurses' performance, and the Quality Patient Care Scale,[14] which is a tool designed to measure the nursing care received by patients. This tool is discussed in detail on page 24. Nursing Audit by Phaneuf[15]

also assesses the quality of patient care by examination of the process of nursing as reflected in the patient's records after discharge. This method is discussed in detail on page 18.

In 1969, Avedis Donabedian[16] divided the evaluation of quality of care into the evaluation of the structure in which care is delivered, the process and the outcome criteria.

In the USA, it was established that audit review alone could not promote an improvement of patient care. Consequently, the Joint Commission on Accreditation of Hospitals established standards of nursing care in 1971 giving a more objective and systematic review of patient care and performance. There is also documented evidence of standards setting at the national level in Australia (The Australian Council of Hospital Standards, 1979) and New Zealand (The Joint Commission on Accreditation for Hospitals, 1980).

In the USA, accreditation is linked with funding. If standards fall below predetermined levels, then the hospital organisation is in jeopardy of losing federal or state funding. These hospital accreditation programmes demand evidence that a hospital has some system of quality assurance. Medical audits have developed into medical record audits, which examine in detail the records post-discharge. Today, these systems are often computerised. Some of these hospitals employ a team of people to examine these records and report their findings to a Quality Assurance Committee.

The Rush Medicus System[17] is a method for evaluating the quality of nursing care for medical, surgical and paediatric patients, and includes the relevant intensive care units. This was anglicised by Goldstone and Ball in 1984 and called Monitor. It is described in detail on page 30.

Here in the UK, a great deal of interest was stimulated by the publication of the Royal College of Nursing documents[19,20] *Standards of Nursing Care* (1980) and *Towards Standards* (1981). Further work by Kitson and Kendall[21–23] demonstrates the use of standards as part of the quality assurance package. The setting of standards is discussed in detail on page 10.

Defining quality assurance

There are many definitions of the term 'quality assurance' by people who have researched the subject thoroughly. A definition that I feel is both appropriate and easily understood is that given by Williamson.[24] 'Quality assurance is the measurement of the actual level of the service provided plus the efforts to modify when necessary the provision of these services in the light of the results of the measurement'. Another definition according to Schmadl[25] is as follows. 'The purpose of quality assurance is to assure the consumer of nursing of a specified degree of excellence through continuous measurement and evaluation'.

The word 'quality' is defined by *The Concise Oxford Dictionary* as 'degree of excellence' and the word 'assurance' means 'formal guarantee; positive declaration'. So, from these definitions, 'quality assurance' may be interpreted as a formal guarantee of a degree of excellence. In other words, it assures patients of an acceptable standard of care.

Evaluation of quality of care

There are various levels at which evaluation of the quality of care may take place. It may be at the national level such as the standards set in the USA by the American Nurses Association; in Canada by the four Canadian Nurses' Associations, including the Canadian Nurses' Association,[26] the College of Nurses of Ontario,[27] Ordre des Infirmières et Infirmiers du Quebec[28] and the Manitoba Association of Registered Nurses;[29] and in Australia the Royal Australian Nursing Federation.[30] A possible model for a quality assurance system in an Australian hospital is shown in Figure 1.

In the UK, the top level might be the Regional Health Authority and the middle level the District Health Authority or an organisation such as a group of private hospitals. The next and most important level is the clinical area – the ward or unit. Within the concept of this book, I shall be concentrating on this level, looking at ways of measuring the quality of care in the clinical area by the ward sister or charge nurse. However, it is important to establish what the organisation as a whole is developing, and what activity is taking place regionally and nationally, so that you can be an effective part of the quality assurance programme.

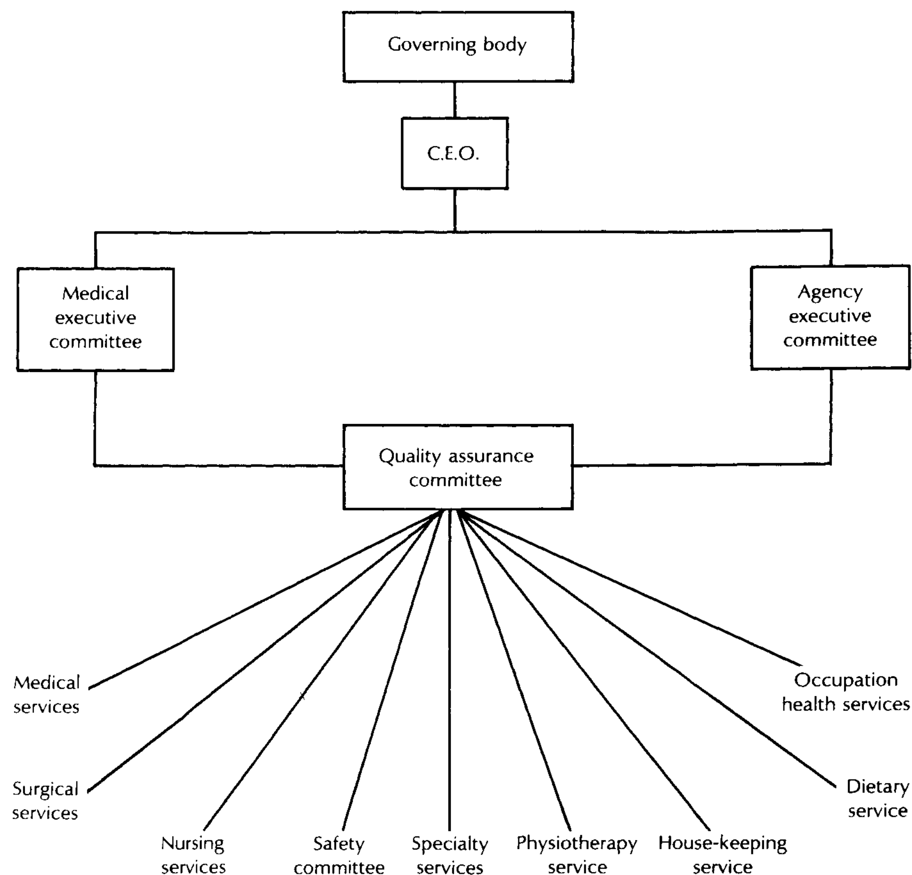

Figure 1 Model for multidisciplinary quality assurance: Communication and reporting lines for a multidisciplinary quality assurance committee
From: Royal Australian Nursing Federation, *Standards for Nursing Practice*, 1983.

There are a variety of conceptual models of evaluation that have been published. Norma Lang's model[31] was adapted by the American Nurses Association and modified by Vail in 1986 when an eighth step was added. Lang's model was also adapted by the Royal Australian Nursing Federation and has eleven steps, as shown in Figure 2. This model can be adapted into a few key steps, as shown in Figure 3, for use by a nursing quality assurance committee, or for the ward sister or charge nurse in their particular clinical area.

Before developing a framework for measuring the quality of care on your ward or clinical area, it is essential to establish what has been written and researched already. A great deal of work has been done and it will help you to select a framework that will suit your needs. There is no need to reinvent the wheel, so a literature search will save you a great deal of time and energy. I hope that within this book there will be enough information to help you with this activity.

The first step of the quality cycle is to get together with colleagues in your clinical area and write a philosophy of care. To do this, you need to discuss your personal beliefs about nursing, the profession's code of conduct as in the UKCC code of conduct, beliefs about the uniqueness of individuals and their human rights, the philosophy of care of the health district and society's values. This does not have to be a long, detailed account but simply a summary of your beliefs as a caring team of professionals.

The next step is to set some objectives – what you hope to achieve by measuring the quality of care. This should include the measurable effect on patient care and the performance of the nursing staff.

Before you can measure the quality of care, you must be able to describe what you do. To this end, it is necessary to identify standards and criteria. On reviewing the literature, you will find that a number of tools have been developed and are in use all over the country. Many approaches are based on criteria and standards, and can be categorised into a structure, process and outcome framework. Some authors of these tools favour the measurement of

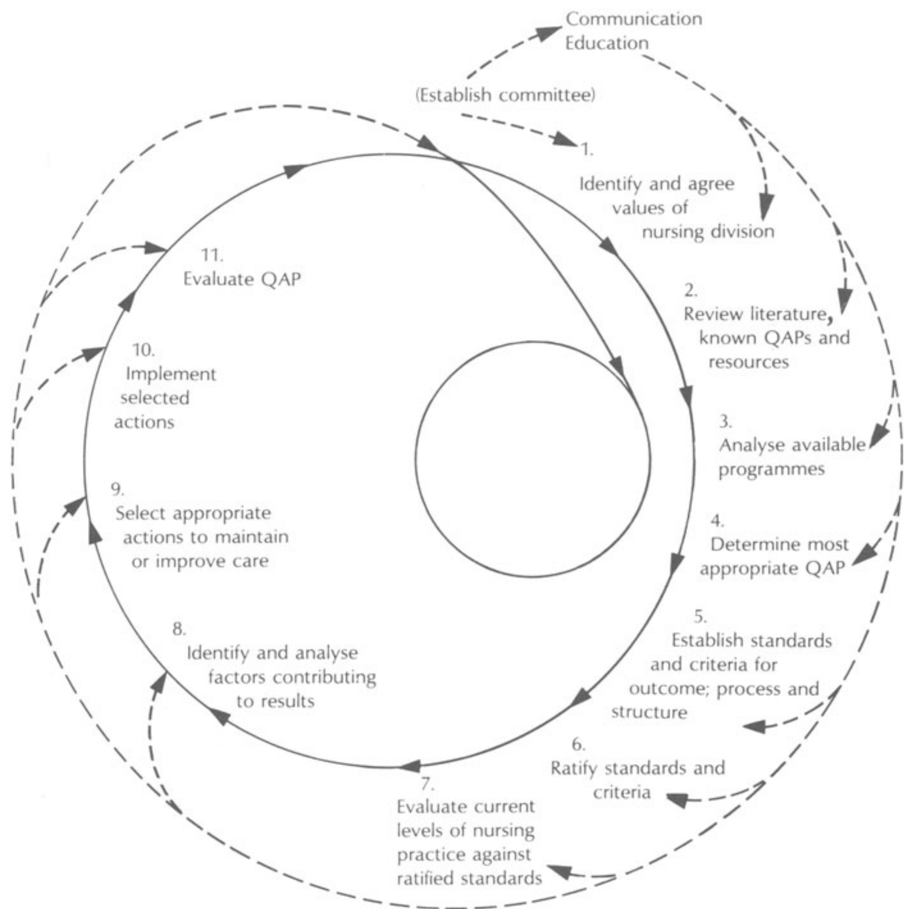

Figure 2 Steps in implementing a quality assurance program (QAP): Model for nursing quality assurance

From: N. Lang, 'Issues in Quality Assurance in Nursing', *ANA Issues in Evaluative Research* (American Nursing Association, 1976).

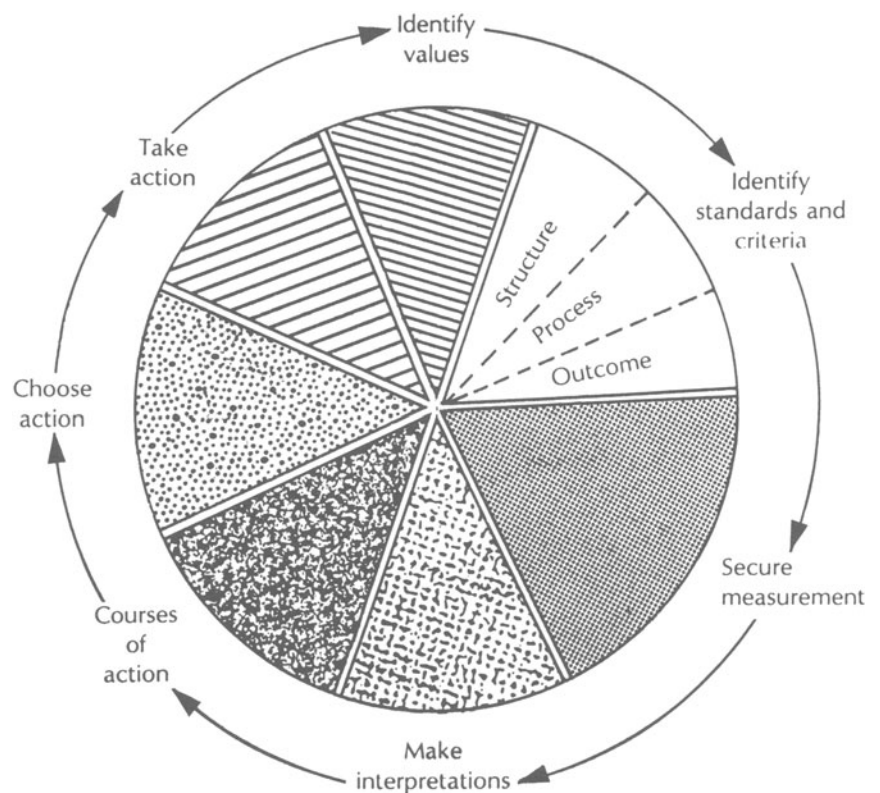

Figure 3 Adapted quality assurance model

process while others favour outcome. These are discussed in detail in the following chapters.

To measure the quality of care, the appropriate tool must be selected. The tools are essentially data collection systems using retrospective and concurrent audit; that is, systems for collecting information which, when collated, will give an indication of the quality of patient care for a particular ward or unit.

Retrospective audit involves all assessment mechanisms carried out after the patient has been discharged. These include:

- Closed-chart auditing, which is the review of the patient's records and identification of strengths and deficits of care. This can be achieved by a structured audit of the patient's records.
- Post-care patient interview, which is carried out when the patient has left the hospital or care has ceased in the home. It involves inviting the patient and/or family members to meet to discuss experiences. This may be unstructured, semi-structured or structured using a checklist or questionnaire.
- Post-care staff conferences, which involve professionals that cared for the patient. The process involves a review of records, charts and care plans.
- Post-care questionnaires, which are completed by the patient on discharge. They are usually designed to measure patient satisfaction.

Concurrent audit involves assessments performed while the patient is in hospital and receiving care. These include:

- Open-chart auditing, which is the review of the patient's charts and records against preset criteria. As the patient is still receiving care, this process gives staff immediate feedback.
- Patient interview or observation, which involves talking to the patient about certain aspects of care, conducting a bedside audit or observing the patient's behaviour to preset criteria.
- Staff interview or observation, which involves talking to and observing nursing behaviours related to preset criteria.
- Group conferences, which involve the patient and/or family in joint discussion with staff about the care being received. This leads to problems being discussed and improved plans agreed.

Advantages and disadvantages of these tools will be discussed in the following chapters.

Evaluation of the results involves comparing 'what is' with 'what should be' and then identifying what needs to be done to achieve quality care.

'Taking action' is achieved by developing a plan to ensure that care is given according to the agreed standard. If this last vital step is not taken, then there has been little point in the exercise, and there will be no improvement of patient care. Where standards are found to be low, or there is poor quality of care, action must be planned and taken to change practice.

Exercise 1

In order to take the first step of this cycle, you could start by discussing and then writing a philosophy and objectives for the patients in your clinical area. To help with this exercise, consider the following points:

- Establish if the Health District or organisation that you work for has a philosophy of care and objectives for nursing. Check with your manager or senior nurse.
- If there is a statement of philosophy and objectives, then check that it can be used as a guide to plan, implement and evaluate all aspects of the nursing service. Then use it to develop a philosophy and objectives for the patients in your clinical area.

If there is no statement of philosophy and consequent objectives, then the structure proposed, and the advice given by Marjorie Moore Cantor,[32] may be helpful. It is important to note that she stated very clearly that there was no justification in having a philosophy that could not be used to support and develop nursing practice and improve patient care. She also denounced the use of very broad abstract terms and concepts wrapped up in jargon. A philosophy needs to be written so that it can be easily understood by all concerned, and not open to misinterpretation. The structure or framework has three parts:

- The **purpose**: This statement describes the reason for being – the why of the service. It tries to answer the question: 'What is the purpose of nursing?'
- The **philosophy**: This is a statement of belief that identifies how the purpose should be achieved and provides an explanation of how it was derived. The purpose and philosophy form the basis of policies and practice, and objectives. Some areas to

consider when developing a philosophy of care are: the nature of health and ill health; people's relationships to health and ill health; the role of the nurse in health and ill health; people's needs; nurses' needs; inter-professional collaboration.

- The **objectives**: These must contain criteria, which are items or variables that are measurable, in order to evaluate the degree to which the purpose is achieved. Many of the statements made in the philosophy will translate into objectives. The following people may be able to help you with this activity: the chief nurse, chief nursing adviser or district nursing officer, basic and post-basic nurse teachers, or the research nurses in your district or organisation who have undertaken research studies. There is plenty of literature on the subject, so ask the library to do a literature search for you. Outside the district or organisation, you could contact the Royal College of Nursing.

When you have written your philosophy and objectives, you need to check the following:

- Do they reflect the beliefs and objectives of all the staff on the ward or unit?
- Does your philosophy reflect that of the District and/or organisation?
- Do the objectives reflect the philosophy of the District and/or organisation?
- Do the philosophy and objectives reflect the patient's and his/her family's needs?
- Have the philosophy and the objectives been acknowledged by other members of the caring team?
- Have senior nurses acknowledged the philosophy and objectives?
- Will you need to review your philosophy and objectives? If so, when?
- Will your philosophy and objectives be used to direct nursing practice in your clinical area?

References

1. F. Nightingale, *Notes on Matters Affecting the Health, Efficiency and Hospital Administration of the British Army* (Harrison, 1858).
2. F. Nightingale, Address from Florence Nightingale to the probationer nurses in the Nightingale Fund School at St Thomas' Hospital who were formerly trained there. Printed for private use 23 July 1874 (Nutting Collection, Teachers College, Columbia University).
3. L. A. Alcott, *Hospital Sketches*, Bessie Z. Jones (Ed.) (Cambridge, MA: The Belknap Press of Harvard University Press, 1960).
4. I. Stewart, 'Possibilities of Standardisation of Nursing Techniques', *Modern Hospital* (1919) **12**(6), 451–4.
5. G. B. Carter and H. Balme, *Importance of Evaluating Care* (1936).
6. F. Abdellah, *Effects of Nursing Staffing on Satisfactions with Nursing Care* (American Hospital Association Monograph, 1958).
7. F. Reiter and M. Kakosh, *Quality of Nursing Care: A Report of a Field Study to Establish Criteria 1950–1953* (New York: Graduate School of Nursing, New York Medical College, 1963).
8. DHSS, *The National Health Service Reorganisation Act, 1973* (London: HMSO, 1981).
9. DHSS, *The NHS (Constitution of District Health Authorities)* (London: HMSO, 1973).
10. DHSS, *NHS Management Enquiry* (London: DHSS, 1983).
11. DHSS, *Report of the Committee on Hospital Complaints Procedure* (London: HMSO, 1985).
12. DHSS, *Royal Commission on the National Health Service* (CMND 7615) (London: DHSS, 1979).
13. M. A. Wandelt and S. D. Stewart, *Slater Nursing Competencies Rating Scale)* (Detroit: Appleton–Century–Crofts, 1975).
14. M. A. Wandelt and J. W. Ager, *Quality Patient Care Scale* (New York: Appleton–Century–Crofts, 1974).
15. M. Phaneuf, *The Nursing Audit* (Detroit: Appleton–Century–Crofts, 1972).
16. A. Donabedian, Medical Care Appraisal – Quality and Utilization, in *Guide to Medical Care Administration*, Vol. 11 (New York: American Public Health Association, 1969).
17. S. T. Hegyvary and R. K. D. Hausman, 'Monitoring Nursing Care Quality', *Journal of Nursing Administration* (1975) **15**(55), 17–26.
18. L. Goldstone and J. Ball, 'The Quality of Nursing Services', *Nursing Times* (1984) **29**(8), 56–9.
19. Royal College of Nursing, *Standards of Nursing Care* (London, 1980).
20. Royal College of Nursing, *Towards Standards* (London, 1981).
21. A. Kitson, 'Indicators of Quality in Nursing Care – An Alternative Approach', *Journal of Advanced Nursing* (1986) **11**(2), 133–44.
22. A. Kitson, 'Taking Action', *Nursing Times* (1986) **3**, 52–4.
23. A. Kitson and H. Kendall, 'Rest Assured', *Nursing Times* (1986) **27**, 28–31.
24. J. W. Williamson, 'Formulating Priorities for Quality Assurance Activity: Descrip-

tion of a Method and its Application', *Journal of American Medical Association* (1978) **239**, 631–7.

25. J. C. Schmadl, 'Quality Assurance: Examination of the Concept', *Nursing Outlook* (1979) **27**(7), 462–5.

26. Canadian Nurses' Association, 'Development of a Definition of Nursing Practice', *The Canadian Nurse* (1980) **76**(5), 11–15.

27. College of Nurses of Ontario, *The Standards and Levels of Nursing Practice Including the Assumptive Base* (A discussion paper, 1985).

28. Ordre des Infirmieres et Infirmiers du Quebec, 'Standards and Criteria of Competence for Nurses', extracts from *Evaluation of the Professional Competence of the Nurse in Quebec* (Ordre des Infirmières et Infirmiers du Quebec, 1985).

29. Manitoba Association of Registered Nurses, 'Standards of Nursing Care', *Manitoba MARN* (1981).

30. Royal Australian Nursing Federation, *Standards for Nursing Practice* (Melbourne: Royal Australian Nursing Federation, 1983).

31. N. Lang, 'Issues in Quality Assurance in Nursing', *ANA Issues in Evaluative Research*, (1976).

32. M. M. Cantor, 'Philosophy, Purpose and Objectives: Why Do We Have Them?', *The Journal of Nursing Administration* (1971) **5**(6), 9–14.

Chapter 2 Standards of care

Having written and agreed a philosophy and objectives, the next step of the quality cycle is to describe nursing, or what we do, in measurable terms. Following this, we have to identify standards and criteria in order to establish the quality of the nursing service. It is not possible to measure the quality of care unless it has been accurately described in measurable terms. Setting and monitoring standards of care and quality assurance are two separate issues, although you may hear people discuss them as though they were the same. For example, it may be stated that standards are poor, implying that quality is poor, and this leads to the misconception that standards and quality assurance are one and the same, but this is not the case. A standard is measurable and achievable, and is only part of quality assurance.

Historical background

In the late 1970s and early 1980s, the Health Service, and in particular the nursing service, were faced with cutbacks and enormous change. The Royal College of Nursing were concerned about reduced numbers of nurses and falling standards, so they set up a working group to develop ways of measuring the quality of nursing care. This group produced two documents: *Standards of Nursing Care*[1] and *Towards Standards*.[2] In the first document, four main themes were put forward:

- Nurses to develop their own standards of care and the profession to agree on acceptable levels of excellence.
- Good nursing is planned, systematic and focused on mutually agreed goals.
- Agreed standards provide a base line for measurement.
- Standards of care influence nursing practice, education, management and research.

In the second document, the working party identified eight prerequisites for successful standard setting. The prerequisites for the professional control of standards of nursing care are:

- A philosophy of nursing.
- The relevant knowledge and skills.
- The nurse's authority to act.
- Accountability.
- The control of resources.
- The organisational structure and management style.
- The doctor/nurse relationship.
- The management of change.

In summary, the document identified the need for a statement of the underlying values and philosophy to guide nursing practice before quality nursing care could be assured. The philosophy had to be agreed and made explicit. The following factors were linked with the philosophy:

- There must be a clear identification of the skills and knowledge required by nurses in order to carry out care effectively.
- They must be given the authority to act.
- They must be accountable for their action.

Of the eight factors, accountability is the key to the formation of professional standards. Nurses must be clear about the extent of their authority, responsibility and accountability, which must be matched with the necessary authority to carry out their job effectively.

The last four items relate to the control of the nursing system. Nurse managers and senior nurses must be prepared to provide nurses with the appropriate manpower and equipment to do the job effectively. There must be a recognition of the nurses' need to control appropriate resources, to manage the service and to enjoy a relationship of mutual respect with other profes-

sionals. Finally, nurses need to be in a position to initiate and manage change, a principle implicit to general management.

Avedis Donabedian, in his review of the evaluation of the quality of medical care,[3] outlined three approaches: studying the structural variables, the process of care and reviewing the outcome of patient care. These approaches have often been used by nurses interested in quality assurance, as most areas of nursing fall into one or more of these categories.

In June 1987, nurses in West Dorset decided to set and monitor standards of care as part of a quality assurance programme. We were very fortunate to have a workshop on standard setting led by Dr Alison Kitson, the Project Co-ordinator of *Standards of Care* for the Royal College of Nursing. She outlined the framework for setting standards of care[4] drawing on the work by Helen Kendall in West Berkshire[5] and that of earlier Royal College of Nursing groups. This approach appeared to meet our needs, so we decided to use this framework to set standards. We have set standards in all areas of nursing throughout the district, and recently the occupational therapists and other professionals have successfully set standards using the same framework. The information that follows is really a 'users' guide' to setting standards based on our experience.

What are standards of care?

Standards of care are valid, acceptable definitions of the quality of nursing care. In other words, standards are statements of what good nursing care should be. Standards cannot be valid unless they contain a means of measurement to enable nursing care to be evaluated in terms of effectiveness and quality. In order to measure a standard, it must contain criteria that are measurable.

Who writes and sets standards?

Standards are written by ward staff on topics that they select. They are relevant to the needs of both the nursing staff and the patients. Standards are often written to solve a problem, but they may also be written for an area of concern or one of particular interest.

There are three levels at which standards may be set.

- Universal or generic: Standards at this level are related to the profession's philosophy of care – what the profession of nursing believes about caring for patients or clients. They relate to mission statements and a professional code of conduct. The UKCC professional code of conduct identifies 14 different categories which are useful as guidelines for clinical practice. However, they cannot be used in a ward or clinical area to measure the quality of care, but they must be in the system to ensure good practice.
- District: Standards at this level constitute statements of good practice to which the district or organisation is aiming. District standards establish expectations about the standards of care that are desirable for all patients. Standards written at this level are intended to ensure that practice moves forward and does not stagnate. District standards may move across professional boundaries and are more generic standards of care.
- Local: Standards at this level are statements that are more specific, concerning activities in wards/departments. They are developed by nurses working in a particular area or care group. They are presented in statements of performance to be achieved within an agreed time, and are acceptable, achievable, observable and measurable. This is the level at which this chapter will concentrate.

Terminology

In order to write standards, it is important to understand the terminology.

1. Standard statements

Standard statements are professionally agreed levels of performance, appropriate to the population addressed, which reflect what is acceptable, observable, achievable and measurable.[6] 'Standard statements are professionally agreed' means that a group of nurses get together and agree a standard, taking into account research findings and changes in practice. 'A level of performance' refers to what you are trying to achieve for your patients or clients within your resources – that is, the desired outcome. 'Appropriate to the population

addressed' refers to the care group for which the standard is written taking into account the patient's and relative's needs, negotiating care with patients, developing shared care plans. As an example, consider a standard statement of nursing care for a ward. This would outline the level of care agreed by nurses (professionals) as necessary to achieve the desirable goals for a specific group of patients. It is important to take into account varying levels and resources, and look at patients in the context of their environment, whether it is a ward, intensive care unit, an outpatient department or their own home.

2. Criteria

Criteria may be defined as descriptive statements of performance, behaviour, circumstances or clinical status that represent a satisfactory, positive or excellent state of affairs. A criterion is a variable, or item, selected as a relevant indicator of the quality of nursing care.[6] Criteria make the standard work because they are detailed indicators of the standard and must be specific to the area or type of patient. Criteria must satisfy the following:

- Be measurable and illustrate the standard, and provide local measures.
- Be specific, giving a clear description of behaviour/action and situation/ resources desired/required.
- Be items that you can identify, which are required to achieve a set level of performance. There may be numerous criteria that you can think of but you have to learn to be selective, picking out only those criteria that are the relevant indicators of quality of care and which must be met in order to achieve a set level of performance.
- Be clearly understandable and stated, to avoid misinterpretation. Therefore, they should ideally contain only one major theme or thought.
- Be achievable. It is important to avoid unrealistic expectations in either performance or results.
- Be clinically sound. Therefore, they should be selected by practitioners who are clinically up to date.
- Be reviewed periodically to ensure that they are reflective of good practice based on current research.
- Reflect all aspects of the patient's or client's status – that is, physiological, psychological and social.

In summary, a criterion must be:

- A detailed indicator of the standard.
- Specific to the area and type of patient.
- Measurable.

There are three types of criteria: structure, process and outcome.

2.1 Structure criteria

These describe what must be provided in order to achieve the standard – the items of service which are in the system, such as:

- the physical environment and buildings
- ancillary services – the laundry, pharmacy, paramedical services, catering, laboratory services
- equipment
- staff – numbers, skill mix, training, expertise
- information – agreed policies and procedures, rules and regulations
- organisational system.

2.2 Process criteria

These describe what action must take place in order to achieve the standard:

- the assessment techniques and procedures
- methods of delivery of nursing care
- methods of intervention
- methods of patient, relative and/or carer education
- methods of giving information
- methods of documenting
- how resources are used
- evaluation of the competence of staff carrying out nursing care.

2.3 Outcome criteria

These describe the effect of the nursing care – the results expected in order to achieve the standard in terms of patient behaviours, responses, level of knowledge and health status. What is expected and desirable in a specific and measurable form.

Figure 4 summarises the purpose of these types of criteria.

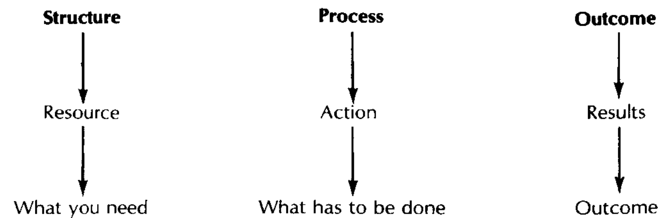

Figure 4 Structure, process and outcome criteria

Criteria describe the activities to be performed while the standard states the level at which they are to be performed. By following this process, nursing care can be measured by comparing actual practice against the stated criteria and then checking to see if the activity has met the agreed standard. The following examples will illustrate.

Example 1

A problem where there is poor follow-up of patients referred to the community nurses.

Standard statement: Each patient is visited by a community nurse within 24 hours of referral.

In order to meet this standard, there are some essential structure, process and outcome criteria:

Structure criteria:
Contact point at GP surgery or health centre for receiving messages;
nursing history forms available.

Process criteria:
The nurse visits the contact point every morning and registers messages received;
the nurse visits and assesses the patient's needs within 24 hours;
the nurse ensures that the patient understands and agrees plan of care;
the nurse records the visit in the patient's home notes.

Outcome criteria:
The patient receives a visit from a nurse within 24 hours;
the patient states that his/her individual needs are being met appropriately;
forms are completed.

Example 2

A problem concerning staff safety. Staff, both nursing and non-nursing, have received an injury from disposed, used sharps.

Standard statement: All sharps will be disposed of without injury to members of staff.

In order to meet this standard, there are some essential structure, process and outcome criteria:

Structure criteria:
District policy re disposal of sharps;
staff have knowledge of this policy;
sharps safe box; polythene bag and label.

Process criteria:
The nurse places all used sharps in the sharps safe box immediately;
the container is closed when it is three-quarters full;
the container is placed in a polythene bag and labelled 'for incineration'.

Outcome criteria:
All sharps are successfully incinerated;
no injuries to staff from sharps.

Classifying standards

This method of writing standards is a dynamic one as it involves writing standards about an area of interest or concern to the group, or in order to solve a problem. As you can imagine, this could lead to vast amounts of information that could overwhelm the system. In order to organise the information, Helen Kendall of West Berkshire Health Authority devised a simple format to co-ordinate the information. Every standard must be classified according to the following headings.

1. Topic

This is the major nursing activity classified according to a particular coding system (see Table 1). The area of interest or concern, or the problem, that has been chosen as the standard can be located in one of these topics. For example, using the standards in Example 1, the topic would be 'continuity of care'. In Example 2, the topic would be 'safety'.

Table 1 Classifying standards

	Index
TOPIC	**SUBTOPIC**
Patient/Client	
SAFETY	Eliminating hazards Theatre standards Control of infection standards
INDIVIDUALISED CARE	
Nursing process	Systematic approach
Activities of living	Maintaining a safe environment Communicating Breathing
(i) 'Physical' (ii) 'Psychological'	Eating and drinking Eliminating Personal cleansing and dressing Controlling body temperature Mobilising Working and playing Expressing sexuality Sleeping Dying
CONTINUITY OF CARE	Reception/admission of patient/client Communication – nursing records/reports Deployment and organisation of team Discharge/transfer plans/arrangements/liaison
INDEPENDENCE AND INVOLVEMENT	Promotion of self-care – decisions/choices – ability to care for self Rehabilitation Family/carer participation
PRIVACY AND CONFIDENTIALITY	Privacy – environment and attitudes to privacy Records – access to records
HEALTH MAINTENANCE AND EDUCATION	Surveillance and monitoring Teaching intervention Prevention of disease Availability of information
Staff/Other	
PERSONNEL	Selection/interviewing, etc.
BASIC AND CONTINUING EDUCATION/APPRAISAL	Competency of nurses/keeping up to date Orientation Professional development
RESEARCH	Research-based practice
PROFESSIONAL ACCOUNTABILITY	Responsibility for decisions
ENVIRONMENT	Environment to enhance effectiveness of therapy

2. Subtopic

This is a subsystem of nursing classifications which enables you to further define the area of interest or concern, or the problem. Again, in Example 1, the

topic is 'continuity of care' and the subtopic is 'liaison'. In Example 2, the topic is 'safety' and the subtopic is 'eliminating hazards'.

3. Care group

This is the target group of patients, clients or staff for whom the standard is written, such as 'care of the elderly', 'patients in the recovery room', 'patients with a specific problem such as diabetes', 'mother and baby', 'children', 'patients or clients in the community', and so on.

4. Achieve by date and review by date

It is important to decide when the standard will be achieved, and to set and record a realistic date. You will also need to discuss and decide when it would be reasonable to review the standard, and decide if it is still relevant, achievable, acceptable, and in line with current practice and research. If it is not, then it should be removed from the system and replaced by an appropriate standard. It is important to realise that standards set today are not set in tablets of stone, but are reviewed and rewritten. They are dynamic and change as the patient's or client's needs change, as new research changes practice, as patients or clients change, or as staff change.

5. Nurse manager's signature

The senior nurse or manager signs the standard statement to say that he/she agrees that the content is desirable, acceptable, applicable in the group specified and achievable in the particular unit by the specified date. Figure 5 shows an example of a form used for submitting standards. This is based on a format designed by Helen Kendall and adapted for use in West Dorset. By classifying standards in this way, it helps to keep the standard succinct and clearly directed at a particular care group. And the good news is that standards should only be a page long! If they are longer, then you may well be rewriting the procedure book. It is very easy to write down everything that you can think of in relation to a problem, but more difficult to be succinct and only include the indicators of quality.

Standard ref. no.: ______	Achieve standard by: ______
Topic: ______	Review standard by: ______
Sub topic: ______	Signature of manager: ______
Care group: ______	Signature of senior nurse: ______
Contact person/Facilitator: ______	Date: ______
Local ref.: ______	
Standard statement: ______	
Structure criteria:	
Process criteria:	
Outcome criteria:	

Figure 5 Form used for submitting standards

Checking standards

Once you have written the standard, check that the criteria:

- describe the desired quality of performance
- have been agreed
- are clearly written (not open to misinterpretation)
- contain one major thought only
- are measurable
- are concise
- are specific
- are achievable
- are clinically sound.

Measuring standards

The next step is to compare present practice with the standard to establish if the standard has been achieved. It is fairly simple to take the criteria in the standard and turn them into a list of questions. Each question is used as an indicator and simply requires a 'yes' or 'no' answer. The total number of 'yes' answers then gives an indication of whether or not the standard has been achieved.

Example 3

Topic: Continuity of care

Subtopic: Discharge

Care group: Medical patients

Standard statement: Each patient's discharge is planned in accordance with his/her wishes and needs.

Structure criteria:
Patient's individualised assessment forms and care plans;
nurse has knowledge of services in the community;
checklist for appropriate services;
patient information booklets.

Process criteria:
The nurse carries out an ongoing assessment of the patient's needs;
the nurse plans the discharge with the patient and/or relatives;
the nurse co-ordinates the discharge information and relays it to the appropriate services and completes the checklist;
the nurse educates the patient using information leaflets and instructions.

Outcome criteria:
There is a completed discharge plan that is acceptable to the patient and relatives;
the discharge is carried out in accordance with the individual's needs and wishes;
all support services have been arranged – checklist complete;
the patient is able to describe his/her medical/nursing needs at home.

Monitoring of this standard may be carried out by:

- Checking that the patient's assessment is complete and that the care plan outlines the discharge plan.
- Checking that the checklist is completed.
- Asking the patient some key questions about his/her medical condition.
  For example:
  – Was your discharge plan negotiated with you? Yes/No
  – If so, was it appropriate? Yes/No
  – Did you receive written instruction about your medical condition? Yes/No
  – The checklist has been completed Yes/No

Measurement techniques are described in detail on page 6; and there are various methods of monitoring standards, although the most commonly used are observation of care, asking the patients and/or relatives, and checking the records. The various types of measurement need to be discussed by the group who set the standard and the most appropriate method selected.

Our practical experience has led us to believe that when a ward or clinical area has a large number of standards, the staff need to be selective about which criteria are monitored. Because of this problem, we only tend to measure the outcome criteria, but also measure other criteria if the standard is not achieved. This approach helps us to establish where the standard is failing and gives us the information to correct the problem. Monitoring standards can easily lead to

the production of dozens of separate questionnaires, which the staff will simply not have time to complete or collate. We have found that it is possible to include questions related to several standards on a single questionnaire and still effectively monitor the different standards.

The final stage in standard setting is to compare current practice with the standard and to act on the monitoring result. If the standard has not been achieved, you need to check why. Ask yourself: 'Is it an achievable standard? Is it realistic?' If not, review the standard. If it is achievable, then develop an action plan to ensure that practice meets the standard.

Questionnaires

The techniques for asking questions have been thoroughly researched and there are many different approaches. Payne,[7] Maccoby *et al.*,[8] Gorden[9] and Oppenheim[10] all have excellent discussions on the art of asking questions. Ward *et al.*[11] give many examples of different approaches to patient surveys. From these findings and recommendations, the following points arise:

- Questions should be phrased so they do not patronise the respondent while at the same time being easily understood, and so meet the intellectual abilities of a cross-section of society.
- Questions must be expressed simply and clearly, care being taken not to use words and phrases that have more than one meaning.
- Ask one question at a time. Do not include two topics in one question. For example: 'Was your discharge planned and negotiated with you?' The discharge may have been planned with the patient but not necessarily negotiated. If asked as two separate questions, the answers could be very different.
- Questions should be short.
- Give the respondent an opportunity to write his/her comments.
- Respondents tend to choose a middle answer if given a choice, so a simple 'yes' or 'no' will overcome this problem.
- Sometimes a respondent may show a bias by answering 'yes' to every question. To avoid this, you can ask a question where a positive answer is required and then later in the questionnaire you can ask the same or similar question where a negative response is required. Including different forms of the same question can also check for consistency and misunderstandings.

These are only a few suggestions but they may help you when you come to prepare a questionnaire to monitor a standard.

Advantages of setting standards

- Standards are written and monitored by nurses in clinical areas. They can also be written and monitored by nurses at the Regional and District or organisational level.
- Standards reflect your own philosophy and values.
- Standards are dynamic and change in response to changes in practice, resources and research findings.
- The very process of setting standards gives a group of nurses the chance to discuss and review their practice.
- Once standards have been set, they can be incorporated into ward, department, unit and health authority targets.
- Written standards can be used to monitor care, assess the level of service provided, identify deficiencies, communicate expectations and introduce new knowledge.
- There is no need for a team of trained observers to monitor standards.

Disadvantages of setting standards

- Problems can arise from badly written or poorly articulated standards.
- Nurses may be unfamiliar with measurement techniques and the development of measurement tools by nurses may lead to unreliability.
- Standard setting is time consuming.
- To set standards effectively, an individual who has experience of setting and measuring standards is required to facilitate the activity.
- Teaching nurses how to set and monitor standards has resource implications.
- The activity of setting standards needs to be co-ordinated. In West Berkshire and West Dorset, the development of a computer index has facilitated this activity, but there are resource implications.

Exercise 2

Get together with a group of nurses in your clinical area and set a standard using the framework described in this chapter. Consider these points:

- Is there someone to help you with this activity, perhaps a senior nurse or a tutor?
- Make sure your nurse manager knows what you are doing and see if he/she would like to be involved.
- Set a time limit on the group's activity and decide when to meet again and what you hope to achieve.
- Select a topic. When selecting a topic, bear in mind the following points:
  - Can you agree on an area of interest or concern, or a problem, on which you would like to write a standard?
  - Can you realistically solve the problem that you have selected?
  - How much work and time will you have to commit to this exercise?
  - Will the end result improve patient care?
  - Write down all the ideas associated with the area of interest or concern, or the problem, and identify those that fit into structure, process and outcome criteria.
  - Can you agree a standard?
  - Having agreed a standard statement, is it easier to work across the criteria so that there is a link between structure, process and outcome? Or is it simpler to list all the structure, then all the process and then the outcome?
  - Is it easier to write the outcome criteria first and work backwards?
  - How will you monitor the standard?
  - When should it be achieved? Remember to be realistic about this date.
  - When should the standard be reviewed – 3 months, 6 months, a year?
  - Discuss the completed standard with your manager.

References

1. Royal College of Nursing, *Standards of Care* (London, 1980).
2. Royal College of Nursing, *Towards Standards* (London, 1981).
3. A. Donabedian, *'Evaluating the Quality of Medical Care', Hilbank Memorial Fund Quarterly* (1966) **44** (2), 166–206.
4. A. Kitson, 'Indicators of quality in nursing care – an alternative approach', *Journal of Advanced Nursing* (1986) 11, 133–144.
5. H. Kendall, 'The West Berkshire Approach', *Nursing Times* (1988) **84** (27) 33–34.
6. H. Kendall and A. Kitson, 'Rest Assured', *Nursing Times* (1986) **82** (35), 28–31.
7. S. I. Payne, *The Art of Asking Questions* (Princeton, NJ: Princeton University Press, 1951.
8. E. Maccoby *et al.*, 'The Interview: A Tool of Social Science', in *Handbook of Social Psychology*, Vol. 1, *Theory and Method*, G. Lindzey (Ed.) (Reading, Mass: Addison–Wesley Publishing Company Inc., 1968).
9. R. I. Gorden, *Interviewing Strategy: Techniques and Tactics* (Homewood, Ill: The Dorsey Press, 1969).
10. A. N. Oppenheim, *Questionnaire Design and Attitude Measurement* (London: Heinemann, 1979).
11. M. J. Ward *et al., Instruments for Measuring Practice and Other Health Care Variables*, Vols 1 & 2 (Boulder, CO: Western Interstate Commission for Higher Education, 1982).

Further reading

M. Cuthbert, 'Evaluating Patient Care', *Australian Nurses Journal* (1984) **13** (8).

A. Donabedian, *The Definition of Quality and Approaches to its Assessment, vol. 1* (Health Administration Press, 1980).

J. Howell and H. Marr, 'Raising the standards – Visible improvements', *Nursing Times* (1988) **84** (25).

A. Kitson, 'Raising the standards', *Nursing Times* (1988) **84** (25), 28–32.

N. Lang, 'Issues in Quality Assurance in Nursing' *ANA Issues in Evaluation Research* (1976).

D. N. T. Sale, 'Participating in Standard Setting: Planning a Programme of Change', *International Journal of Health Care Quality Assurance* (1989) **2** (2).

D. N. T. Sale, 'Raising the standards – Down Dorset Way', *Nursing Times* (1988) **84** (28), 31–32.

Chapter 3 Quality assurance measures – performance. Nursing audit

In this and the following two chapters, we shall look at the various 'off-the-shelf' tools available for measuring the quality of care, see how they are used, discuss their advantages and disadvantages, in order to help you select appropriate methods of measurement. These tools offer an alternative to writing your own standards – that is, selecting criteria to be measured by peer review (see Chapter 2). This chapter in particular discusses the measurement of nursing performance, a technique that has been tried and tested in a variety of clinical situations.

In the USA, in the 1960s and 1970s, nursing audits began to appear, although Medical Audit had emerged in 1919. The quality measurement devised at Wayne State University, Detroit, Michigan was one of the earliest tools. It was in the form of a record audit and was developed by Dr Maria Phaneuf, Professor of Public Health Nursing.

The nursing audit by Phaneuf

The nursing audit by Phaneuf is a retrospective appraisal of the nursing process as reflected in the patient's records. As mentioned in Chapter 1, there are two methods of auditing records: concurrent and retrospective. A retrospective audit is the evaluation of patient care following the discharge of the patient, focusing on the documentation of nursing care given. This type of audit is based on the assumption that what has been written down has been done effectively. Or that 'good' documentation reflects 'good' care, which is not necessarily the case.

This audit was devised around the following seven functions of nursing, as listed by Lesnik and Anderson in their book *Nursing Practice and the Law*:[1]

- The application and execution of the physician's legal orders.
- Observation of symptoms and reactions.
- Supervision of the patients.
- Supervision of those participating in care.
- Reporting and recording.
- Application and execution of nursing procedures and techniques.
- Promotion of physical and emotional health by direction and teaching.

Six of these functions are independent nursing functions, including emotional aspects and teaching, while the seventh is the application of the physician's legal orders. From these seven functions, Phaneuf developed 50 components to help auditors to evaluate the quality of nursing care. These 50 components are stated in terms of actions by the nurses in relation to the patient, in the form of questions to be answered by the auditors when they review the records.

Audit committee

Before carrying out an audit, an audit committee should be formed, comprising of a minimum of five members who are interested in quality assurance, are clinically competent and able to work together in a group. It is recommended that each member should review no more than 10 patients each month and that the auditor should have the ability to carry out an audit in about 15 minutes. If there are less than 50 discharges per month, then all the records may be audited; if there are large numbers of records to be audited, then an auditor may select 10 per cent of discharges.

Training for auditors should include the following:

- A detailed discussion of the seven components.
- A group discussion to see how the group rates the care received using the

notes of a patient who has been discharged – these should be anonymous and should reflect a total period of care not exceeding two weeks in length.

- Each individual auditor should then undertake the same exercise as above. This is followed by a meeting of the whole committee who compare and discuss their findings, and finally reach a consensus of opinion on each of the components.

Carrying out the audit

The audit comprises three parts.

Part I applies to the setting, of which there are two separates formats: one for a hospital setting (hospital or nursing home audit – see Figure 6) and one for

Data must be held in STRICT confidence and MUST NOT BE FILED with patient's record

All entries to be completed by trained clerk

1. Name of patient: (LAST) (FIRST)	2. Sex	3. Age	4. Admission date	5. Discharge date

6. Name of institution:	7. Floor	8. Medical supervision	Private ☐	Ward ☐	OPD/Clinic ☐

9. Complete diagnosis(es):

10. Admitted by referral from:	Physician on staff ☐	MD not hospital affiliated ☐	Clinic/OPD ☐	11. Via emergency ☐

12. Patient discharged to:	Self-care ☐	Family care ☐	PHN agency ☐	Other specify:	Died ☐	Unknown ☐

13. If patient died:	MD present ☐	MD promptly notified ☐	Family present ☐	Family promptly notified ☐	14. If patient Catholic: Last rites given: YES ☐ NO ☐

15. All nursing entries signed by name and dated:	YES ☐	NO ☐	16. Nursing entries show whether made by professional, practical, student nurse, or other:	YES ☐	NO ☐

17. Patient's clothing, valuables and other personal items were accounted for in accordance with policy:	YES ☐	NO ☐

	YES	NO
18. Operative and other patient or family consent forms completed as required by policy	______	______
19. A. Were there any accidents or other special incidents?	______	______
B. If yes, chart indicates report was submitted to administration	______	______
C. Or, report is part of chart	______	______
20. A. Kardex in use	______	______
B. If yes, Kardex becomes part of permanent chart	______	______
21. Nursing care plan is recorded in the chart	______	______
22. A. Nursing admission entry shows assessment of patient's condition: physical	______	______
emotional	______	______
B. Nursing discharge entry shows assessment of patient's condition: physical	______	______
emotional	______	______

Figure 6 Nursing audit by Phaneuf: Part I – Hospital or nursing home audit

From: M. C. Phaneuf, *Nursing Audit Self-regulation in Nursing Practice*, 2nd Edn. (New York: Appleton-Century-Crofts, 1976).

Data must be held in STRICT confidence and MUST NOT BE FILED with patient's record

All entries to be completed by trained clerk

1. Name of patient: (LAST) (FIRST) 2. Sex 3. Age 4. Admission date 5. Discharge date

6. Nursing agency: 7. Number of visits to patient by agency:

8. Complete diagnosis(es):

9. Was patient hospitalised immediately prior to PHN service:
YES ☐ No. of days ☐ NO ☐ Unknown ☐

10. Medical supervision:
Private ☐ Ward ☐ OPD/Clinic ☐

11. Patient referred to PHN by:
Hospital nurse ☐ Hospital social worker ☐ MD ☐ Patient's family ☐ Other specify: ☐ Unknown ☐

12. Patient discharged from PHN to:
Self-care ☐ Family care ☐ Rehospitalised ☐ Died ☐ Other PHN agency ☐ Other specify: ☐ Unknown ☐

13. All nursing entries signed by name and dated:
YES ☐ NO ☐

14. Nursing entries show whether made by public health, professional, practical, student nurse, physiotherapist, other:
YES ☐ NO ☐

15. Nursing care plan is recorded: YES ☐ NO ☐

	YES	NO
16. Were there any accidents or special incidents?	____	____
A. If yes, chart indicates report was submitted to administration	____	____
B. Or, report is part of the chart	____	____
17. Nursing admission entry shows assessment of	____	____
patient's condition:	____	____
physical	____	____
emotional	____	____
18. Nursing discharge entry shows assessment of	____	____
patient's condition:	____	____
physical	____	____
emotional	____	____

Figure 7 Nursing audit by Phaneuf: Part 1 – Public health nursing audit

From: M. C. Phaneuf, *Nursing Audit Self-Regulation in Nursing Practice*, 2nd Edn. (New York: Appleton–Century–Crofts, 1976).

the community (public health nursing audit – see Figure 7). Phaneuf[2] states that this part does not need to be completed by a nurse; it is acceptable for a member of the clerical staff to fill in the details as it does not require professional judgement. The items in this part are not scored but are necessary for information and reference.

Part II is the section where all 50 components, developed into questions from the seven nursing functions, are audited. The audit form has three boxes to the right of each component, as indicated in Figure 8. The score is clearly indicated and the auditor must enter 'yes', 'no' or 'uncertain' against each component. Uncertainty applies when the auditor is unsure as to whether there is enough evidence to state that the component has been adhered to, although it is clear that it has been considered. In Sections 1–5, every component is considered to be applicable, while in Sections 6 and 7 there is a 'does not apply' box.

The audit committee will decide in advance which criteria they accept as having met the requirements of each component. The score is weighted according to the relative importance of the component concerned. The final score is obtained by multiplying the total score of the individual component scores by a value determined by the 'does not apply' responses. The final score is rated as follows:

All entries to be completed by a member of the Nursing Audit Committee
(Please check in box of choice; DO NOT obscure number in box)

Name of patient:
(LAST) (FIRST)

		YES	NO	UNCERTAIN	TOTALS
I.	APPLICATION AND EXECUTION OF PHYSICIAN'S LEGAL ORDERS				
	1. Medical diagnosis complete	7	0	3	
	2. Orders complete	7	0	3	
	3. Orders current	7	0	3	
	4. Orders promptly executed	7	0	3	
	5. Evidence that nurse understood cause and effect	7	0	3	
	6. Evidence that nurse took health history into account	7	0	3	
	(42) TOTALS		0		
II.	OBSERVATIONS OF SYMPTOMS AND REACTIONS				
	7. Related to course of above disease(s) in general	7	0	3	
	8. Related to course of above disease(s) in patient	7	0	3	
	9. Related to complications due to therapy (each medication and each procedure)	7	0	3	
	10. Vital signs	7	0	3	
	11. Patient to his condition	7	0	3	
	12. Patient to his course of disease(s)	5	0	2	
	(40) TOTALS		0		
III.	SUPERVISION OF PATIENT				
	13. Evidence that initial nursing diagnosis was made	4	0	1	
	14. Safety of patient	4	0	1	
	15. Security of patient	4	0	1	
	16. Adaptation (support of patient in reaction to condition and care)	4	0	1	
	17. Continuing assessment of patient's condition and capacity	4	0	1	
	18. Nursing plans changed in accordance with assessment	4	0	1	
	19. Interaction with family and with others considered	4	0	1	
	(28) TOTALS		0		
IV.	SUPERVISION OF THOSE PARTICIPATING IN CARE (EXCEPT THE PHYSICIAN)				
	20. Care taught to patient, family, or others, nursing personnel	5	0	2	
	21. Physical, emotional, mental capacity to learn considered	5	0	2	
	22. Continuity of supervision to those taught	5	0	2	
	23. Support of those giving care	5	0	2	
	(20) TOTALS		0		
V.	REPORTING AND RECORDING				
	24. Facts on which further care depended were recorded	4	0	1	
	25. Essential facts reported to physician	4	0	1	
	26. Reporting of facts included evaluation thereof	4	0	1	
	27. Patient or family alerted as to what to report to physician	4	0	1	
	28. Record permitted continuity of intramural and extramural care	4	0	1	
	(20) TOTALS		0		

VI. APPLICATION AND EXECUTION OF NURSING PROCEDURES AND TECHNIQUES	YES	NO	UNCERTAIN	TOTALS	DOES NOT APPLY
29. Administration and/or supervision of medications	2	0	05		2
30. Personal care (bathing, oral hygiene, skin, nail care, shampoo)	2	0	05		2
31. Nutrition (including special diets)	2	0	05		2
32. Fluid balance plus electrolytes	2	0	05		2
33. Elimination	2	0	05		2
34. Rest and sleep	2	0	05		2
35. Physical activity	2	0	05		2
36. Irrigations (including enemas)	2	0	05		2
37. Dressings and bandages	2	0	05		2
38. Formal exercise programme	2	0	05		2
39. Rehabilitation (other than formal exercise)	2	0	05		2
40. Prevention of complications and infections	2	0	05		2
41. Recreation, diversion	2	0	05		2
42. Clinical procedures – urinalysis, B/P	2	0	05		2
43. Special treatments (care of tracheotomy, use of oxygen, colostomy or catheter care, etc.)	2	0	05		2
44. Procedures and techniques taught to patient	2	0	05		2
(32) TOTALS		0			
VII. PROMOTION OF PHYSICAL AND EMOTIONAL HEALTH BY DIRECTION AND TEACHING					
45. Plans for medical emergency evident	3	0	1		3
46. Emotional support to patient	3	0	1		3
47. Emotional support to family	3	0	1		3
48. Teaching promotion and maintenance of health	3	0	1		3
49. Evaluation of need for additional resources (spiritual, social service, homemaker service, physical or occupational therapy)	3	0	1		3
50. Action taken in regard to needs identified	3	0	1		3
(18) TOTALS		0			
TOTAL SCORE					
FINAL SCORE					

Figure 8 Nursing audit by Phaneuf: Part II – Nursing audit chart review schedule

From: M. C. Phaneuf, *Nursing Audit Self-regulation in Nursing Practice*, 2nd Edn. (New York: Appleton–Century–Crofts, 1976).

- 161–200: excellent
- 121–160: good
- 81–120: incomplete
- 41–80: poor
- 0–40: unsafe.

Advantages of the nursing audit by Phaneuf

- Can be used as a method of measurement in all areas of nursing.
- Seven functions are easily understood.
- Scoring system is fairly simple.
- Results easily understood.
- Assesses the work of all those involved in recording care.
- May be a useful tool as part of a quality assurance programme in areas where accurate records of care are kept.

Disadvantages of the nursing audit by Phaneuf

- Appraises the outcomes of the nursing process, so it is not so useful in areas where the nursing process has not been implemented.
- Designed for a country that has a very different culture to that of the UK. Has not been adapted to take account of British nursing, politics, policies and procedures. This tool was devised over 20 years ago in the USA.
- Many of the components overlap, making analysis difficult.
- Is time consuming.
- Requires a team of trained auditors.
- Deals with a large amount of information.
- Only evaluates record keeping. It only serves to improve documentation, not nursing care (Hegyvary and Haussman[3]).
- The main area of criticism is the assumption that what is done is documented, and what is documented is done (Meyers *et al.*[4]).
- Jelinek *et al.*[5] argue that nurses soon learn how to document in a way that favourably influences the audit results, without necessarily changing the delivery of nursing.

Exercise 3

Selecting the appropriate tool for your ward or clinical area is very important. Get together with your colleagues and discuss the following questions and establish if Phaneuf's audit would be suitable for your clinical area.

- Does it identify weaknesses?
- Does it identify strengths?
- Are you using the nursing process for all your patients?
- Do you consider care in your clinical area to be well documented?
- Does the patient's record equate with care given?
- Are the seven components relevant to your clinical area?
- Can you identify those that are not relevant and list the reasons why?
- Is Phaneuf's audit part of the quality assurance programme in your Health District or organisation?
- Are the following resources available in your Health District or organisation to enable the implementation of Phaneuf's audit? Staff who are:
  - interested in quality control
  - prepared to be trained in audit techniques
  - clinically competent
  - available to undertake the auditing of 10 per cent of all patients discharged.

Can you identify five people who meet these criteria?
Can you identify someone to train them?

By answering these questions, you should be able to establish if this type of audit is desirable and/or feasible.

References

1. M. J. Lesnik and B. E. Anderson, *Nursing Practice and the Law*, 2nd Edn. (Philadelphia: Lippincot, 1955).
2. M. C. Phaneuf, *Nursing Audit Self-regulation in Nursing Practice*, 2nd Edn. (New York: Appleton–Century–Crofts, 1976).
3. S. T. Hegyvary and R. K. D. Haussman, 'Monitoring Nursing Care Quality', *Journal of Nursing Administration* (1976) **6**(9) 6–9.
4. M. Mayers *et al.*, *Quality Assurance for Patient Care–Nursing Perspectives* (New York: Appleton–Century–Crofts, 1977).
5. R. C. Jelinek *et al.*, *A Methodology for Monitoring Quality of Nursing Care* (Bethesda, MD: US Department of Education, Health and Welfare, Publ. No. (HRA) 76-25, 1976).

Chapter 4 Quality assurance measures – performance. Quality Patient Care Scale (Qualpacs)

Qualpacs is also an American tool, being the result of the combined work of two professors, Wandelt and Ager, and their faculty members at Wayne State University College of Nursing, published in 1974.[1] Many of the items are derived from the Slater Nursing Performance Rating Scale.[2] The Slater scale evaluates the competence of the nurse while he/she is giving patient care, by observing and measuring his/her performance against predetermined standards within the scale. Qualpacs, on the other hand, measures the quality of care received by the patients from the nursing staff of a ward or unit.

Qualpacs uses a method of concurrent review that is designed to evaluate the process of care at the time it is being provided, including a review of the records, patient interview (asking the patient to comment on certain aspects of his/her care), direct observation of patient's behaviours related to predetermined criteria, staff interview (asking the staff to comment on specific aspects of patient care) and staff observation (observing nursing behaviours related to predetermined criteria).

Using Qualpacs

Qualpacs is used to evaluate the direct and indirect interaction of nursing staff with patients. It contains 68 items that are divided into the following six categories:

- psychosocial: individual (15 items)
- psychosocial: group (8 items)
- physical (15 items)
- general (15 items)
- communication (8 items)
- professional implications (7 items).

The Quality Patient Care Scale, which constitutes the first of the six categories, is shown in Figure 9. *D indicates that direct observation is appropriate; *I indicates that indirect observation is appropriate; and *D/*I indicates that either method may be used.

For each item, a list of clues is provided to clarify exactly how the item should be interpreted. Taking the first item in the psychosocial: individual section, 'Patient receives nurse's full attention', the clues suggested by Wandelt and Ager are:

- Patient is appropriately responded to verbally and non-verbally, without being asked to repeat phrases.
- Staff assume positions that will aid in observation and communication with patient.
- Conversation of staff is restricted to patient who is receiving care.
- The infant is looked at and talked to as he/she receives a bottle feeding.
- Questions are asked which encourage patient to express feelings.
- Evidence is given by staff of anticipation of projected needs of the patient.

These clues may be modified to suit the particular situation and do not affect the scale, as the items are scored, *not* the clues.

The items listed can be either directly observed or indirectly gathered from staff, patients and/or the records. Most of the items require direct observation of the behaviour, although a few may be implied from charts and other sources. Nursing care delivered to the patient is evaluated regardless of the skill level of the nurse providing the care. The observation scoring time is usually three and one-half to four hours, which includes one hour for preparation, two hours for direct observation and one hour spent rating the direct observation period.

Date ____________________

Patient (name or no.): Rater (name or no.):

INTERACTIONS RECORD: AM/PM

No.:												
Time:												

PSYCHOSOCIAL: INDIVIDUAL Actions directed toward meeting psychosocial needs of individual patients:		5	4	3	2	1	0	0	
1. Patient receives nurse's full attention *D	1	X 5		X X 6		X 1			11–12 12/3
2. Patient is given an opportunity to explain his feelings *D	2								13–14
3. Patient is approached in a kind, gentle and friendly manner *D	3								15–16
4. Patient's inappropriate behaviour is responded to in a therapeutic manner *D	4								17–18
5. Appropriate action is taken in response to anticipated or manifest patient anxiety or distress *D/*I	5								19–20
6. Patient receives explanation and verbal reassurance when needed *D	6								21–22
7. Patient receives attention from nurse with neither becoming involved in a non-therapeutic way *D	7								23–24
8. Patient is given consideration as a member of a family and society *D/*I	8								25–26
9. Patient receives attention for his spiritual needs *D/*I	9								27–28
10. The rejecting or demanding patient continues to receive acceptance *D/*I	10								29–30
11. Patient receives care that communicates worth and dignity of man *D	11								31–32
12. The healthy aspects of the patient's personality are utilised *D/*I	12								33–34
13. An atmosphere of trust, acceptance and respect is created rather than one of power, prestige and authority *D	13								35–36
14. Appropriate topics for conversation are chosen *D	14								37–38
15. The unconscious or non-orientated patient is cared for with the same respectful manner as the conscious patient *D	15								39–40
	AREA I MEAN								41—42—43

Figure 9 Quality Patient Care Scale (Qualpacs)

The information is gathered by specially trained, non-participant nurse observers, through direct observation and indirect means. The role of the non-participant observer is to evaluate the care that the patient receives – they must not communicate, verbally or non-verbally, with patients, relatives or members of the staff. Nor must they contribute or intervene in patient care, as this would alter the care received by the patient. Observers should only intervene if the patient is at risk. The criteria used by these observers is that care is safe, adequate and therapeutic. To reduce the risk of observer bias, it is recommended that at least two observers should watch the same incident. The

assessors use their own judgement as to whether they observe just one patient or a small group of patients at a time.

Prior to the evaluation of a ward, the person who requested the assessment is responsible for ensuring that all the nursing staff are fully aware and understand what is involved. All patients, relatives and visitors must also be informed, and permission sought from those selected for the evaluation. The patients selected are those who are representative of those being cared for in that particular ward.

The process of the evaluation

The evaluation starts with a verbal report from the nurse who is responsible for the selected patient. The observers then read the patient's records and draw up their own plan of care for each patient, using information available and their professional judgement. This enables them to identify actions that they would expect to see during the observation period. The observer then takes up his/her position, so it is possible to both observe and hear the selected patient, and begins the two hour non-participation observation period.

The nurse observer rates the quality of care that the patient receives as 'best care' (5 points), 'between' (4 points), 'average care' (3 points), 'between' (2 points) and 'poorest care' (1 point). Items may also be deemed 'not applicable' or 'not observed', since this system was designed to evaluate nursing care currently being received by the patient.

Within one aspect of nursing care, several items in different sections may be observed concurrently. The observer notes all these and places an X in the appropriate column and subsection for each interaction observed. The number of each item and the commencing time of each interaction is recorded at the top of the scale. The interaction is considered to be completed when there is an interruption or break in the communication between the patient and the nurse. It may be considered more useful to identify the grade of nurse from which care is received, so instead of an X the letters S for sister, R for registered nurse and L for learner may be used. Various symbols are acceptable, but the names of the nurses are not recorded on the form. The observer may also add a number to the symbol, indicating the number of interactions, such as L6 or S3 – this allows a more detailed analysis of the content of the interactions.

At the end of the observation period, the observer looks for indirect evidence of care by reviewing the selected patient's records and charts, which are also scored. As before, the symbol X is used if there is no evidence of the level of the nurse. Many of the items will not have received scores, so the assessor must decide if the item was relevant to the patient's care; if not, then the column 'not applicable' is marked with an X. If the item is considered essential for that patient's care, then the observer, in discussion with the nurse and with reference to the records, must decide if the omission was reasonable. For example, it might be considered reasonable if the item was scheduled for later in the day in order to meet the patient's needs, in which case an X is marked in the 'not observed' column. If the item of care was needed by the patient, and expected by the observer but not given, then the X is marked in the 'poorest care' column.

Scoring Qualpacs

When the scale has been checked, every item should have at least one symbol against it. The mean score of each item is established in this way:

- Every entry against an item is awarded a value. These figures are added together and give a total score for the item.
- This figure, is entered above the diagonal line in the column headed 'mean score' (see Figure 9).
- This total score is then divided by the number of entries made against that item and the figure entered below the diagonal line (see Figure 9).

Items rated 'not applicable' or 'not observed' receive no score. All 68 items are scored in this way.

The total mean score gives the overall measurement of the quality of care and is found by:

- The addition of all the item means.
- This total is then divided by the number of items that received a score, again excluding those rated 'not applicable' or 'not observed'. These figures are recorded at the end of the scale (see Figure 10).

PROFESSIONAL IMPLICATIONS Care given to patient reflects initiative and responsibility indicative of professional expectations	Item number	Best care	Between	Average care	Between	Poorest care	Not applicable	Not observed	Mean Score
62. Decisions that are made by staff reflect knowledge of facts and good judgement *D/*I	62								78–79
63. Evidence (spoken, behavioural, recorded) is given by staff of insight into deeper problems and needs of the patient *D/*I	63								11–12
64. Changes in care and care plans reflect continuous evaluation of results of nursing care *D/*I	64								13–14
65. Staff are reliable: follow through with responsibilities for the patient's care *D/*I	65								15–16
66. Assigned staff keep informed of the patient's condition and whereabouts *D	66								17–18
67. Care given the patient reflects flexibility in rules and regulations as indicated by individual patient needs *D/*I	67								19–20
68. Organisation and management of nursing activities reflect due consideration for patient needs *D/*I	68								21–22
	AREA VI MEAN								23–24–25
	Sum of item means								
	Number of items rated								
	Mean of item means								26–27–28

FINAL QUALPACS SCORE

Area I		Area IV	
Area II		Area V	
Area III		Area VI	
		TOTAL	

Figure 10 Final Qualpac scores

The mean scores of each of the 'areas' can be worked out in the same way:

- Add together the mean scores of each of the items, within an area.
- Divide this total by the number of items that received a score. These figures are recorded at the end of each subsection (see Figure 10).

It is important to note that it is not arithmetically correct to use the mean scores of the area subsections to calculate the total mean score. This can only be done by adding all the item means together, and dividing this number by the number of items scored.

Finally, the results are discussed and analysed before a report is sent to the person who requested the evaluation. This will include the overall mean score, the assessor's impression of the care, points for improvement, suggestions and recommendations for change, and the scores for the subsections with examples of how good and bad scores were awarded.

Advantages of Qualpacs

- Has been subjected to rigorous testing by researchers in the USA, and there is documented evidence of its reliability, validity and discriminatory ability.
- Has been used in this country, in particular at the Nursing Development Unit, Oxford.
- Use of direct observation provides data that cannot be collected by other means. For example, observation of verbal and non-verbal behaviours provides information on interaction between nurses, patients, their families and other professionals. It is not possible to evaluate this type of interaction by reviewing charts and records – it has to be seen or observed.
- Uses more than one method of concurrent review.
- Provides nurses with an evaluation of their own performance, which can lead to a greater awareness and change in practice, and so improve patient care.
- Provides positive feedback for the nursing team.

Disadvantages of Qualpacs

- Content represents American values although many of the implied values in the items on the scale may match your own values.
- Requires highly skilled and trained observers.
- Is time consuming.
- Observer bias can occur during direct observation; for example, giving a rating that is either too negative or too positive, and being influenced by one's own expectations and attitudes.
- Has been criticised for being subjective and reliant on professional judgement, although most nurses seem to agree on what constitutes good or bad care.
- Scoring system is time consuming and quite complicated.

Exercise 4

Selecting the approprate measurement tool for your ward or clinical area is very important, so this exercise is designed to test out the suitability of Qualpacs for your clinical area. Discuss with your colleagues the following points:

- Does Qualpacs identify strengths and weaknesses?
- Is it a reliable method of measuring quality of patient care?
- Do the items in the scale reflect your values?
- What are your values?
- Is Qualpacs used in your Health District or organisation at present? If not, are there plans to use it? Does it fit in with your Health District's or organisation's plans for quality assurance?
- What do you consider to be the essential attributes for an observer?
- Would you/your staff feel comfortable being observed while giving patient care?
- Do you/your staff want the quality of patient care on your ward/unit measured?
- Are there specific areas of practice that you feel you would like measured? List these and compare them to the items included in the Qualpacs scale.
- Do you see Qualpacs as the only method of measuring quality of care or as part of a programme involving other methods.

If you are interested in using Qualpacs, you will need to read some of the literature listed and then discuss it with the person in your Health District or organisation who is responsible for quality assurance, to see if it is feasible. This is not a method that you can implement on your own – you need the backing of management to provide resources for a team of observers and their training.

References

1. M. A. Wandelt and J. W. Ager, *Quality Patient Care Scale* (New York: Appleton–Century–Crofts, 1974).
2. M. A. Wandelt and D. S. Stewart, *Slater Nursing Competencies Rating Scale* (New York: Appleton–Century–Crofts, 1975).

Further reading

P. Trussell and N. Strand, 'A Comparison of Concurrent and Retrospective Audits on the Same Points', *Journal of Nursing Administration* (1978) **8**(38), 33–38.

P. Wainwright and S. Burnip, 'Qualpacs at Burford', *Nursing Times* (1983) **79** (5), 36–38.

A. Wiles, *et al.*, *Nursing Quality Measurement* (John Wiley & Sons, 1987).

Chapter 5 Quality assurance measures – performance. 'Monitor'

Monitor, an Anglicised version of the Rush Medicus methodology, was produced by North-West Region and Newcastle-upon-Tyne Polytechnic.

Rush Medicus

The Rush Medicus instrument was developed by the Rush Presbyterian St Lukes's Medical Centre and the Medicus Systems Corporation of Chicago from 1972 and was completed in 1975. This system evolved from research in two main areas. First, the development of a 'conceptual framework', stating what is being measured. As this constitutes a patient-centred approach, the nursing process and patient needs were the identified components. Second, the identification of criteria for evaluating the quality of care within this framework. Within the system, there are a series of objectives and sub-objectives, which represent the structure of the nursing process (see Figure 11).

At the same time as the development of this system, criteria were developed and tested to measure each of the sub-objectives within the six main objectives. These criteria are written so that a 'yes' or 'no' response indicates the quality of

1.0 THE PLAN OF NURSING CARE IS FORMULATED
- 1.1 The condition of the patient is assessed on admission
- 1.2 Data relevant to hospital care are ascertained on admission
- 1.3 The current condition of the patient is assessed
- 1.4 The written plan of nursing care is formulated
- 1.5 The plan of nursing care is co-ordinated with the medical plan of care

2.0 THE PHYSICAL NEEDS OF THE PATIENT ARE MET
- 2.1 The patient is protected from accident and injury
- 2.2 The need for physical comfort and rest is met
- 2.3 The need for physical hygiene is met
- 2.4 The need for a supply of oxygen is met
- 2.5 The need for activity is met
- 2.6 The need for nutrition and fluid balance is met
- 2.7 The need for elimination is met
- 2.8 The need for skin care is met
- 2.9 The patient is protected from infection

3.0 THE PHYSICAL, EMOTIONAL AND SOCIAL NEEDS OF THE PATIENT ARE MET
- 3.1 The patient is orientated to hospital facilities on admission
- 3.2 The patient is extended social courtesy by the nursing staff
- 3.3 The patient's privacy and civil rights are honoured
- 3.4 The need for psychological, emotional well being is met
- 3.5 The patient is taught measures of health maintenance and prevention of illness
- 3.6 The patient's family is included in the nursing care process

4.0 ACHIEVEMENT OF NURSING CARE OBJECTIVES IS EVALUATED
- 4.1 Records document the care provided for the patient
- 4.2 The patient's response to care and treatment is evaluated

5.0 UNIT PROCEDURES ARE FOLLOWED FOR THE PROTECTION OF ALL PATIENTS
- 5.1 Isolation and infection control procedures are followed
- 5.2 The unit is prepared for emergency situations

6.0 THE DELIVERY OF NURSING CARE IS FACILITATED BY ADMINISTRATIVE AND MANAGERIAL SERVICES
- 6.1 Nursing reporting follows prescribed standards
- 6.2 Nursing management is provided
- 6.3 Clerical services are provided
- 6.4 Environmental and support services are provided

Figure 11 Rush Medicus – Objectives

care and, where appropriate, 'not applicable' may be applied. Each item is written in such a way as to minimise ambiguity, and to ensure reliable interpretation and response from the observers carrying out the study. Looking through the criteria, you will see that they are relevant to almost any situation of patient care.

This system is computerised and involves a simple dependency rating system, which enables the computer to select 30–50 criteria at random for each patient according to their dependency rating. In order to test the criteria, information is gained from the following sources:

- questioning patients
- questioning nurses
- observing patients
- observing nurses
- observing the patient's environment
- observing the general environment
- examining records
- observer making inferences.

Rush Medicus developed a method for evaluating the quality of nursing care for medical, surgical and paediatric patients, including the relevant intensive care units. Evaluation is through the production of two indexes. The first is an average score of the quality of patient care and the second is a score for the unit environment. Management scoring is on a scale of 0–100, where a higher score indicates a better quality of care. The score obtained by the unit is an indicator of the quality of care rather than a measure of all aspects of the quality of care.

Monitor

In the UK, Ball *et al.*[1] successfully adapted the Rush Medicus methodology, resulting in the development of the monitoring tool Monitor. The original version was designed for use on acute surgical and medical wards; however, more recent versions have been developed for use in geriatric wards and district nursing, followed by a version for psychiatric and paediatric wards in 1987. The midwifery and health visiting versions are planned for publication by Leeds Polytechnic in 1989.

Monitor has a patient-orientated approach and two main concepts; individualised patient care and the patient's needs. Linked with these concepts is the monitoring of the support services who influence the delivery of good standards of patient care.

Monitor is based on a master list of 455 questions about patient care. Only 80–150 are directed at the care of any one patient and they are grouped into four sections:

- Assessment and planning.
- Physical care.
- Non-physical care.
- Evaluation.

ASSESSMENT AND PLANNING

- Is there a statement written within 24 hours of admission on the condition of the skin?
- Do the nursing orders or care plan include attention to the patient's need for discharge teaching?

PHYSICAL CARE

- Has the patient received attention to complaints of nausea and vomiting?
- Is adequate equipment for oral hygiene available?

NON-PHYSICAL CARE

- Do the nursing staff call the patient by the name he prefers?
- Are special procedures or studies explained to the patient?

EVALUATION

- Do records document the effect of the administration of 'as required' medication?
- Do records document the patient's response to teaching?

Figure 12 Typical questions representing the different sections of the Monitor patient questionnaire

Figure 12 demonstrates some typical questions.[2]

Monitor follows the structure of the nursing process but the authors state that the clinical area being assessed does not have to be using this approach to patient care in order to use Monitor.

1. Dependency groups

Patients are classified into dependency groups according to the following factors:

- personal care
- feeding
- mobility
- nursing attention (frequency of nursing requirements)
- other (including incontinence, preparation for surgery, severe behavioural problems).

There are four levels of dependency:

- minimal care
- average care
- above average care
- maximum care.

The definitions of dependency are defined in Figure 13.

There are four different questionnaires, each appropriate to a specific dependency category of patients. The criteria are presented as questions and the information is gained from a variety of sources – by asking the nurse or the patient, consulting records, and observing both the environment and the patient. The questions are answered by trained assessors with a 'yes', 'no', or 'not applicable' or 'not available'. The scoring system is 1 for 'yes' and 0 for 'no' – the 'not applicable/available' answers are deleted. The total score is given as the percentage of 'yes' responses obtained. The closer the score is to 100 per cent, the better the standard of care being delivered.

CATEGORY I – MINIMAL CARE
Patient is physically capable of caring for himself but requires minimal nursing supervision and may require treatments and/or monitoring (e.g., B.P., T.P.R., clinical observations) by nursing staff.

CATEGORY II – AVERAGE CARE
Patient requires an average or moderate amount of nursing care, including some nursing supervision and encouragement. The patient may require some assistance with personal care needs as well as monitoring and treatments. Some examples would include:

- a patient past the acute stage of his disease or surgery
- a 3–4 day post-op cholecystectomy
- a diabetic patient for reassessment
- an independent patient requiring extensive investigative procedure.

CATEGORY III – ABOVE AVERAGE CARE
Patient requires a greater than average amount of nursing care, including nursing supervision, encouragement and almost complete assistance to meet personal care needs. The patient usually requires medical support and sometimes the use of special equipment. Some examples would be:

- a patient after the acute phase of CVA (residual paralysis)
- a first day post-op radical mastectomy or cholecystectomy
- a debilitated, dependent elderly person
- a newly diagnosed diabetic requiring extensive health teaching and support from nursing staff.

CATEGORY IV – MAXIMUM CARE
Patient requires very frequent to continuous nursing care along with close supervision by medical personnel and/or health team members, and/or support from technical equipment. Some examples would include:

- a quadriplegic in early rehabilitative stages
- a severely burned patient
- a comatose patient

Figure 13 Definition of categories

From: Ball et al., *Monitor: An Index of the Quality of Nursing Care for Acute Medical and Surgical Wards* (Newcastle-upon-Tyne Polytechnic Products Ltd, 1983).

2. Case study

Pam Leggett, Assistant Director of Nursing Services, has used Monitor at Poole General Hospital. This section describes the experience.

'At Poole General Hospital (PGH), it was decided to use Monitor, together with a complete review of all other information and its influence on quality. Not only did we want to identify present levels of achievement, but also to look to improved services for the future and cost savings in the light of our findings. In other words, it was felt that managers should be responsive to the quality of care in the service, to the best value for money.

2.1 Rationale for use

The rationale for undertaking this study in PGH in all medical and surgical wards was, and has been, identified in various customer-related industries to see if we were setting the correct goals and meeting the customers' demands and needs. The research objective was to examine customers' satisfaction, to produce a level of achievement and, following results, to look towards a projected level of desired achievement. In using Monitor, it would also be possible to assess the patients' expectations and to see to what degree these had been fulfilled. In contrast with other companies in industry, the product we are dealing with is not tangible, and not easily measurable, and it was with these thoughts in mind that we welcomed the introduction of Monitor.

2.2 The project study

The study commenced on 24 June 1985, using a steering group of four trained and experienced nurses led by the writer as a team leader. The group was purposely small, in order to reach clear group understanding of the Monitor questionnaires. The aims of our group were not only to plan and carry out the study in PGH, but to liaise with other districts who may have previously used the system, or who were considering its implementation; to organise a suitable training and liaison period for all staff within the hospital; and to produce a planned evaluation programme once the studies were completed, with speedy feedback of results to all staff.

A random sample of 10–12 patients was selected from each medical and surgical ward with approximately three in each dependency category. The assessors, having introduced themselves to the patient, would then explain and ask the questions. Each study in each ward took two assessors approximately two days to complete, including the scoring of the results. Once the scores were produced for the ward, the statistical results were fed back directly.

A more detailed evaluation was then completed with the ward sister and nursing officer, in order to produce an action plan for each ward, highlighting areas of suggested improvement. Throughout the study, the importance of confidentiality was stressed and ward scores were listed within an alphabetical coded key system.

2.3 What has been learned?

Now all 16 wards in PGH have been studied, it is extremely useful to look back and reflect not only on the scores, but on the way the study was completed, to determine whether the best system was used. One or two variations for the future may well be considered, or indeed as to whether we use Monitor as an ongoing tool in itself.

Overall hospital results have shown that we still have a long way to go as far as planning our care, but that we are evaluating the care we are offering patients. An even distribution of care is being offered to patients in various dependency categories, from the very able to the highly dependent. Our figures are closely in line with the known averages in other acute hospital services.

2.4 Future planning

From the study, we have been able to plan the way forward as far as looking at training needs and development for the future. We have highlighted the need to look at more individualised and planned patient care, and we have recently set about trying to offer further updating in this area. We can now list standards

of care we want to achieve within the unit and incorporate our information linked with other investigations, such as establishment figures, skill mix, and so on, to give a total picture of what we are able to achieve.

2.5 Staff benefits

Staff have welcomed the study. They realise they have a responsibility for quality and want to be part of the team looking at the quality assurance programme. It is essential to take note of the customers' (patients') viewpoint and satisfaction, boosting our staff morale and interest, and ensuring a patient's stay is comfortable. Present testing concerns the feasibility of performing biannual nursing audits with full audits (that is, using Monitor) taking place annually with ward staff carrying out one another's studies themselves. In this way, the programme should remain cost effective and realistic, and ensure the commitment to quality throughout the unit. One of the key issues highlighted from this study has been the need to improve methods of communication and an improved ongoing hospital information system for both staff and patients. We look forward to the future with optimism knowing that in this unit there will be a continuing commitment to quality in the interests of the public and staff within our services. The help and enthusiasm of the staff in making the Monitor study such a success deserves our greatest praise and gratitude'.

3. Preparing for Monitor

If you have decided that Monitor would be an appropriate tool to evaluate patient care on your ward, then you will need to consider the following points:

- The consultation of trade unions because of the observational studies concerning how their members work and the environment in which they work, and the Ethical Committee because of the questioning of patients about their care.
- The purchase of copies of the documents *Monitor* and *A Guide to Monitor*.
- The setting up of a steering group like the one described by Pam Leggett. This is essential and should include ward sisters, managers and assessors.
- The selection of a chairman for the steering group. The chairman should be someone with a strong commitment, a good understanding of quality assurance, and an ability to facilitate a common agreement and understanding of all the questions.
- The selection of two assessors per ward. Nurse managers, teachers with recent clinical experience and ward sisters may act as assessors. Of the two assessors per ward, at least one should have expertise in the particular speciality. In some districts, there is a team of trained assessors who use Monitor on all the appropriate wards. In other districts, assessors are taken from other wards in the same hospital. In some areas, neighbouring health authorities train a team of assessors who are available and able to use Monitor in any ward in either district.
- The training of assessors. These people will need time to go through all the questions in Monitor. They must have a common understanding of all the questions if the results are to be valid. These assessors could need as much as 10–12 hours, divided into 5–6 meetings, for this activity. These meetings will need to include thought and discussion about the questions leading to agreement on their meaning, and some practise using Monitor on a few patients.
- Changing or removing irrelevant or inappropriate questions should be kept to an absolute minimum, as any major changes would make the results unreliable. Results of Monitor can be compared with other health districts but this would not give a reliable comparison if the criteria have been altered.
- Introduction and orientation of staff to Monitor. Seminars to explain the system to staff, the reasons for using it, the benefits to patient care, how it works, what will happen and how it will affect them.
- Preparation of the ward staff. Dates for the study need to be discussed and planned so that the evaluation takes place when the ward is operating as normally as possible, so staff holidays, study leave and student allocation should be considered. On the day of the monitoring study, the charge nurse or sister will be asked to agree that the patient mix, workload activity and staffing levels are typical of his/her ward.

- Patients and relatives must be informed about Monitor and the steering group will need to devise a method for meeting this need.

4. Using Monitor on the ward

- The assessors and the sister or charge nurse agree the patient dependency classification for each patient on the ward.
- Each patient is placed in one of the four classifications.
- The appropriate set of questions are selected and posed.
- *Either* all patients are included in the study over a period of two days *Or* three patients are chosen at random, without reference to their records or the sister or charge nurse, for each dependency category.
- The patient's initials or a chosen code is entered on to the appropriate Monitor sheet.
- The assessor then answers the questions on the sheet recording them in the appropriate box, as shown in Figure 14.

5. Scoring Monitor

Most of the questions can be answered 'yes', 'no', or 'not applicable' or 'not available'. In some questions, the 'yes' answer is further divided into 'yes, always', 'yes, complete', and so on. All these variations of 'yes' count as a full 'yes' and score 1. There is also a 'yes, sometimes', 'yes in part' and 'yes incomplete', and so on. All of these variations score a $\frac{1}{2}$ point. The answer 'no'

Source of information:		Patient's code or initials:									
Ask patient	e. DO STAFF SEEK PATIENT'S PARTICIPATION DURING ROUNDS? To patient: When doctors and nurses come to see you in a group, do they include *you* in their discussion	No									
		Yes, sometimes									
		Yes, always									
		Not applicable/ Not available									
		114									
		SCORE									
	3. *Patient's Privacy and Civil Rights*										
Records	a. IS WRITTEN CONSENT OBTAINED BEFORE SPECIAL PROCEDURES ARE UNDERTAKEN? Includes all procedures for which written consent must be given, e.g. surgery, lumbar puncture, etc.	No									
		Yes									
		Not applicable/ Not available									
		115									
		SCORE									
Ask nurse	b. IS THE NURSE AWARE OF WHAT THE PATIENT HAS BEEN TOLD ABOUT HIS/HER ILLNESS? To nurse: Has Mr/Mrs .... been told anything about his/her illness? Code 'no' if nurse is unsure or does not know.	No									
		Yes									
		Not applicable/ Not available									
		116									
		SCORE									
Ask patient	c. ARE SPECIAL PROCEDURES OR STUDIES EXPLAINED TO PATIENT? To patient: Have you had any special tests or procedures while you have been in hospital? If 'no' code 'not applicable/not available'. If 'yes' ask 'Were they explained to you before they were done?' 'Were the results of the tests explained to you?' Code 'yes fully' if yes to both. Code 'yes in part' if yes to only one.	No									
		Yes in part									
		Yes fully									
		Not applicable/ Not available									
		117									
		SCORE									

Figure 14 Assessment form

From: Ball et al., *Monitor: An Index of the Quality of Nursing Care for Acute Medical and Surgical Wards* (Newcastle-upon-Tyne Polytechnic Products Ltd, 1983).

scores 0. Answers such as 'not applicable' or 'not available' are marked X. To obtain the per cent index for each section, and consequently the whole tool, which is an index of the quality of care of the patient, the assessor:

- Deducts the number of inapplicable responses from the total number of questions to get the number of applicable answers.
- To obtain the total score, all the 'yes' answers are totalled as just described.
- Then the total score is divided by the number of applicable responses and multiplied by 100 to give the percentage.

A computer programme has been developed that will calculate and print out the scores for patients, groups and wards. These results are then discussed with the charge nurse or sister and an action plan is developed to improve patient care. Ward scores can be compared within hospitals, districts or on a broader basis between districts.

Advantages of Monitor

- Using this tool involves the systematic collection of information related to the clinical area including documenting systems, management systems, the environment, the delivery of care and outcomes.
- Gives feedback to ward staff about the quality of care.
- Helps staff to improve their performance.
- Gives an indication of patient satisfaction.
- Compares performance with other wards and/or districts.
- Measures the effectiveness of the nursing process.
- Provides information that can be used to facilitate future planning in areas such as training and the development of nursing.

Disadvantages of Monitor

- Requires a team of trained observers to monitor the ward or unit. This activity has resource and cost implications for the service.
- Requires the purchase of several copies of the document.
- Wards or units that have not implemented the nursing process and are more task orientated will probably obtain lower scores, although the authors state that this is not the case. However, this is debatable as the questions in Monitor are grouped according to the concept of the nursing process.
- The criteria measured are preset and therefore not 'owned' by the staff whose performance is being measured.
- A clear statement of its philosophy of nursing is lacking.
- There are problems of observer reliability and subjective interpretation which may well be reduced if the observers have extensive training.

Exercise 5

If you feel that Monitor would be an appropriate tool to use on your ward or unit, then I suggest that you get a copy of the document in order to discuss the questions thoroughly with your colleagues. To help you with this exercise, enlist the help of a senior nurse or a teacher with some experience of quality assurance. When you have received a copy of Monitor, go through the questions and establish if:

- They are relevant to your clinical area.
- They represent the indicators of quality care on your ward/unit.
- You and your colleagues can agree on an interpretation of 10 of the questions.

References

1. J. A. Ball *et al.*, *Monitor: An Index of the Quality of Nursing Care for Acute Medical and Surgical Wards* (Newcastle-upon-Tyne Polytechnic Products Ltd., Ellison Building, Ellison Place, Newcastle-upon-Tyne, 1983).
2. V. A. Illsley and L. A. Goldstone, *Guide to Monitor* (Newcastle-upon-Tyne Polytechnic Products Ltd., 1986).

Further reading

R. Fawcett, 'Measurement of Care Quality', *Nursing Mirror* (1985) **160**(2), 29–31.
R. C. Jelinek *et al.*, *A Methodology for Monitoring Quality of Nursing Care* (Bethesda, MD: US Department of Education, Health and Welfare Publ. No. (HRA) 76–25, 1976).
R. C. Jelinek *et al.*, *Monitoring Quality of Nursing Care*, Part 2, *Assessment and Study of Correlates* (Bethesda, MD: US Department of Education, Health and Welfare Publ. No. (HRA) 76-7, 1976).
R. C. Jelinek *et al.*, *Monitoring Quality of Nursing Care*, Part 3, *Professional Review for Nursing: An Empirical Investigation* (Bethesda, MD: US Department of Education, Health and Welfare Publ. No. (HRA) 77–70, 1977).
J. McCall, 'Monitor Evaluated', *Senior Nurse* (1988) **8**(5), 8–9.
J. Whelan, 'Using Monitor – Observer Bias', *Senior Nurse* (1987) **7**(6), 8–10.

Chapter 6 Quality circles

Having discussed the various types of tools available for measuring the quality of care, we now move on to quality circles, which may be used as part of a quality assurance programme. Quality circles are a useful method of solving problems that may result in an improvement in the quality of care.

Quality circles were launched in Japan in 1962 as part of an overall quality assurance system. In 1974, quality circles were introduced in America by Lockheed, and four years later, in 1978, Rolls-Royce of Derby became the first British company to introduce them. It was not until 1982 that the National Society of Quality Circles was formed in the UK. In North Warwickshire Health Authority, quality circles were implemented following the 1982 restructuring of the National Health Service, in order to gain greater staff involvement and participation.

Many nurses dislike analogies made between industry and the National Health Service but surely the aims are similar. The manufacturing industries want cost-effective production and satisfied customers who make repeat orders and recommend the company to others. In the National Health Service, our aims are very similar: we seek a quality service for our patients that is cost-effective.

A quality circle is a group of five to eight volunteers working in the same area who meet regularly to identify, select and solve problems. The solution to the problem is then implemented and monitored to establish if the problem has been solved.

How a quality circle works

As can be seen from Figure 15, a quality circle starts by brainstorming a list of problems. Inevitably, the group will identify a large number of problems, which then have to be sorted into those that can be dealt with, those for which help is needed and those that are really difficult if not impossible.

The next stage is the selection of the problem. Out of the list of problems, there will appear a general theme, and the group select problems that will give

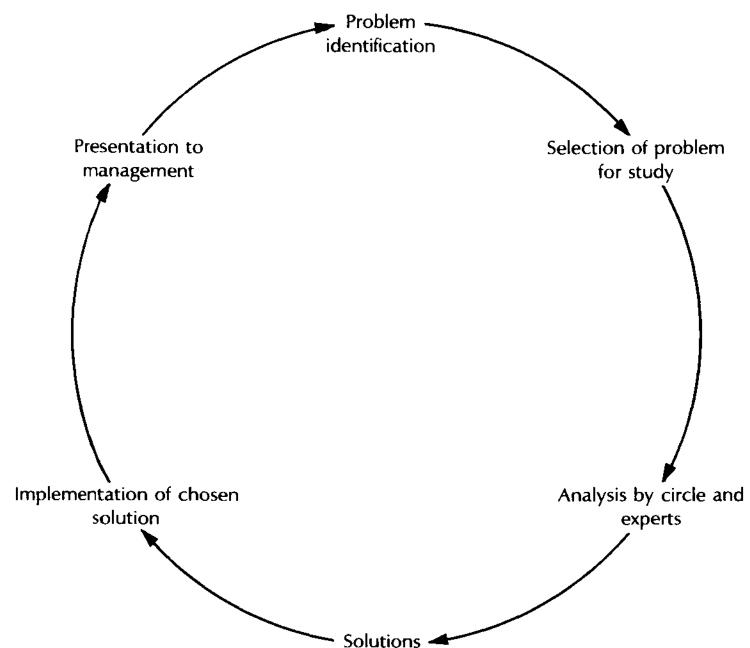

Figure 15 Quality circle
From: M. Robson *Quality Circles – A Practical Guide* (Gower, 1984).

them quick results. In this way, they will maintain the purpose and enthusiasm of the group as well as demonstrating their effectiveness.

The group then analyse the problem that has been selected, decide what facts are needed to solve the problem, and collect, record and interpret data about the problem. Solutions to the problem are discussed in consultation with all concerned and a number of options established, based on facts, and a solution produced. The group then prepare a presentation for management outlining the solution.

The chosen solution to the problem is planned and implemented. The situation is monitored to ensure the problem is solved and that the desired effect is maintained. The final stage is the presentation to management demonstrating an improvement in service and the recorded facts.

Members of the circle come from all disciplines and grades of staff who are working in the same clinical area. The only qualifications needed to be a member of a circle are the desire to solve problems that will lead to an improvement in the quality of patient care, commitment and plenty of enthusiasm.

Meetings are usually held weekly or fortnightly and last for a set period of time, usually one hour even if all the business is not finished. Sometimes there is work for the members to do outside the meeting, such as researching solutions to the problem and gathering information. Minutes of the meeting are recorded and circulated to all members of the circle and to any other interested parties who may be able to help solve the problem. These minutes serve two purposes: first, as a record of the meeting and, second, a record of the group's progress towards a solution to the problem.

This may all sound very simple but there is much more to a quality circle than a group of people who simply get together and solve a problem. There is a need for commitment on behalf of the management to the work of a circle. There are also cost implications, as training is required for the various roles that people take in order to develop an active and productive quality circle.

Roles of people involved in quality circles

1. The co-ordinator

The activities of the circle need to be co-ordinated to ensure that the activity continues. The co-ordinator should be someone who is in a senior position with access to top management and therefore has the authority to help unravel difficult problems. The co-ordinator needs to be the sort of person who will take on the responsibility with enthusiasm. This is the person that people wishing to know more about quality circles will turn to for advice and information. So the co-ordinator will need the ability to communicate with all levels of the organisation.

The tasks of the co-ordinator can be summarised as follows:

- To be the focal point of the programme – the source of information concerning the programme and the progress of all the circles involved. The co-ordinator will be responsible for setting up several quality circles.
- To administer the programme, ensuring that there are adequate and appropriate training materials, and that the facilitators are covered for annual leave and sickness so that the work of the circles continues uninterrupted. When a circle is first formed, this person will need to ensure that the members are aware of the time and place of the meetings, and that meetings start and finish on time as they are limited to one hour. As the circle becomes established, this administrative role should decrease as the members become familiar with the way their circle works.
- To ensure good communication between circles, facilitators and others who are not direct participants in the programme. The co-ordinator is responsible for ensuring that the leaders of the various circles meet together for one hour every six to eight weeks, to report on progress and discuss any problems that they may have. Also, to ensure that the facilitators meet together for $\frac{1}{2}$ to one hour either weekly or fortnightly; this is particularly important at the beginning of a programme and where newly trained facilitators are involved.
- To be available, on request from the facilitator and the circle, to help with any problems outside the circle that may be hindering their progress.
- To make policy decisions relating to the programme and to plan further

developments. Organising presentations, getting volunteer facilitators and leaders, arranging their training and enlisting their help to set up new circles.
- Finally, ensuring the preservation of the core principles of the quality circles.

2. The facilitator

Facilitators are volunteers and may well come from middle management. Their role is vital in ensuring that the quality circle gets going and maintains its momentum. At the start of the circle's activity, the group will probably require half a day a week of the facilitator's time for the first three months, gradually reducing over the next six months until the circle is independent.

The tasks of the facilitator are as follows:

- To help the circle towards independence and self-sufficiency. The group should not become dependent on this person nor should the facilitator lead the group.
- To help the group to solve their own problems. To encourage group dynamics and feedback information about the group process to the co-ordinator.
- To ensure that the group leader develops his/her leadership skills within the group, by planning the agenda with the leader before group meetings. The facilitator attends the meetings and assists with training. After meetings, the facilitator will discuss his/her performance and that of the groups with the leader. The task of training and planning sessions should be transferred to the leader as soon as the leader's confidence and ability has developed.
- To encourage the leader and members to create an environment for others to support the programme.
- To assist with arrangements but not to take over the organisation and administration of the circle.

3. The leader

The circle leader is often the natural leader of the group. The leader of the group will require special training in quality circle techniques, systematic problem solving, leadership skills, group dynamics and quality circle philosophy. The leader will need to meet frequently with the facilitator to plan and review meetings.

The tasks of the leader are as follows:

- To run an effective problem-solving group that is self-sufficient.
- To develop the group's skills of structured problem solving.
- To control the process of the group.
- To ensure the members of the circle feel comfortable in and with the group.
- To prevent the circle being seen as an elite club. A quality circle is not a secret society!
- To administer the problem-solving activities.
- To administer the work of the circle, such as arranging for managers or specialists who may help with a problem to attend the meetings, collecting data relevant to the problem, and arranging the meetings and the venue.

4. The recorder

At the beginning of each meeting, someone volunteers to record the minutes of the meeting. This is not the task of either the leader or the facilitator.

Training

The training of both the facilitators and the leaders is vital to the success of a quality circle programme. In Mike Robson's book, *Quality Circles – A Practical Guide*[1], he clearly outlines a training programme, which is essential reading for anyone wishing to introduce quality circles. The main components of this training are as follows.

Facilitator training includes:

- an introduction to quality circles
- working together

- problem solving
- brainstorming
- planning meetings
- reviewing meetings
- management presentations
- management of quality circles
- problems and issues
- dealing with problems in the circle.

Training the leader includes:

- teaching adults
- training material
- introduction to quality circles
- preparation
- problem solving
- brainstorming
- analysing problems
- collecting data
- working in groups
- dealing with problems in the group
- presentations.

Planning the programme

There is also a training package developed by the author which represents a complete system for teaching the techniques required for effective quality circles.

Prior to setting up quality circles, it is essential to discuss the issue with the trade unions. It is also advisable to set up a steering group to set operational guidelines, objectives and goals to provide structure and continuity to the programme.

Advantages of quality circles

- Offers an opportunity for members to be more involved in decision making.
- Members learn valuable problem-solving and presentation skills.
- Quality circles develop the team concept.
- Encourages multidisciplinary interaction and promotes greater understanding of other people's roles in the organisation.

Disadvantages of quality circles

- There are cost implications in both time and resources. Inadequate training and lack of commitment from management will mean that the quality circle will fail.
- Sounds simple but in fact needs careful thought and in-depth understanding of the principles.

Exercise 6

- List five problems that you think could be solved by a quality circle.

___
___
___
___
___

- List who you would involve in the circle. (Remember that your circle should consist of 5–8 volunteers from all disciplines.)

___
___
___
___
___
___
___
___

- List who would be the ideal:
co-ordinator ___
leader ___
facilitator ___

References

1. M. Robson, *Quality Circles – A Practical Guide* (Gower, 1984).

Further Reading

L. W. Ball, 'The Relevance of Industrial Quality Assurance to Hospital Quality Assurance,' *Quality Assurance* **10**(13).

E. Berne, *Games People Play. The Psychology of Human Relationships* (Grove Press Inc., Penguin Books, 1968).

J. M. Juran (Ed.), *Quality Control Handbook*, 3rd Edn. (McGraw-Hill, 1974).

Chapter 7 Measuring outcome standards

This chapter describes a method of measuring outcome standards using a computerised nursing system called Excelcare. In West Dorset, in conjunction with Price Waterhouse (Office of Health Care Services, 19 Berkeley Square, Bristol BS8 1HB), we have been involved in the evaluation of this nursing system which is based on standards of care. Excelcare was developed by Dr Elizabeth Mason in the USA, and West Dorset was the first District Health Authority to implement the system in the UK.[1]

How a computerised nursing system works

Excelcare is a computerised nursing system designed to assist nurses with planning, documenting and evaluating care. It also assists nurse managers or ward sisters in making decisions concerning staffing and budgeting.

Standards of nursing care are the basis of the system. Dr Mason's definition of a standard is as follows:[2]

'A nursing standard is a valid definition of the quality of nursing care that includes the criteria by which the effectiveness of the care can be evaluated. To guarantee quality, every standard must be valid – that is, nursing care administered according to the standard must result in positive outcomes for clients. A standard is not valid unless it includes the criteria to evaluate the quality of nursing care.'

In Chapter 2, we discussed standard setting using the Royal College of Nursing framework, in which we saw how to write a standard statement, and develop structure, process and outcome criteria. Although the principles are similar, the details are a little different. In this system, the standards are grouped into units of care, which describe the required nursing care and desired patient outcomes for specific patient problems or needs. Units of care comprise three types of standards: process, outcome and content standards.

Process standards define the quality of the implementation of nursing care.

Outcome standards define the results, in terms of the effect of care upon the patient. They are the criteria against which a patient's progress is measured.

Epilepsy/Grand Mal Control – On Admission

STANDARD STATEMENT

The patient experiencing epileptic fits is monitored, treated and observed for the side effects of medication.

PROCESS STANDARDS

1. Assess relationships with family and/significant others.
2. Assess lifestyle and precipitating factors.
3. Identify the type and frequency of fits.
4. Identify medications and side effects of drugs. Note and report to doctor.
5. Prepare patient for encephalogram: explain procedure, ensure hair is clean and answer questions.
6. Wash hair after EEG.
7. Observe for change in neurological status – hourly.

OUTCOME STANDARDS

1. At all times, the patient did not experience side effects of medication. If the patient had side effects the doctor was notified.
2. Within 24 hours of admission, the nurse had:
   a. documented relationships
   b. noted precipitating factors
   c. noted type and frequency of fits.
3. Patient was prepared for EEG with clean hair.
4. Post EEG the patient's hair was washed.
5. At all times, the patient had been reassured and made comfortable.

Figure 16 Process and outcome standards

Epileptic Fits –
Health Education Prior to Discharge

STANDARD STATEMENT
The patient who experiences epileptic fits is able to describe all aspects of the condition, medication and required changes in lifestyle.

CONTENT STANDARDS
1. Educate to be able to identify and prevent precipitating factors.
2. Educate on lifestyle alternatives and good health measures with adequate rest, activities and avoidance of fatigue.
3. Assist problem solving re:
   a. emotional situations
   b. relaxation techniques.
4. Counsel family re:
   a. safety during fits
   b. assisting patient with changes in lifestyle
   c. emotional support.
5. Instruct on medications: how and when to take and observation of side effects.
6. Explain importance of regular appointments with the GP/Consultant Neurologist.

OUTCOME STANDARDS
Before discharge:
1. Patient can state how to implement adaptions in lifestyle related to fits.
2. Patient can describe how to take medication, side effects and what to report to the doctor.
3. Patient can describe how to deal with fits and precipitating factors.
4. Family/significant others can describe:
   a. a fit and what to do
   b. how to give emotional support to the patient.

Figure 17 Content and outcome standards

Content standards define information that must be recorded, reported or taught.

Figures 16 and 17 present samples of units of care. Figure 16 contains process and outcome standards, while Figure 17 consists of content and outcome standards.

Before the nursing observations, interventions and expected outcomes become standards, their validity must be established. This means that it must be shown that when the nursing care defined by the standards is carried out, the patient achieves a positive outcome. Figures 16 and 17 show how this is accomplished.

Once the standards are valid, the units of care can be used to develop individualised nursing care plans and to support evaluation activities to assure quality of care. Units of care can also be used as a means of measuring workload, required staffing and cost of care. Each unit of care is timed and assigned an appropriate level of nurse, competent to carry out the observations and interventions that make up each unit of care.

Once the units of care have been selected for each patient's care plan, this information is processed by computer to generate management reports indicating: the amount of time by skill grade required for each patient for the next shift, or specified time period; and the amount received over the previous shift, or specified time period. Information may be processed once or twice a day, or up to six times a day, as required by the hospital using the system. The reports identify the amount and cost of care given, and predict staffing requirements.

Using a computerised nursing system

The staff use Excelcare in the following way.

- When a patient is admitted, the nurse assesses the patient. This assessment assists the nurse in the selection of the appropriate units of care that are needed for the particular patient.
- The nurse then enters the numbers of the selected units of care and builds the patient's care plan. For any specific needs required for the patient, the nurse can build a customised unit of care.
- The computer prints the nursing care plan. The nurse then carries out care as specified by the care plan and documents care on the form. A care plan is illustrated in Figure 18.

The patient's care is assessed continuously throughout the day and night. In addition, the patient's needs and problems are assessed every morning. Care plans are reviewed to ensure that care planned for the previous shift, or time period, was in fact the care given. If additional units of care are added or deleted during the shift, or specified time period, the care plan is updated. The nurse also enters the level of nurse that provided the care. This information is necessary to identify the cost of nursing care for the previous shift, or specified time period. The nurse then assesses the patient's needs for the next shift, or specified time period, selects the units of care required and the care plan is updated.

Once all the patients have been assessed and all of the care plan are updated, the computer then prints out care plans for all the patients, along with the 'Cost of Nursing Care' and the 'Nurse Manager's Reports'. These are all generated at a time specified by the ward staff and nurse management. The 'Cost of Nursing Care' report contains information about the direct and indirect nursing costs

Figure 18 An example care plan

19/01/89 **Supplemental Care Plan/Documentation**
DAILY **WEYMOUTH AND DISTRICT HOSPITAL**
MAUD ALEXANDER

Patient: W12345 JOE BLOGGS Cons: ASH Bed:
Specialty: MED:

1100	ADMISSION-PREPARATION/ORIENTATION/ASSESSMENT								
1.	1. PREPARE BED AREA BEFORE PATIENT'S ARRIVAL	..	..	14	..	..	..	..	..
	2. GREET PATIENT, INTRODUCE SELF AND PATIENTS	..	..	..	..	..	..	..	..
	IN AREA AND SETTLE	..	..	..	..	..	..	..	..
	3. GIVE EXPLANATION AND INFORMATION FOR WARD ORIENTATION								
	4. ALLOW TIME FOR PATIENT AND FAMILY/ SIGNIFICANT OTHERS TO EXPRESS FEARS AND ANXIETIES								
	5. CHECK AND ATTACH IDENTITY BAND TO PATIENT								
	6. COMPLETE NURSING DATA BASE								
	7. PLAN CARE ACCORDING TO IDENTIFIED NEEDS	..	..	14	..	..	..	..	..
	★★★★	..	..	..	..	..	..	..	..
		..	..	..	..	..	..	..	..
1140	INTRAVENOUS INFUSION								
1.	1. KEEP INFUSION SITE DRY AND CANNULA SECURE	..	..	14	..	..	..	..	..
	★★★	..	..	22	..	..	..	..	..
		..	..	..	..	8	..	..	..
2.	1 HOURLY OBSERVE:	12	13	14	15	16	17	18	19
	– FOR SIGNS OF OVER-HYDRATION:	20	21	22	23	24	1	2	3
	DYSPNOEA, OEDEMA	4	5	6	7	8	9	10	11
	– INFUSION SITE FOR REDNESS, PAIN, HEAT SWELLING, EXTRAVASION								
	REPORT TO NURSE IN CHARGE								
3.	1. RECORD CORRECT BAG NUMBER. CHECK CORRECT	..	..	14	..	..	..	..	..
	FLUID IS RUNNING AT PRESCRIBED RATE	..	..	22	..	..	..	..	..
	2. CHANGE INFUSION TUBING EVERY 48 HRS	..	..	..	.. 8	..	..	..	
	★★★								
1502	NAUSEA								
1.	1. IDENTIFY: STIMULI/SMELLS CAUSING/INCREASING	..	..	14	..	..	..	..	..
	THE NAUSEA AND ELIMINATE	..	..	22	..	..	..	..	..
	2. PROVIDE LIQUIDS THAT DO NOT INCREASE NAUSEA	..	..	..	..	8	..	..	..
	3. PROVIDE VOMIT BOWLS AND TISSUES								
	4. TEACH PATIENT TO TAKE DEEP BREATHS THROUGH MOUTH								
	5. PROVIDE PHYSICAL COMFORT BEFORE MEALS								
	★★★★★								
2.	1. ADMINISTER ANTIEMETICS AS ORDERED. OBSERVE	..	..	14	..	..	..	..	..
	EFFECT/RESPONSE TO MEDICATION	..	..	22	..	..	..	..	..
	★★★★★	..	..	..	..	8	..	..	..
3.	PROVIDE MOUTH CARE 4 HOURLY (MORE OFTEN IF	..	..	14	..	..	..	18	..
	REQUIRED)	..	..	22	..	..	..	2	..
	★★★★★	..	..	6	..	..	..	10	..

1601	PARTIAL CARE	
1.	1. GENERAL ASSESSMENT OF PATIENT	.. .. 14 .. ..
		.. .. 22 .. ..
		.. .. 8 .. .. ..
	★★★	
2.	1. EXPLAIN ALL PROCEDURES, PROVIDE PRIVACY AND EMOTIONAL SUPPORT WHEN GIVING CARE ALLOW EXPRESSION OF FEARS AND ANXIETIES FOR BOTH PATIENT/FAMILY/SIGNIFICANT OTHERS	.. .. 14 .. .. 22 .. .. 8 .. .. ..
	★★★★★	
3.	1. ENCOURAGE SELF-CARE 2. ASSIST WITH BATH, ORAL HYGIENE, PERINEAL CARE, HAIR, NAILS 3. OBSERVE CONDITION OF SKIN, EYES, MOUTH AND PERINEAL AREA DURING CARE 4. ENCOURAGE HAND WASHING AFTER USE OF COMMODE/TOILET 5. WEIGH TWICE WEEKLY 6. OBTAIN SPECIMENS FOR LAB 7. MAINTAIN SKIN INTEGRITY 8. RECORD BOWEL MOTIONS DAILY	.. .. 14 .. .. 22 .. .. 8 .. .. ..
	★★★★★	

Person Rendering Care (signature and title) ____________________

established from the units of care used by each patient and the level of staff who carried out the care. The 'Nurse Manager's Report' assists nurse managers and ward sisters to predict the level and numbers of staff to implement care, as defined by the units of care, for the next shift, or specified time period.

As the nurse renders care, the evaluation and the care given is documented on the care plan. This document replaces the handwritten care plan and the progress report. Evaluation of patient care is written on the care plans as care is given and then the care plan updated on the computer. These care plans are legible, comprehensive and up to date. A nurse coming on duty will receive an accurate, updated care plan with all the information necessary to care for his/her patient, thus reducing the time required for handover reports, and ensuring continuity and quality care.

Quality of care is measured using the outcome standards contained in each unit of care. A report listing the outcome standards of care for all of the units of care for a patient can be generated at any time during the patient's stay, or following discharge.

There are three levels of evaluation supported by Excelcare which together form the basis for quality. These are:

- Daily monitoring of every patient's responses to therapy and nursing care. Continuous monitoring of the patient's progress towards his/her preset goals of nursing care.
- Concurrent evaluation of a patient's total care. At any time during the patient's stay, the nurse can print out all of the patient's expected outcomes for each unit of care that the patient has required. The nurse then compares the expected outcomes with the patient's outcome. If the outcomes are positive, then the nurse has positive feedback that the patient is progressing towards his/her goals; if the outcomes are negative, then the nurse revises the care plans or reports necessary observations to other health professionals.
- Concurrent evaluation of the care of a group of patients requiring the same unit of care. One or two units of care are selected and the evaluation data on several patients with this particular unit of care are assessed. Again, the outcome results are shared with the nurses caring for the patients concerned and action is taken if patients do not have positive outcomes.

Outcome standards are monitored by asking the patient and or relatives, by concurrent and retrospective audit of the records, and by asking the nurse responsible for the care of the patient (see Figure 19). It is this concurrent evaluation of the patient's care that is so exciting. Within this book, I have

mentioned various methods for measuring the quality of care. So far, the evaluation has been either retrospective or concurrent, and has only taken place periodically. With Excelcare, the concurrent evaluation is continuous, thus allowing any negative outcomes to be acted upon immediately. The care plan can be reviewed and more appropriate or alternative process and content standards can be identified to ensure that the patient achieves positive outcomes.

Outcome standards may also be used as follows:

- To review patients with similar problems and compare the length of stay and positive outcomes. Information on patients with varying lengths of stay and positive outcomes may be compared and conclusions drawn, which may lead to a reduction in the length of stay of patients with similar problems.
- To compare when an expensive treatment is used for one patient and a less expensive treatment for another, both with similar problems and requiring the same units of care, and yet both patients achieve positive outcomes. Conclusions can therefore be drawn and action may be taken to deliver more cost-effective treatment.

In summary, outcome standards can be used to monitor the individual patient's progress towards positive outcomes by reviewing individual units of care or the entire care plan. If outcomes are not met, one can look to determine

Date: 19/01/89
Time: 10.13

EXCELCARE(tm) Quality Assurance
WEYMOUTH AND DISTRICT HOSPITAL
Patient Evaluation Form

Patient: JOE BLOGGS
W12345

1100 ADMISSION-PREPARATION/ORIENTATION/ASSESSMENT
1140 INTRAVENOUS INFUSION
1502 NAUSEA
1601 PARTIAL CARE

Were standards met? ADMISSION-PREPARATION/ORIENTATION/ASSESSMENT
YES : NO : Standards

---

1. BEFORE PATIENT IS ADMITTED, BED AREA IS READY WITH ALL EQUIPMENT WORKING
2. AFTER PATIENT ADMITTED, NUMBER ON IDENTIBAND IS THE SAME AS NUMBER ON THE ADMISSION SHEET
3. PATIENT'S CORRECT NAME IS PLACED AT HEAD OF BED
4. 24 HOURS AFTER ADMISSION, PATIENT STATES HE HAS BEEN ORIENTATED TO:
   A PATIENT'S NOTICE BOARD
   B. USE OF BED
   C. LOCATION OF BATHROOM, TOILET, DAYROOM AND FIRE EXITS
   D. USE OF NURSE CALL SYSTEM
   E. GRADES OF STAFF
   F. ROUTINES OF MEALS, WARD ROUNDS, VISITING
   G. THE TELEPHONE
   H. HOSPITAL FACILITIES INCLUDING LIBRARY, HAIRDRESSER AND CHAPLAIN SERVICES
   I. HOSPITAL INFORMATION BOOKLET
   J. REASON FOR HOSPITALISATION
   K. INFORMATION IN ADMISSION LITERATURE
   L. POLICY REGARDING USE OF ELECTRICAL EQUIPMENT
5. PATIENT'S VALUABLES AND LARGE SUMS OF MONEY ARE IN THE SAFE OR SENT HOME WITH THE FAMILY
6. WITHIN 24 HOURS OF ADMISSION, PATIENT HAS BEEN ASSESSED AND THE DATABASE COMPLETED
7. RECORDING IS ACCURATE AND COMPLETE

***

Figure 19 Evaluation form

whether the process standards were met. Alternatively, a group of patients can be evaluated by looking at several patient's outcomes for a specific unit of care.

Advantages of measuring outcome standards using Excelcare

- Quality of care is measured concurrently during the patient's stay and on transfer or discharge.
- It enables frequent evaluation of specific units of care.
- The standards are written and owned by the nursing staff – they have not been written by someone else. These standards can be reviewed and updated to ensure that they reflect practice that is current and research based.
- Monitoring outcome standards can lead to more cost-effective care.
- Results of evaluations can be entered into the computer for future analysis.
- Evaluation is continuous, and is part of the process of care.
- It makes retrieval of standards easy.

Disadvantages of measuring outcome standards using Excelcare

- To use these standards without a computerised nursing system would be unwieldy and time consuming. It must be recognised that there are incremental costs incurred in introducing computer-based nursing systems like Excelcare. However, these costs must be set against the benefits derived from increased productivity and improved patient care.
- It takes time to write such detailed standards on all aspects of patient care.
- Staff need to be trained in writing standards, so there are additional costs that need to be taken into account.

Exercise 7

Using the following information, get together with a group of nurses and see if you can write a unit of care. First, you will need to write the process standards:

- Identify the unit of nursing care. On what aspect of nursing care do you wish to write standards.
- Define the time frame of the unit of nursing care – for example, pre-operative care, preparation for paracentesis.
- Identify the objectives of the nursing care. Write a standard statement that identifies the objectives for the patients (see Figure 16). What can nursing care do to benefit the patients who need this unit of care.
- List the interventions that meet the objectives. Remember to be selective. Which interventions must be implemented to meet the objective? (see Figure 16).
- List the observations that are essential to the interventions (see Figure 16). Go through each intervention and check what observations are required to monitor the patient's response. This is essential in order to monitor the patient's response to nursing care and his/her progress towards the desired objectives or goals.
- Specify when each intervention and observation needs to be done to achieve the objectives on the nursing care. For each intervention, decide how often and for how long each intervention needs to be done to achieve the objectives of the nursing care. For each observation, decide when and how often the observation should be made in order to establish that the interventions are being implemented accurately.
- Put all the process standards in a logical order.

For content standards, repeat the steps above for nursing care that is communicated or taught (see Figure 17).

The next step is to write the outcome standards. Remember that an outcome standard defines the expected changes in the health status of the patient as a result of the nursing care given and the extent of the patient's satisfaction. It is possible that both positive and negative outcomes may occur as the result of nursing care. But positive outcomes occur when the nursing care given was appropriate to the patient's needs and this is the objective.

- Specify the positive outcomes that will occur if the objectives have been met.
- Identify the negative outcomes that can be avoided if the objectives are met. What negative outcomes can be avoided if the nursing care is given as planned to meet the patient's needs?
- Specify when you expect each outcome to occur. Consider when you can expect to see a positive outcome. When can you expect to see the results of nursing care? For example, after 48 hours?
- Clarify the description of the expected outcome. What specification is needed for nursing personnel to recognise the outcomes of nursing care? Add qualifying statements as necessary.
- List all the outcome standards in a logical order (see Figure 17).

References

1. E. J. Mason, 'Case Study: Implementing the Excelcare Nursing System in West Dorset, Nursing and Computers', in *Third International Symposium on Nursing Use of Computers and Information Science,* Trinity College Dublin, Ireland (Proceedings C. V. Mosby, June 20–23, 1988, 601–2).
2. E. J. Mason, *How to Write Meaningful Nursing Standards,* 2nd edn (John Wiley & Sons, 1984).

Further Reading

D. Sale *et al.*, 'Setting Nursing Standards', *British Journal of Healthcare Computing* (1988) **5**(10) December, 34–5.

D. Sale, 'The Weymouth Case Study. Nursing and Computers', in *Third International Symposium on Nursing Use of Computers and Information Science,* Trinity College Dublin, Ireland (Proceedings C. V. Mosby, June 20–23, 1988, 603–5).

Chapter 8 Quality now and the future

Measuring the quality of care and ensuring that patients receive the best possible care within the resources available has been the theme throughout this book. In the light of the Government's White Paper, *Working for Patients*, this issue has never been more important than it is today. Within this new business management approach, there is the need for the introduction of a quality culture. A strategy for the Health District, and then hospital and local services, will need to be developed to ensure that patients receive a high quality of care.

The information in this book will help you to make informed decisions about which quality assurance tool would be most appropriate to use to measure the quality of patient care in your particular clinical area. All practitioners, including nurses, have a responsibility to measure the quality of care that they are giving and to take action when the results indicate that the provision of care needs to be improved. Nurses have been systematically measuring the quality of care for many years by using the tools that have been included in this book.

Medical audit

Our medical colleagues are involved in medical audit, a systematic, critical analysis of the quality of medical care, which includes the procedures used for diagnosis and treatment, the use of resources and the resulting outcome for the patient.

Clinical outcomes (nursing)

This systematic, critical analysis could equally apply to nursing. For example, tracking and analysing incidences such as pressure sores, infections or other complications.

Resource management

Nurses in six hospitals around the UK have been taking part in the Government's Resource Management Initiative.[1] These six pilot sites are as follows:

- Arrowe Park Hospital, Wirral are using ANSOS software, a personnel system, and are developing a ward-based nurse management and information system.
- Freeman Hospital, Newcastle-upon-Tyne are using a system based around criteria for care, which has been developed by Freeman and ISTEL. The system currently assesses workload with a nurse personnel component under consideration. Care planning is not computerised.
- Guy's Hospital, London is using the FIP ward system which was developed by West Midlands Regional Health Authority. This system contains workload assessment and nurse personnel facilities. Care planning is not computerised.
- Royal Hampshire County Hospital, Winchester is involved in the Wessex Regional Information Strategy Project (RISP), and the system being developed within this framework, TDS (formerly Technicon), is an integrated communication and ordering system. Nursing staff are developing the ward management information system to meet their needs.
- Royal Infirmary, Huddersfield is using Excelcare marketed by Price Waterhouse and developed by the nursing staff. The system includes computerisation of documentation for nursing care plans combined with workload assessment and the measurement of outcome standards. This system is linked with ANSOS, the nurse personnel system.
- Pilgrim Hospital, Boston, South Lincolnshire is also using criteria for care as the basis for developing an ICL system. The nursing systems are being developed to include a nurse tracking module, following development work on integrating feeder systems for hospital computer network.

The systems at Winchester, Huddersfield, Newcastle and Guy's allow, as part of their workload assessment, the recording of total actual hours of nursing staff worked on a ward during a shift, by grade and therefore the cost of staffing.

At Huddersfield's Royal Infirmary, staff are able to measure treatment. Clinicians identify expected costs and check treatment against a 'profile of care'. Excessive cost levels which are shown up can be analysed and discussed. Complications, death rates and re-admissions can be identified.

Resource management is closely associated with computer systems but these systems alone cannot achieve resource management. Resource management is achieved when staff use the information to enable them to look at:

- what they do
- who does it
- how it is done
- what effect the care has on the patient
- and then use this information to make better use of their time and skills.

Everyone has a responsibility for managing resources more effectively and this can be achieved by looking critically at how we deliver care and the effect that care has on the patient. Delivery of care needs to be flexible and designed to meet the needs of the individual patient, and certainly not ritualistic. Applying this principle alone will save nursing time and improve the quality of care.

Quality assurance programmes

All quality assurance activity must be part of the whole system, and therefore part of both the District and Regional strategy for quality assurance.

1. The Regional Health Authority and quality assurance

The Regional Health Authority is accountable to the Secretary of State for the performance of District Health Authorities and the quality of patient care services provided in all districts. In order to fulfil this accountability, the Regional Health Authority must ensure that the District Health Authorities measure the aspects of the service that will indicate the quality of patient care in a particular district. This can be achieved by each district producing a quality assurance plan and programme, the results of which are reviewed by the Regional Health Authority. The library should have a copy of the Regional Health Authority Plan and also be able to establish if your Health Authority has a quality assurance plan.

2. The District Health Authority and quality assurance

The development of a quality assurance plan will vary from one District Health Authority to another. In some districts, the District General Manager will develop the plan, while in others there may be a named individual who has designated responsibility for quality assurance for the whole district, a unit or a care group. In some cases, the manager of a unit or care group may be asked to develop a plan for a department, unit or care group.

Total quality management

Total quality management is an important and vast subject, but perhaps within the context of this book it is appropriate to give only a very broad outline.

In industry, the approach to quality has been traditionally to produce the product or complete the job, then inspect or check it, and screen out, or in some cases re-do, what is not right. In the National Health Service, quality assurance activity is based on audits, such as those discussed earlier in this book, reviews and surveys. Many of these tools establish what went well or badly after the event – that is, retrospective audit. The results of these initiatives lead to the evaluation of what happened and the development of action plans to improve the quality of care. As mentioned earlier, action taken after the event is less helpful to the patient, who would much rather that things were corrected while he/she was receiving care.

What is needed is a system that is designed to prevent poor quality patient

care. If this is to be the case, then quality has to be managed. This means that every part of the organisation must produce a quality service; if one service or department breaks the quality chain, then the level of service provided will affect those receiving the service. This is a concept that has been discussed before in this book when it was stated that it is almost impossible for one profession, department or service to assess the quality of care in isolation. The outcome of care given by the nurse to the patient will be affected by the diet the patient receives, the standard of cleanliness in the ward, the input of medical care, the standard of physiotherapy, and so on. 'Total quality management is the system by which quality at each interface is assured. It is an approach to improving the effectiveness and flexibility of the service as a whole – a way of organising and involving the whole service, every authority, unit, department, activity, every single person at every level to ensure that organised activities happen the way they are planned, and seeking continuous improvement in performance.'[2]

Total quality management requires the introduction of a good system for quality assurance which ensures a product or service that meets the customer's requirements. The customer may be a patient, someone outside, such as social services, or someone internal, such as the pharmacy, another professional or department. The achievement of high quality services must be central to all the business activities of a Health Authority, with commitment and understanding of all that this involves by senior management.

A total quality management plan might include:

1. For patients:

- defining, auditing and monitoring standards of care for all disciplines and departments
- auditing outcomes of care
- customer care, improving personal service
- review of services dealing with issues of efficiency and effectiveness

2. For staff:

- valuing staff by the provision of staff benefits, a system of rewards, staff health, promotion of healthy living, good working environment and good communications, such as newsletters and team briefing
- effective management.

Conclusions

It is important that you establish what activity is already taking place within your District Health Authority, unit, hospital or locality to ensure that the work that you are doing is acknowledged and fits in with the overall plan. It is worth considering the implications of the statement: 'Quality costs money but poor quality costs more.' There is much more to quality than just a belief that everyone is committed to the provision of high quality care for patients. What is needed is a good understanding of the various aspects of quality, the systems available, their suitability and use, and financial commitment to quality assurance initiatives.

I hope that the information contained within this book has not only given you an insight into the fascinating and essential subject of quality assurance, but has also given you some ideas that you can put into practice.

References

1. Department of Health, *Resource Management Ward-Based Nurse Information Systems* (Department of Health on behalf of the Management Communications Unit, designed and produced by Line-Up in association with Baseline Creative, March 1989).
2. B. Morris, 'Total Quality Management', *International Journal of Health Care Quality Assurance* (1989) Vol **2** (3), 4–6.

Further reading

R. J. Maxwell, 'Quality Assessment in Health', *British Medical Journal* (1984) **12** (5), 84.
J. Oakland, *Total Quality Management* (Heinemann Professional Publishing, 1989).
West Dorset Health Authority, *Total Quality Management Plan* (1989).

Glossary of terms

Accreditation
'the process by which an Agency or Organisation evaluates and recognises a programme of study or institution as meeting predetermined Standards' (World Health Organisation, glossary of terms prepared for European Training Course on Quality Assurance, 1986)

Assessment
'the thorough study of a known or suspected problem in quality of care, designed to refine causes and necessary action to correct the problem' (Ibid)

Clinical audit
A systematic, critical analysis of the quality of clinical care, which includes the procedures used for diagnosis and treatment, the use of resources and the resulting outcome for the patient.

Clinical review
'the term clinical review is used to describe any evaluation activities which review the care being given to patients and the effectiveness of that care. Included in clinical review may be utilisation review activities.' (Australian Council on Hospital Standards, *Glossary of Terms*)

Concurrent Audit (open chart audit)
Audit or examination of the patient/client's charts and records while the patient/client is still in hospital or being cared for at home, to establish if outcomes are being achieved for the patient/client

Concurrent review
Methods of assessing the quality of patient care while the patient is still in the hospital or being cared for. Examples include, open chart audit or concurrent audit, patient interview/observation, staff interview/observation and group conferences

Content standards
'define the substance of nursing care that is communicated to others and the substance of nurses' decisions' (E. J. Mason, *How to Write Meaningful Nursing Standards*; 2nd edn (John Wiley & Sons, 1984))

Criterion
'variable selected as a relevant indicator of the quality of nursing care; a measure by which nursing care is judged as good' (B. W. Gallant and A. M. McLane, 'Outcome Criteria – a Process for Validation at Unit Level', *Journal of Nursing and Administration* (1979) **9** 14–20)

Criterion
'statement which is measurable, reflecting the intent of a standard' (N. Lang, 'Issues in Quality Assurance in Nursing', *ANA Issues in Evaluative Research* (1976))

Data collection
The collection of information concerning the topic to be researched/the patient. For example, data collection concerning a patient would include: information about his/her past and present health status, daily living pattern. This would include subjective data as described by the patient or his/her family, and objective data gleaned from observation and examination and documented data from records and reports.

Evaluation
The process of determining the extent to which goals or objectives have been achieved'

Monitoring
'the ongoing measurement of a variety of indicators of health care quality to identify problems' (World Health Organisation, glossary of terms prepared for European Training Course on Quality Assurance, 1986)

Nursing Audit
A formal and detailed systematic review of nursing records in order to evaluate the quality of nursing care

Nursing care plan
A written statement of the patient/client's problems, expected outcomes and planned nursing interventions

Nursing history
A written record of information collected by a nurse when interviewing the patient/family/significant other

Nursing intervention
'specific nursing activities carried out by a nurse and on behalf of the patient' (Royal Australian Nursing Federation (1985))

Nursing process
'the application of a problem-solving approach to nursing care. The four phases are: Assessment – the collection and interpretation of data and the identification of patient problems. Planning – the determination of priorities – expected outcome and nursing interventions. Implementation – the delivery of Planned Nursing Interventions. Evaluation – a continuous activity which compares actual outcomes with expected outcomes and which directs modifications of nursing care as required.' (Ibid)

Nursing standard
'a valid definition of the quality of nursing care that includes the criteria by which the effectiveness of care can be evaluated' (E. J. Mason, *How to Write Meaningful Nursing Standards*, 2nd edn (John Wiley & Sons, 1984))

Outcome criteria
Describes the desired effect of nursing care in terms of patient behaviour responses, level of knowledge and health status

Outcome standards
'define the expected change in the client's health status and environment following nursing care and the extent of the client's satisfaction with nursing care' (E. J. Mason, *How to Write Meaningful Nursing Standards*, 2nd edn (John Wiley & Sons, 1984))

Patient questionnaire
Questionnaires developed to ask patients about care received, either in hospital or at home

Peer review
'evaluation of the quality of patient care by persons equivalent in status to those providing the care' (Australian Council on Hospital Standards, *Glossary of Terms*)

Philosophy
'a statement of a set of values and benefits which guide thoughts and actions' (Royal Australian Nursing Federation (1985))

Process criteria
'relate to actions taken by nurses in order to achieve certain results and include: the assessment of techniques and procedures. The method of delivery of nursing care, interventions, techniques, how resources are used. The evaluation of care planned and given.'

Process standards
'define the quality of the implementation of nursing care' (E. J. Mason, *How to Write Meaningful Nursing Standards*, 2nd edn (John Wiley & Sons, 1984))

Quality Assurance
'the measurement of the actual level of the services rendered plus the efforts to modify, when necessary, the provision of these services in the light of the results of measurement' (World Health Organisation, glossary of terms prepared for European Training Course on Quality Assurance, 1986)

Quality control system
This is a system used in industry to check the quality of goods. In nursing it would refer to the quality of the environment and surroundings in which nurses work and patient care is given.

Quality of care
Degree of excellence

Quality programme
'a documented set of activities, resources and events serving to implement the quality system of an organisation' (European Organisation for Quality Control, *Glossary of Terms used in the Management of Quality*, 5th edn (1981))

Resources management
The balance of quality, cost and quantity

Retrospective audit (chart audit/closed audit)
Audit or examination of the patient/client's charts and records after he/she has been discharged to determine the quality of nursing care received

Retrospective review
Methods of assessing the quality of patient care after discharge, including retrospective chart audit. Post care interviews, post care staff conferences, post care questionnaires.

Standard
'optimum level of care against which performance is compared' (B. W. Gallant and A. M. McLane, 'Outcome Criteria – a Process for Validation at Unit Level', *Journal of Nursing and Administration* (1979) **9** 14–20)

Standard
'agreed upon level of excellence' (N. Lang, 'Issues in Quality Assurance in Nursing, *ANA Issues in Evaluative Research* (1976))

Standard statements
Are professionally agreed levels of performance appropriate to the population addressed which reflect what is acceptable, achievable, observable and measurable

Structure criteria
Items and services which enable the system to function and include the organisation of nursing services, recruitment, selection, manpower establishments and skill mix. Equipment, ancillary services, such as supplies, central sterilising, catering, pharmacy, laboratory services, laundry, paramedical services and the provision of buildings. Agreed rules and regulations, policies and procedures.

Total Quality Management
'is the system by which quality at each interface is ensured. It is an approach to improving the effectiveness and flexibility of the service as a whole – a way of organising and involving the whole service, every Authority, unit, department, activity, every single person at every level to ensure that organised activities happen the way they are planned, and seeking continuous improvement in performance.' B. Morris, 'Total Quality Management', *International Journal of Health Care Quality Assurance* (1989) **2** (3), 4–6.

Unit of nursing care
'a cluster of process, outcome and content standards, that define the nursing care for a given nursing diagnosis, health problem, or need; a definable point on the health-illness-health continuum: or a specific developmental stage' (E. J. Mason, *How to Write Meaningful Nursing Standards*, 2nd edn (John Wiley & Sons, 1984))

Index

Abdellah, Dr Faye 1
accountability 9
accreditation 3, 52
Alcott, Louisa M. 1
ANSOS 49
Area Health Authorities (AHAs) 2
assessment 52
audits 6
  chart 54
  clinical 52
  closed 54
  committee 18–19
  concurrent 52
  medical 49–50
  open-chart 6
  retrospective 54
  see also Nursing Audit
Australia 3, 4

Ball, J. A. 3, 30
Boston, Pilgrim Hospital 49
business statement 52

Canada 3
care:
  groups 14
  objectives of 4, 7
  philosophy of 4, 6–7, 53
  plans 43–5, 53
  quality (*q.v.*) of 54
  standards of 9–17, 42–3, 54
case conferences 1
chart audit 54
classification
  of standards 13–14
  of types of care 2
clinical audit 52
clinical outcomes 49
clinical review 52
closed audit 54
co-ordinator, quality circles 38–9
Code of Conduct, UKCC 4, 10
Community Health Councils (CHCs) 2
concurrent audit 6, 52
concurrent review 52
content standards 43, 52
criteria 5, 7, 11–12, 52
  outcome 5, 12, 53
  process 5, 11–12, 53–4
  structure 5, 11–12, 54

data, collection of 52–3
Davies Report 2
dependency groups 31

dissatisfaction, as basis for evaluation 1–2
District Health Authorities (DHAs) 2
  evaluation of quality of care 3, 50
  standards 10
Donabedian, Avedis 3, 10

evaluation 53
  of quality of care 3–6
Excelcare nursing system (measuring outcomes) 42–7, 49
  advantages and disadvantages 47
  use of 43–7

facilitator, quality circles 39
FIP ward system 49

Goldstone, L. A. 3, 30
Griffiths Report (1983) 2
Guy's Hospital, London 49, 50

Health Service Commissioner 2
history, nursing 53
Hospital Advisory Service 2
Huddersfield, Royal Infirmary 49, 50

industry, and health services 37
intervention, nursing 53
ISTEL 49

Japan 37

Kendall, Helen 3, 10, 13, 14
Kitson, Dr Alison 3, 10

Lang, Norma 4–5
leader, quality circles 3, 10

Mason, Dr Elizabeth 42
measures of quality of care 6
  Monitor 3, 29, 30–5
  Nursing Audit 2–3, 18–23
  outcome standards, Excelcare 42–7
  Qualpacs 2, 24–8
medical audit 49–50
  clinical outcomes 49
  resource management 49–50

Monitor 3, 29, 30–5
  advantages and disadvantages 35
  case study 32–3
  dependency groups 31
  preparation for 33–4
  scoring 34–5

use on the ward 34
monitoring 53
multidisciplinary teams 1

National Development Team/Group 2
National Health Service (NHS) 2
New Zealand 3
Newcastle-upon-Tyne, Freeman Hospital 49, 50
Nightingale, Florence 1
North Warwickshire HA 37
nursing:
history 53
intervention 53
process 53
standard 53
Nursing Audit 2–3, 18–23, 53
advantages and disadvantages 22–3
audit committee 18–19

objectives 4, 7
Ombudsman 2
open-chart audit 6
outcome, clinical 49
outcome criteria 5, 12, 53
outcome standards 42–3, 53
measuring 43–7

peer review 53
Performance Monitor *see* Monitor
Performance Nursing Audit *see* Nursing Audit
Performance Quality Patient Care Scale *see* Qualpacs
Phaneuf, Dr Maria 2–3, 18–23
philosophy of care 4, 6–7, 53
plans, care 43–5, 53
Poole General Hospital (PGH) 32–3
process criteria 5, 11–12, 53–4
process standards 42–3, 54

quality assurance 1–6, 54
committee 4
definition 3, 54
evaluation of quality of care 3–6
history 1–3
measures of 6
Monitor 3, 29–35
Nursing Audit 2–3, 18–23
outcome standards, Excelcare 42–7
Quality Patient Care Scale (Qualpacs) 2, 24–8
now and future 49–51
programmes 50
model 5
quality circles 37–40
standards of care 9–17
total 50–1
quality circles 37–40
advantages and disadvantages 40
functioning 37–8
programme planning 40
roles of those involved 38–9
co-ordinator 38–9
facilitator 39
leader 39
recorder 39
training 39–40
quality control system 54
Quality Patient Care Scale *see* Qualpacs
quality programme 54
Qualpacs 2, 24–8
advantages and disadvantages 27–8
process 26
scoring 26–7
use of 24–6
questionnaires 16
Monitor 30
patient 53

recorder, quality circles 39
Regional Health Authorities (RHAs) 2
evaluation of quality of care 3, 50
Regional Information Strategy Project (RISP) 49
Reiter, Frances 2
resource management 9, 49–50, 54
Resource Management Initiative 49–50
retrospective audit 6, 54
retrospective review 54
reviews:
clinical 52
concurrent 52
peer 53
retrospective 54
Royal Australian Nursing Federation 4, 53
Royal College of Nursing, standards 9–10
Royal Commission on the NHS (1979) 2
Rush Medicus 3, 29–30

Salmon Report (1973) 2
Slater Nursing Rating Scale 2, 24
standards 9–17, 42–3
advantages and disadvantages of 16
checking 15
classification of 13–14
content 43, 52
definition 10, 42, 54
history 9–10
measuring 15–16
nursing 53
outcome 42–3, 53
measuring 43–7
process 42–3, 54
questionnaires 16
setting of 10
statements 10–11, 54
terminology 10–12
statements:
standard 10–11, 54
Stewart, Isabel 1
structure criteria 5, 11–12, 54
subtopics 13–14

TDS system 49

timing 14
topics 13
total quality management 50–1
training, quality circles 39–40

unit of nursing care 54
United States of America (USA) 1, 3
  accreditation 3
  Nursing Audits 2–3, 18
  quality circles 37
  Qualpacs 2, 24
  Rush Medicus 3, 29–30

value statements 54

Wandelt, M. A., and Ager, J. W. 24
ward/unit level 3
  meetings 1
  standards 10
Wayne State University, Detroit 18, 24
West Berkshire HA 10, 13
West Dorset HA 10, 14, 42
Winchester, Royal Hampshire County Hospital 49, 50
Wirral, Arrowe Park Hospital 49
Working for Patients White Paper 49