

4

AUSTRALIA -
NEW ZEALAND
EDITION

Pauline Calleja | Karen Theobald | Theresa Harvey

Estes Health Assessment & Physical Examination



HEALTH + NURSING SERIES

4

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4th Edition

Pauline Calleja

Karen Theobald

Theresa Harvey

Mary Ellen Zator Estes

Portfolio manager: Fiona Hammond

Senior product manager: Michelle Aarons

Senior content developer: Margie Asmus/Stephanie Davis

Senior project editor: Nathan Katz

Cover designer: Danielle Maccarone

Text designer: Cengage Creative Studio

Permissions/Photo researcher: Catherine Kerstjens

Editor: Marta Veroni

Proofreader: Paul Smitz

Indexer: KnowledgeWorks Global Ltd.

Art direction: Mariana Maccarini

Cover: Courtesy stock.adobe.com/Yakobchuk Olena

Typeset by KnowledgeWorks Global Ltd.

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Authorised adaptation of *Health Assessment and Physical Examination*, Fifth edition, by Mary Ellen Zator Estes ©2014, Cengage Learning [9781133610939]

This fourth edition published in 2024

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National Library of Australia Cataloguing-in-Publication Data

ISBN: 9780170463140

A catalogue record for this book is available from the National Library of Australia.

Cengage Learning Australia

Level 5, 80 Dorcas Street

Southbank VIC 3006 Australia

For learning solutions, visit cengage.com.au

Printed in China by 1010 Printing International Limited.

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Guide to the text

As you read this text you will find a number of features in every chapter to enhance your study of health assessment and physical examination and help you understand how the theory is applied in the real world.

CHAPTER-OPENING FEATURES

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CHAPTER 11

EARS, NOSE, MOUTH AND THROAT

LEARNING OUTCOMES

By the end of this chapter you should be able to:

- 1 identify the structures of the ears, nose, mouth and throat
- 2 describe system-specific history and normal findings in the physical examination of the ears, nose, mouth and throat
- 3 describe common abnormalities with pathophysiology found in the physical examination of the ears, nose, mouth and throat
- 4 identify health education opportunities for consumers with specific conditions
- 5 perform the physical examination of the ears, nose, mouth and throat
- 6 discuss the clinical reasoning in evaluating outcomes of health assessment and physical examination including documentation requirements for recording information, health education given and relevant health referral.

BACKGROUND

Health assessment and physical examination of the ears, nose, sinuses, mouth and throat can be linked to assessment of the neurological, respiratory, endocrine, gastrointestinal, musculoskeletal and cardiovascular systems.

Ear-related conditions include:

- > **infections** (either bacterial or viral) such as otitis media (middle ear infection) and otitis externa ('tropical ear' or 'swimmer's ear'). In Australia there are between 900 000 and 2.4 million cases per year of otitis media (Veivers et al., 2022), one of the leading causes of disease in Aboriginal and Torres Strait Islander children, and a significant contributor to hearing loss (De Lacey, Dine & Macdonald, 2020). In 2018–19, 43% of Aboriginal and Torres Strait Islander children aged seven and older had measured hearing loss in one or both ears (AIHW, 2020a). Clinical presentation differs for this cohort, in that they are, on average, younger in age for first infection, have a higher frequency of infection and experience infections of greater severity and persistence, compared with non-Indigenous children (Jervis-Bardy, Carney, Duguid & Leach, 2017). In New Zealand, approximately 60% of children have experienced at least one episode of acute otitis media by age four, and 27% of children aged 0 to 4 years are affected each year (BPAC, 2022). Research indicates Māori and Pasifika children experience higher rates of middle ear infection and subsequent hearing loss than the broader New Zealand population (EMC, 2021).
- > **hearing loss**, which may be due to disease processes such as Ménière's disease, age-related changes, drug-related conditions, acoustic neuroma and trauma. Hearing loss in children is significantly correlated with ear disease and infection.

Identify the key concepts that the chapter will cover with the **Learning outcomes** at the start of each chapter.

THE HEALTH ASSESSMENT AND PHYSICAL EXAMINATION PROCESS

| HEALTH HISTORY | | | | | | | | | |
|-------------------------|---|---|------|--|---|--|---|--|---|
| CONSUMER PROFILE | The ears, nose, mouth and throat health history provides insight into the link between a consumer's life and lifestyle and ears, nose and sinuses, mouth and throat information and pathology. Diseases or changes that are age-, sex- and race-specific for the ears, nose, mouth and throat are listed. | | | | | | | | |
| | <table border="1"> <thead> <tr> <th>AGE</th> <th>EARS</th> </tr> </thead> <tbody> <tr> <td></td> <td> <ul style="list-style-type: none"> > Elderly consumers: <ul style="list-style-type: none"> • Hearing loss related to presbycusis, sensorineural degeneration or otosclerosis • Excessive or impacted cerumen </td> </tr> <tr> <td></td> <td> <ul style="list-style-type: none"> > Elderly consumers: <ul style="list-style-type: none"> • Decrease in ability to smell </td> </tr> <tr> <td></td> <td> Orthodonture <ul style="list-style-type: none"> > Elderly consumers: <ul style="list-style-type: none"> • Tooth loss and gum disease • Candidiasis related to immunosuppression • Decrease in ability to taste </td> </tr> </tbody> </table> | AGE | EARS | | <ul style="list-style-type: none"> > Elderly consumers: <ul style="list-style-type: none"> • Hearing loss related to presbycusis, sensorineural degeneration or otosclerosis • Excessive or impacted cerumen | | <ul style="list-style-type: none"> > Elderly consumers: <ul style="list-style-type: none"> • Decrease in ability to smell | | Orthodonture <ul style="list-style-type: none"> > Elderly consumers: <ul style="list-style-type: none"> • Tooth loss and gum disease • Candidiasis related to immunosuppression • Decrease in ability to taste |
| | AGE | EARS | | | | | | | |
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| | | | | | | | | | |
| | | | | | | | | | |

In each of the examination chapters in Part 2, a **Health History** table details consumer profiles, descriptions of common complaints, important past health history information and relevant family and social history information related to the body system covered in that chapter.

THE HEALTH ASSESSMENT AND PHYSICAL EXAMINATION PROCESS

An **Examination in Brief** box gives a concise summary of key elements in the physical examination process.

The full IPPA method of physical examination is then outlined for each body system, clearly colour-coded and presented in the **ENAP format**, ensuring a complete, detailed physical examination.

A full **Case Study** at the end of each examination chapter brings everything together – including a complete consumer profile and health history, and demonstrating the process of approaching the case – using the **evaluation and clinical reasoning cycle** (explained in more detail in Chapter 1).

EXAMINATION IN BRIEF: EARS, NOSE AND SINUSES, MOUTH AND THROAT

Examination of the ear

- Auditory screening**
- > Voice-whisper test
 - > Tuning fork tests
 - Weber test
 - Rinne test

- Inspection**
- > External ear

- Palpation**
- > Otitoscopic examination

Examination of the nose

- Inspection**

Palpation and percussion

Transillumination of the sinuses

Examination of the mouth and thro

Examination of the breath

Examination of the lips

Inspection

Palpation

Examination of the tongue

Examination of the buccal mucosa

Examination of the gums

Voice-whisper test

- E** 1. Instruct the consumer to occlude one ear with a finger.
- 2. Stand 60 cm behind the consumer's other ear and whisper a two-syllable word or phrase that is evenly accented.
- 3. Ask the consumer to repeat the word or phrase.
- 4. Repeat the test with the other ear.
- N** The consumer should be able to repeat words whispered from a distance of 60 cm.
- A** The consumer is unable to repeat the words correctly or states that he or she was unable to hear anything.
- P** This indicates a hearing loss in the high-frequency range that may be caused by excessive exposure to loud noises.

- E** Examination
- N** Normal findings
- A** Abnormal findings
- P** Pathophysiology

| UNIT 2 | | THE CONSUMER WITH ACUTE RHINOSINUSITIS | | | | | | | | | | | | | | | | | | | | | |
|---|---|--|--|------------------------|------------------------------|-------------------------|----------------------|------------------|--------------------|---|---|------------------------------|---------------------------------------|-------------------------------|---|-------------------------|--|---------------------------|---|---------------------------------------|-------------------------------------|----------------------|---|
| CASE STUDY | | <p><i>This case study illustrates the application and the objective documentation of the ears, nose, mouth and throat assessment.</i></p> <p>Lianna Potter is a 61-year-old nurse who presents to the health clinic complaining of facial pain and frontal headache.</p> | | | | | | | | | | | | | | | | | | | | | |
| | | HEALTH HISTORY | | | | | | | | | | | | | | | | | | | | | |
| | | CONSUMER PROFILE | 61-year-old Caucasian female | | | | | | | | | | | | | | | | | | | | |
| | | CHIEF COMPLAINT | 'I have had a headache and facial pressure for over 10 days.' | | | | | | | | | | | | | | | | | | | | |
| | | HISTORY OF THE PRESENT ILLNESS | Consumer was in her usual state of health until 10 days ago, when she developed an upper respiratory infection that seems to have become worse. Her symptoms started with nasal congestion, purulent nasal discharge and mild facial pressure. After 5 days, she developed thick, green, purulent nasal discharge, bilateral frontal headache (4/10 intensity), maxillary facial pain (6/10 intensity), and bilateral maxillary toothache. She has had a low-grade fever (37.4°C) without chills, sweats, ear pain, sore throat, chest congestion, wheezing or dyspnoea. The symptoms seem to get worse when she leans over. She has been taking decongestants every 6 hours and ibuprofen 400 mg at bedtime without relief for 3 days. Consumer has been renovating downstairs bathroom and guest bedroom for the past two weeks. | | | | | | | | | | | | | | | | | | | | |
| | | PAST HEALTH HISTORY | <table border="1"> <tr> <td>MEDICAL HISTORY</td> <td>Hypertension since age 40</td> </tr> <tr> <td>SURGICAL HISTORY</td> <td>Hysterectomy, age 54</td> </tr> <tr> <td>ALLERGIES</td> <td>Bees – anaphylaxis</td> </tr> <tr> <td>MEDICATIONS</td> <td> > Hydrochlorothiazide 25 mg every morning > Ibuprofen for headaches 200–600 mg BD PRN > Demazin Cold and Flu – paracetamol (500 mg) and phenylephrine PRN for nasal congestion (5 mg) </td> </tr> <tr> <td>COMMUNICABLE DISEASES</td> <td>Has had COVID-19 in past three months</td> </tr> <tr> <td>INJURIES AND ACCIDENTS</td> <td>Denies</td> </tr> <tr> <td>SPECIAL NEEDS</td> <td>Denies</td> </tr> <tr> <td>BLOOD TRANSFUSIONS</td> <td>Denies</td> </tr> <tr> <td>CHILDHOOD ILLNESSES</td> <td>Chickenpox, age 5, without sequelae</td> </tr> <tr> <td>IMMUNISATIONS</td> <td>All up to date as per employment requirements</td> </tr> </table> | MEDICAL HISTORY | Hypertension since age 40 | SURGICAL HISTORY | Hysterectomy, age 54 | ALLERGIES | Bees – anaphylaxis | MEDICATIONS | > Hydrochlorothiazide 25 mg every morning > Ibuprofen for headaches 200–600 mg BD PRN > Demazin Cold and Flu – paracetamol (500 mg) and phenylephrine PRN for nasal congestion (5 mg) | COMMUNICABLE DISEASES | Has had COVID-19 in past three months | INJURIES AND ACCIDENTS | Denies | SPECIAL NEEDS | Denies | BLOOD TRANSFUSIONS | Denies | CHILDHOOD ILLNESSES | Chickenpox, age 5, without sequelae | IMMUNISATIONS | All up to date as per employment requirements |
| MEDICAL HISTORY | Hypertension since age 40 | | | | | | | | | | | | | | | | | | | | | | |
| SURGICAL HISTORY | Hysterectomy, age 54 | | | | | | | | | | | | | | | | | | | | | | |
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| CHILDHOOD ILLNESSES | Chickenpox, age 5, without sequelae | | | | | | | | | | | | | | | | | | | | | | |
| IMMUNISATIONS | All up to date as per employment requirements | | | | | | | | | | | | | | | | | | | | | | |
| | | FAMILY HEALTH HISTORY | | | | | | | | | | | | | | | | | | | | | |
| | | SOCIAL HISTORY | <table border="1"> <tr> <td>ALCOHOL USE</td> <td>1–2 glasses of wine per week</td> </tr> <tr> <td>TOBACCO USE</td> <td>Never smoked</td> </tr> <tr> <td>DRUG USE</td> <td>Denies</td> </tr> <tr> <td>DOMESTIC AND INTIMATE PARTNER VIOLENCE</td> <td>Denies</td> </tr> <tr> <td>SEXUAL PRACTICE</td> <td>Monogamous relationship with husband</td> </tr> <tr> <td>TRAVEL HISTORY</td> <td>Denies recent travel more than 100 km from home in past month</td> </tr> <tr> <td>WORK ENVIRONMENT</td> <td>Is a nurse manager at local health service</td> </tr> <tr> <td>HOME ENVIRONMENT</td> <td>Lives with husband and adult daughter and grandchild in a single-family home. Recent renovation of downstairs area to allow for Airbnb rental to supplement income, as getting ready for retirement</td> </tr> <tr> <td>HOBBIES AND LEISURE ACTIVITIES</td> <td>Music, playing golf, caravanning</td> </tr> </table> | ALCOHOL USE | 1–2 glasses of wine per week | TOBACCO USE | Never smoked | DRUG USE | Denies | DOMESTIC AND INTIMATE PARTNER VIOLENCE | Denies | SEXUAL PRACTICE | Monogamous relationship with husband | TRAVEL HISTORY | Denies recent travel more than 100 km from home in past month | WORK ENVIRONMENT | Is a nurse manager at local health service | HOME ENVIRONMENT | Lives with husband and adult daughter and grandchild in a single-family home. Recent renovation of downstairs area to allow for Airbnb rental to supplement income, as getting ready for retirement | HOBBIES AND LEISURE ACTIVITIES | Music, playing golf, caravanning | | |
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| HOBBIES AND LEISURE ACTIVITIES | Music, playing golf, caravanning | | | | | | | | | | | | | | | | | | | | | | |

OTHER CHAPTER FEATURES

Other boxed features appear across the text, highlighting important information and helping you build your understanding of key concepts.

Identify and learn how to respond to serious or life-threatening clinical assessment findings that need immediate attention with the **Urgent Finding** alerts.

URGENT FINDING

Cerebrospinal fluid (CSF) drainage from the ear

If the consumer has cerebrospinal fluid (clear liquid that tests positive for glucose on Dextrostix) leaking from the ear, be sure to use good hand washing technique and avoid placing any objects into the ear canal in order to prevent the development of meningitis. A consumer with this finding needs immediate referral to a qualified specialist for emergency assessment.

Explore the application of health assessment and physical examination theory in different real-world clinical situations with the **Putting it in Context** boxes.

PUTTING IT IN CONTEXT

Allergy assessment

Jenny Adams is a 13-year-old Caucasian female attending high school. She presents to the general practice with her mother complaining of hay fever symptoms that have been worsening over the past 6 months. Mum states she notices Jenny is increasingly restless when sleeping, becoming cranky and easily upset, unable to concentrate for long, has watery eyes, sneezes up to 17 times in a row, and normal doses of antihistamines are not helping. Jenny states that sometimes her eyes are so itchy and watery that she has trouble with her vision from rubbing them so hard; she wakes up with a dry mouth and bad breath and mum reports she has been snoring lately.

On examination Jenny's visual acuity is normal, her eyes are slightly reddened, she has a small amount of periorbital oedema, and you observe her sneeze 12 times in a row. Her tonsils are normal size, with no redness or swelling in her mouth or throat. She has had a Claratyne this morning along with ibuprofen for her headache, which she states is in her

Get guidance on educating for healthy consumer outcomes and emphasising assessment of the whole person with **Health Education** boxes.

HEALTH EDUCATION

Making connections – oral cancer

Oral cancer risk factors are important to consider for long-term health promotion and harm minimisation, especially for factors that are modifiable by a change in lifestyle choices. Consider which of these factors are modifiable and would influence your opportunistic education approaches.

- > Male sex
 - Aboriginal and Torres Strait Islander peoples are 1.4 times more likely to die from cancer and have a lower five-year relative survival rate compared to non-Aboriginal and Torres Strait Islander peoples (AIHW, 2018).
- > Age > 40 years
- > Tobacco use (pipes, cigars, cigarettes)
- > Excessive alcohol use
- > Sun exposure (lips)
- > History of leukoplakia
- > History of erythroplasia

Understand the decision-making process and develop your clinical judgement skills with the **Clinical Reasoning** boxes.

CLINICAL REASONING

Practice tip: Risk factors for hearing loss

Consumers who fit any of the following hearing loss risk factors should be assessed for hearing damage. This is also an opportunity to provide person-centred health education about possible ways to avoid hearing loss based on the risk factor that are identified.

- | | |
|--------------------------|---------------------------------|
| > Noise exposure | > Trauma |
| > Smoking | > Chronic infection |
| > Ototoxic drugs | > Systemic disease |
| > Congenital or heredity | > Tympanic membrane perforation |

Think about your own practice with **Reflection in Practice** boxes, which introduce realistic clinical situations and ethical controversies. These allow you to relate to the issues in a personal way, and to develop critical thinking, effective decision making and problem-solving skills.

REFLECTION IN PRACTICE

The consumer with poor oral hygiene

Mary is a 78-year-old widow who lives alone. She attends the clinic for a blood pressure check-up, but you notice that she has left her dentures out. When you ask her where her teeth are she states they are hurting her. On inspection you note multiple ulcers in her gums, remains of food particles in her gum and cheek margins and a foul smell. On further investigation you find out that she brushes her dentures every few days but does not have a cleaning regimen for her gums and mucous membranes.

- > What type of education would you recommend and why?
- > Would you refer Mary to anyone?
- > What type of treatment may she require and why?

Advanced practice material is highlighted throughout the text, to extend your understanding beyond basic assessment.

Transillumination of the sinuses

If palpation and percussion of the sinuses suggest sinusitis, transillumination of the frontal and maxillary sinuses may be performed by the advanced practitioner.

To evaluate the frontal sinuses:

1. Place the consumer in a sitting position facing you in a dark room.
2. Place a strong light source such as a transilluminator, penlight, or tip of an otoscope with the speculum under the bony ridge of the upper orbits (Figure 11.38A).
3. Observe the red glow over the sinuses and compare the symmetry of the two sides.

To evaluate the maxillary sinuses:

1. Place the consumer in a sitting position facing you in a dark room.
2. Place the light source firmly under each eye and just above the infraorbital ridge (Figure 11.38B).
3. Ask the consumer to open the mouth; observe the red glow on the hard palate.
4. Compare the two sides.

 Examination  Normal findings  Abnormal findings  Pathophysiology  Advanced Assessment

END-OF-CHAPTER FEATURES

At the end of each chapter you will find several tools to help you to review, practise and extend your knowledge of the key learning outcomes.

Test your knowledge and consolidate your learning with the **Review Questions**.

CHAPTER RESOURCES

REVIEW QUESTIONS

For answers to these questions, see Answer section at the end of the book.

1. On examination of a 44-year-old man's inner ear, you notice a darkened area or hole in his left tympanic membrane. This is likely to be:
 - a. A perforated ear drum
 - b. A fungal infection on the ear drum
 - c. A bacterial infection on the ear drum
 - d. A tumour or ear cancer

Link theory to key skills by reading about the relevant clinical skill, such as in Tollefson & Hillman, *Clinical Psychomotor Skills* 7th edition, and by watching its accompanying **clinical skills videos**.

CS CLINICAL SKILLS

The following Clinical Skill is relevant to this chapter and can be found in Tollefson & Hillman, *Clinical Psychomotor Skills*, 8th edition:

- > 27 Healthcare teaching.

Extend your understanding through the suggested **Further Resources** relevant to each chapter.

FURTHER RESOURCES

UNIT 2

- > Australasian Sleep Association: <http://www.sleep.org.au>
- > Australian and New Zealand Academy of Periodontists: <http://www.perio.org.au/>
- > Australian Dental Association Incorporated: <http://www.ada.org.au/>
- > Australian Hearing: <http://www.hearing.com.au/>
- > Australian Society of Otolaryngology – Head and neck surgery: <http://www.asohns.org.au/>
- > Health Direct Australia: <http://www.healthdirect.gov.au/ear-disorders>

Guide to the online resources

FOR THE INSTRUCTOR

Cengage is pleased to provide you with a selection of resources that will help you prepare your lectures and assessments. These teaching tools are accessible via cengage.com.au/instructors for Australia or cengage.co.nz/instructors for New Zealand.

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- Revision Quizzes
- Case Study Quizzes
- Media Quizzes
- Animations and Clinical Skills Videos.

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INSTRUCTOR'S MANUAL

The Instructor's manual includes:

- Learning objectives and key terms
- Chapter outlines
- Theory application activities
- Teaching exercises
- Individual exercises and group activities
- Clinical application activities
- Chapter checklists.

TEST BANK

This bank of questions has been developed in conjunction with the text for creating quizzes, tests and exams for your students. Deliver these through your LMS and in your classroom.

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Use the chapter-by-chapter PowerPoint slides to enhance your lecture presentations and handouts by reinforcing the key principles of your subject.

ARTWORK FROM THE TEXT

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PREFACE TO THIS EDITION

Health assessment forms the foundation of all health care. Assessment is an ongoing process that is person-centred and considers the whole person as a physical, psychosocial and functional being, whether they are young or old, well or ill. *Health Assessment and Physical Examination*, 4th edition for Australia and New Zealand, provides a well-illustrated approach to the process of holistic assessment, including health history interview, physical examination techniques and health education.

The text presents knowledge from foundation to advanced health assessment, and physical examination for commencing students to advanced healthcare practitioners, using a scaffolded approach. This moves the learner through the comprehensive contextual information, including health assessment and physical examination techniques supported by evidence. Through this process abnormal findings are highlighted, and the chapter concludes with assessment applied to practice through an applied case study exemplar.

CONCEPTUAL APPROACH

This text is designed to support learners to holistically assess a consumer as a foundation of health practice. The skills of interviewing, inspection, palpation, percussion, auscultation and documentation enable the reader to make accurate clinical judgements and promote healthy consumer outcomes.

The concept for *Health Assessment and Physical Examination* is based on an organised assessment approach that can be easily applied into clinical practice. Further, this text focuses the reader on a transparent clinical reasoning cycle for ongoing care of the consumer based on the health assessment. The text is organised according to a well-known and applied quality framework called APIE (Assess, Plan, Implement, Evaluate).

Health Assessment and Physical Examination, 4th edition, emphasises the underpinning knowledge of anatomy, physiology and assessment, while highlighting clinically relevant information. This is achieved by taking a person-centred care approach that is displayed through the themes of assessment: cultural, familial, environmental considerations, patient dignity, and health education, including a specialist chapter on Aboriginal and Torres Strait Islander Peoples' health.

This text's consistent, easy-to-follow format with recurring pedagogical features is based on two formats:

1. The IPPA method of physical examination (Inspection, Palpation, Percussion, Auscultation) is consistently applied to body systems for a complete, detailed physical assessment.
2. The ENAP format (Examination, Normal findings, Abnormal findings, Pathophysiology) is followed for every IPPA examination, providing a useful and valuable collection of information. Pathophysiology is included to support understanding of each abnormal finding, acknowledging that nurses' clinical decisions need to be based on scientific rationale. It also enables the reader to study the content specifically relevant to his or her own healthcare practice.

ORGANISATION

Health Assessment and Physical Examination, 4th edition, consists of 22 chapters, which are organised into four units.

Unit 1 lays the foundation for the entire assessment process by guiding the reader through the nursing process, the critical thinking and clinical reasoning cycle, the patient interview including developmental considerations, the health history including documentation, physical assessment techniques, and cultural considerations. Specific tips on professionalism, approaching consumers, and discussing sensitive topics help the reader understand the importance of the nurse–patient relationship in the assessment process.

Unit 2 details assessment procedures and findings for specific body systems. The format used for all applicable systems-focused health assessment and physical examination chapters in this unit includes:

- > Background
 - Anatomy and physiology
- > Assessment: Taking the patient's health history
- > Person-centred health education
- > Planning for physical examination
 - Evaluation of subjective data to focus physical examination
 - Environment
 - Equipment
- > Implementation: Conducting the physical examination
 - Inspection
 - Palpation
 - Percussion
 - Auscultation
- > Evaluation of health assessment and physical examination findings
 - Case study.

The physical examination techniques presented are described for adults.

Unit 3 focuses on assessment techniques and findings for specific lifespan populations including pregnant women, children and the older adult.

Unit 4 helps the reader pull all the core concepts together to perform a thorough, accurate and efficient health assessment and physical examination.

ACKNOWLEDGEMENTS

We would like to acknowledge and sincerely thank our families and friends who have shared ‘us’ on the weekends, and many evenings, to enable us to complete this fourth edition.

We would like to sincerely thank all expert chapter contributors who provided critical review and input:

- > Dr Leanne Brown, PhD, MNSc (NP), Grad DipApplSc (Nephrology, Grad Appl Sc, Grad Dip Appl Sc (Nsg) Grad Cert HMgt, BSc, RN, Nurse Practitioner Cape York Kidney Care.
- > Dr Helen Donovan, PhD, RN/RM/CHN, MEd (l’ship); MEd (IncEd) FRCNA, SFHEA. School of Nursing, Queensland University of Technology
- > Genevieve Edwards, RN, BN, Nurse Immuniser, Cert. Sex. & Rep. Health, GC Comm. & Public Health, GCHE, MPH, School of Nursing, Midwifery and Paramedicine, Australian Catholic University
- > Nicole Hewlett, a proud palawa woman from lutruwita (Tasmania) Project Manager, The First Nations Cancer & Wellbeing Research Program, School of Public Health, Faculty of Medicine, The University of Queensland for developing Chapter 4, Aboriginal and Torres Strait Islander people’s health
- > Sandra Leathwick, RN, BHealth (Nursing), MEd (Adult), SFHEA, MACORN, MCATSINaM, School of Nursing, Midwifery and Paramedicine, Australian Catholic University
- > Kate Lowe, MN (Management), GC (Paed Nursing), BN, LLB, School of Nursing, Midwifery & Paramedicine, Australian Catholic University
- > Associate Professor Margaret MacAndrew, PhD, RN, BN, G.Cert (Ageing & Dementia), GCAP (FHEA), School of Nursing, Queensland University of Technology
- > Joclyn Neal RM, RN, Master Midwifery, G.Cert (Neonates) School of Nursing, Midwifery and Paramedicine Australian Catholic University (QLD)
- > Dr Christina Parker BHIthSci (Nursing) Grad Cert. PhD. Distinguished Educator in Gerontological Nursing (SFHEA), School of Nursing, Queensland University of Technology
- > Sharyn Plath, RN, BN (Hons), Grad Cert Intercultural Studies, MNP, School of Nursing, Queensland University of Technology.

Thank you to the following people who contributed to the digital resources that accompany this text:

- > Kristy Griffith (Australian Catholic University)
- > Victoria Kain (Griffith University).

We would also like to thank everyone who so enthusiastically contributed to previous editions of this text, whose input we benefit from still. Thanks also go to the reviewers from universities in Australia and New Zealand who provided valuable feedback on the chapter drafts. A final thank you goes to the Cengage Content and Production teams, specifically Michelle Aarons and Margie Asmus, Stephanie Davis, Marta Veroni and Nathan Katz for their continued support.

The authors and Cengage Learning would like to thank the following reviewers for their incisive and helpful feedback:

- > Amanda Kiernan (Australian Catholic University)
- > Anthea Fagan (University of New England)

- > Benjamin Hay (The University of Notre Dame Australia)
- > Caroline Borzdynski (La Trobe University)
- > Charlotte George (EmployEase)
- > Courtney Hayes (University of Canberra)
- > Dr Mark Lock (Ngiyampaa), Chief Editor at Cultural Safety Editing Service
- > Lori Delaney (Queensland University of Technology)
- > Mary Huynh (Australian Catholic University)
- > Melissa Slattery (EQUALS International)
- > Michelle Freeling (Flinders University)
- > Paul Jarrett (Queensland University of Technology)
- > Rachel Gilder (Swinburne University of Technology)
- > Rita Eramo (Victoria University).

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Warning – First Nations Australians are advised that this book and associated learning materials may contain images, videos or voices of deceased persons.

ABOUT THE AUTHORS

Pauline Calleja

CQUniversity

RN, PhD, BNSc, MANP, GCert HigherEd, BNSc, DipManagement, FCENA, MACN
Associate Professor, CQUniversity, Committee member – Association of Queensland Nursing and Midwifery Leaders, Relieving Director of Nursing, Central West Hospital and Health Service, Registered Nurse, Emergency Department, Innisfail Hospital, Cairns and Hinterland Hospital and Health Service.

Pauline's nursing background has spanned many specialty areas and has included teaching health assessment, physical examination and clinical reasoning in clinical and academic settings. Pauline is an Associate Professor in the School of Nursing, Midwifery and Social Science at CQUniversity. Her experience in special projects includes developing and implementing a support program for rural and remote clinicians, teaching Indigenous primary healthcare workers, developing capacity for clinical teaching, and developing leadership skills in clinical teachers. Pauline has also taught at Griffith University, Queensland University of Technology, University of the Sunshine Coast, James Cook University and within various clinical and vocational education settings and has senior management experience in a remote setting. Pauline is a Fellow of professional associations including College of Emergency Nursing Australasia, and member of CRANaplus, Association of Nursing and Midwifery Leaders and the Australian College of Nursing.

Karen Theobald

Queensland University of Technology (QUT)

**RN, PhD (Griff), MHSc (Nursing), GCert (HigherEd), BAppSc (QUT) PFHEA
AFHEA (Indigenous)**

Associate Professor, Academic Lead Education, School of Nursing QUT, Postgraduate Study Area Coordinator for Health Professional Education in the School of Nursing, Queensland University of Technology; Principal Fellow and Associate Fellow (Indigenous), Higher Education Academy (UK) and Honorary Senior Visiting Fellow of Nursing and Midwifery, Metro North Health.

Karen is an experienced nursing academic and clinician, teaching across a variety of settings, which include healthcare contexts, undergraduate and postgraduate tertiary courses. Most of Karen's teaching is in the areas of acute care nursing, health assessment, advanced life support and developing teachers' capacity to enhance learning. A strong focus in her teaching is a commitment to learning through industry collaboration and work-integrated learning.

In her present role Karen oversees policy and the strategic direction of teaching and learning for the six nursing courses. She is responsible for ensuring ongoing internal and professional accreditation for these courses. Her research focuses on workforce preparation, including co-design and delivery of curricula with industry, transfer of clinical reasoning capability; simulation; peer learning and interprofessional education. Karen also serves in leadership and advisory capacities with professional organisations such as the Australian College of Critical Care Nurses and the Australian Resuscitation Council (Queensland Branch).

Theresa Harvey

Australian Catholic University (ACU)

**RN, RM, PhD (CQU) MN (Women's Health), Grad Dip (FurtherEdTraining),
BHlthSc (Nurs), FACN, SFHEA**

Senior Lecturer, International Coordinator, Course Coordinator Master of Leadership and Management in Healthcare, School of Nursing, Midwifery and Paramedicine, Australian Catholic University (ACU).

Theresa has extensive and varied clinical and nursing education experience including tertiary and clinical education, clinical expertise in high-dependency, community and midwifery practice. Theresa's research and teaching focus incorporates health assessment and physical examination, including development of clinical reasoning and supporting undergraduate students' clinical learning for transition to practice, clinical leadership, simulation, developing clinical teaching skills and developing a global perspective for clinical care. As the School of Nursing Midwifery and Paramedicine International Coordinator at ACU, Theresa assists with the globalisation of the curriculum and learning opportunities and facilitates students' learning experiences in short-term study abroad programs. Theresa has led professional development of clinical teachers from multidisciplinary health areas to enhance their support of students on practicum both in Australia and Vietnam. She has also taught at Queensland University of Technology and Northern Sydney Area Midwifery School/Ryde Hospital. Theresa is a Fellow of the Australian College of Nursing and Senior Fellow, Higher Education Academy (UK).

Mary Ellen Zator Estes

Ball State University, Muncie, Indiana

RN, MSN, FNP, APRN-BC, NP-C

Family Nurse Practitioner in Internal Medicine, Fairfax, Virginia Clinical Faculty, Nurse Practitioner Track, School of Nursing, Ball State University, Muncie, Indiana.

With nearly 30 years' experience as a clinician and academician, Ms. Estes has taught health assessment and physical examination courses to nurses and nursing students from a variety of backgrounds. Her hands-on approach in the classroom, clinical laboratory and healthcare setting has consistently led to positive learning experiences for her students. She has taught at the University of Virginia, Marymount University, Northern Virginia Community College, and the George Washington University Medical Center. She has also served as Clinical Faculty for Ball State University. Ms. Estes originated and developed the original US edition of this text.

UNIT 1

LAYING THE FOUNDATION

- CHAPTER 1 THE NURSING ROLE IN HEALTH ASSESSMENT AND PHYSICAL EXAMINATION
- CHAPTER 2 THE HEALTH CONSUMER INTERVIEW APPROACHES INCORPORATING DEVELOPMENTAL CONSIDERATIONS
- CHAPTER 3 THE COMPLETE HEALTH HISTORY INCLUDING DOCUMENTATION
- CHAPTER 4 ABORIGINAL AND TORRES STRAIT ISLANDER PEOPLES' HEALTH

CHAPTER 1

THE NURSING ROLE IN HEALTH ASSESSMENT AND PHYSICAL EXAMINATION

LEARNING OUTCOMES

By the end of this chapter you should be able to:

- 1 describe how nurses have a valued role in health assessment for planning, implementing and evaluating culturally safe care
- 2 discuss components of critical thinking applied to health care
- 3 discuss the clinical reasoning cycle
- 4 apply the Universal Intellectual Standards to the clinical reasoning cycle
- 5 describe the nursing process and applying this when undertaking health assessment and physical examination
- 6 describe the concept of cultural competence compared with cultural safety.

BACKGROUND

Health assessment and physical examination are two essential skills on which an effective and safe practitioner bases every consumer interaction. Every interaction is an opportunity for nurses to assess the consumer. Critical thinking and following the **nursing process** is what allows nurses to make informed and at times life-saving **interventions** for the consumer. Critical thinking is an essential component of clinical reasoning, which combines nursing knowledge and practice. This text highlights the application of knowledge to practice emphasising the critical thinking and clinical reasoning underpinning care decisions based on health assessment and physical examination findings.

Nursing is a profession with a distinct body of knowledge. Over time, nurses build a repertoire of professional experience that they take into each healthcare encounter, which assists decision making and often informs instinctive responses to certain situations; for example, feeling worried for a consumer and this triggers a medical emergency call (Raymond, Porter, Missen, Larkins, de Vent & Redpath, 2018). In this way, experienced nurses make intuitive links that are not usually made by beginners because they can select strategies that have been successful in the past, and all forms of knowledge can positively impact on the decision-making process (Miller & Hill, 2018). To develop their own body of knowledge, including intuition, nurses must cultivate the skill of professional reflection and critical thinking to ensure that these opportunities for development are realised.

Professional intuition develops over time as nurses begin to link certain patterns or events to specific health outcomes (Hassani, Abdi, Jalali & Salari, 2020). Experienced nurses seem to do this with little conscious effort. The beginner, however, may need guidance to perceive links intuitively recognised by the experienced nurse (Turan et al., 2016). For example, a critical care nurse may feel that the consumer is 'going downhill' even though their vital **signs** are stable. The experienced nurse has a 'feel' for the person and their situation. A few hours later the person has a cardiopulmonary arrest.

How did the experienced nurse know this? That is part of the critical thinking and clinical reasoning that has developed in the experienced nurse (Hassani, Abdi, Jalali & Salari, 2020). The health history findings will inform what the nurse chooses to focus on in the physical examination, and the findings will give the nurse direction for other things to investigate. In this way critical thinking and clinical reasoning link both health history and physical assessment. As such, this will effectively and efficiently guide the nurse in the 'right' direction to assess the person and collaboratively decide on the priorities to be managed.

Expert nursing involves the use of analytical thinking, also known as clinical reasoning. Clinical reasoning is an integral part of professional reflection that every nurse needs to develop (Gonzalez, 2018). In analytical thinking, information is studied and broken into its constituent parts, and relationships and patterns are identified. Causation, key factors, and possible outcomes to a situation are identified where possible and then evidence should be used in decision making.

CRITICAL THINKING AND CLINICAL REASONING

Critical thinking is a purposeful, goal-directed thinking process applied to problem-solve issues using clinical reasoning. It combines logic, intuition and creativity. **Clinical reasoning** is a disciplined, creative and reflective approach that, combined with critical thinking, is used to establish potential strategies to assist people in reaching their desired health goals. For example, a consumer in the cardiac care unit complains of chest pain at rest. The consumer had been lying down after lunch. Your critical-thinking skills lead you to assess all aspects of the person's condition to determine the cause of this episode of pain and treat it accordingly. You recognise that, in addition to the person's diagnosis of angina, they also have a history of gastro-oesophageal reflux disease and a hiatal hernia, for which they take pantoprazole 40 mg each morning. You pursue a line of questioning that uncovers more information about the consumer's pain. You use clinical reasoning skills to determine that their pain is most likely gastrointestinal in nature because the pain is located in the epigastric area, whereas their recent chest pain was located in the substernal region. In addition, there are no ECG changes with the pain (which had previously been present), and the pain was relieved when they sat up in a semi-Fowler's position. The use of reasoning, applying knowledge and information gathering are combined to direct the nurse's action. Therefore, critical-thinking skills are needed to enable the process of clinical reasoning.

Guidelines outlined by the Foundation for Critical Thinking address some of the underpinning key elements of clinical reasoning (Table 1.1) and assist in applying the Universal Intellectual Standards for critical thinking. Knowing and understanding these guidelines helps both the novice and the advanced nurse master the clinical reasoning process. The time frame in which this mastery occurs differs for every person. Like most skills, the more clinical reasoning is practised, the more natural and easier it becomes.

TABLE 1.1 Key elements of critical thinking and clinical reasoning

| ELEMENTS THAT UNDERPIN CLINICAL REASONING AND CRITICAL THINKING | UNIVERSAL INTELLECTUAL STANDARDS FOR CRITICAL THINKING |
|--|--|
| <ul style="list-style-type: none"> > All reasoning has a purpose. > All reasoning is an attempt to figure something out, to settle some question, or to solve a problem. > All reasoning is based on assumptions. > All reasoning is done from a specific point of view. > All reasoning is based on data, information and evidence. > All reasoning is expressed through, and shaped by, concepts and ideas. > All reasoning contains inferences by which we draw conclusions and give meaning to data. > All reasoning leads somewhere, and has implications and consequences. | <ul style="list-style-type: none"> > Clarity: understandable, the meaning can be grasped > Accuracy: free from errors or distortion, true > Precision: exact to the necessary level of detail > Relevance: relating to the matter at hand > Depth: containing complexities and multiple interrelationships > Breadth: encompassing multiple viewpoints > Logic: the parts make sense together > Significance: focusing on the important not trivial > Fairness: justifiable, not self-serving or one-sided |

SOURCE: *HELPING STUDENTS ASSESS THEIR THINKING*, BY R. PAUL AND L. ELDER, 1997. [HTTPS://WWW.CRITICALTHINKING.ORG/PAGES/OPEN-MINDED-INQUIRY/579](https://www.criticalthinking.org/pages/open-minded-inquiry/579); ELDER AND PAUL (2013)

Applying standards for critical thinking

The quality of critical thinking can be evaluated by applying the nine Universal Intellectual Standards (UIS) proposed by Elder and Paul (2013). These standards are outlined in **Table 1.1** and applied to a clinical example in **Table 1.2**.

Consistent application of these standards to critical thinking leads to refinement and sophistication of clinical reasoning.

TABLE 1.2 Application of critical thinking to clinical example

| STANDARD | QUESTIONS TO CONSIDER | CLINICAL REASONING EXAMPLE |
|------------------|--|---|
| Clarity | Could you elaborate further on that point? Could you give me an example? Could you illustrate what you mean? | A 70-year-old consumer may report a breathing difficulty. The nurse would use critical thinking to assist them to specify when and under what conditions the breathing difficulty occurs. Shortness of breath at rest with no provocation will be different from shortness of breath when walking. |
| Accuracy | Is that really true? How could we check/verify this piece of information? | Thinking that this person is always short of breath every time they mobilise may be an inaccurate fact. This individual may be able to breathe normally when walking on flat surfaces but becomes short of breath walking up six stairs. The nurse would need to ask questions to ensure accurate understanding of information. |
| Precision | What is the specific or precise information here? | To state that a consumer is 'short of breath' is not precise, especially if they are not short of breath when you are looking at them. The statement 'The consumer reports becoming short of breath on uphill exertion – more than five steps' is precise. |
| Relevance | How are these connected? Do these topics/issues impact on each other? How does this help us with the issue? | If the consumer presents with urinary frequency and then you discover that they also experience shortness of breath when walking, these issues, while problems for the individual, are not likely to be connected. However, if the person reports shortness of breath on walking, along with dizziness, loss of balance, and urinary frequency and stinging pain on urination, the nurse may suspect that because the person is older, a urinary infection may be causing some systemic issues such as dizziness and loss of balance and thus they become short of breath because they are systemically unwell. |
| Depth | What are the factors that makes this situation complex? How are the complexities in the situation being considered? Are we dealing with the most significant factors in the situation? | As noted in the above information, relevance and depth really work together, along with precision of information. The factors that make this situation complex include the symptoms that group together to make meaning. The fact that this person is elderly and that urinary infections can cause systemic problems in the older adult means the nurse needs to ensure the significant factors are identified and precise. |

>>

>> TABLE 1.2 continued

| STANDARD | QUESTIONS TO CONSIDER | CLINICAL REASONING EXAMPLE |
|---------------------|---|--|
| Breadth | Do we need to consider various points of view? What would this look like from the point of view of the patient/family member/allied health professional? | Is the consumer's story simplified when relayed to the nurse? Is there a need to consider the views of another person such as a spouse, parent, relative, friend or significant other? Is there additional data that needs to be obtained in order to gain an accurate impression of the consumer's situation? In this situation, if a family member relays to you that the consumer has also been confused over the last two days, and has a history of urinary infections, this will paint a broader picture that the person's urinary symptoms are probably causing these systemic symptoms. |
| Logic | Does this make sense? Does all of this make sense together? | Does the consumer's or family member's story seem logical? If the consumer stated that they have recently been travelling and therefore have not been able to drink as much water as usual, this would make sense as another contributing factor to the individual's likelihood of having developed a urinary tract infection. Another way to think logically is to attribute signs and symptoms to disease entities. The consumer experiences shortness of breath – is this due to heart problems or the systemic issues associated with the urinary tract infection? Logical thinking would seem to point to the latter aetiology, unless a cardiac or respiratory history or other symptoms relevant to heart/lung disease need to be ruled out as contributing factors to the shortness of breath. |
| Significance | Is this the most important problem to consider? Which of these facts are most important? | For this individual, we would need to consider the underlying probable cause for their problem; in this case we would need to ensure the person is treated for the urinary tract infection, and also rule out other cardiac and respiratory issues simultaneously (for example, we may take an electrocardiogram of the heart, and a peak flow reading of the patient's tidal volume). If the shortness of breath persists after treatment for the infection is complete and no immediate cardiac or respiratory issues are identified, then further testing would be relevant. |
| Fairness | Do I have a vested interest in this issue? Am I representing the viewpoints of others? | Although we may not always consider the issue of 'fairness' in health care, at times the decisions we make about the amount, type and timing of information we give consumers, and choices in their health care, could be considered in this way. For example, when assessing how to manage your day, do you allow individuals a choice of when to shower or not give them a choice so it is easier for your time management? |

Components of critical thinking and clinical reasoning

According to Wilkinson (2007), critical thinking encompasses many skills, including interpretation, analysis, inference, explanation, evaluation and self-regulation.

Levett-Jones et al. (2010) have adapted many of these skills into a clinical reasoning cycle specifically derived from nurses' practice. These skills will be discussed to show their relationship with health assessment and physical examination. First, we will discuss what critical thinking is within a clinical context.

Interpretation of a situation requires the nurse to decode hidden messages, clarify meaning and then categorise the information. For example, a consumer may claim to be seeking health care for a bad cough and cold, but actually is concerned about whether the cough is a sign of lung cancer.

During analysis, the nurse examines the ideas and data that were presented, identifies discrepancies, and reflects on possible reasons for these. The nurse can then begin to frame the main points of the consumer's story. For instance, an individual may complain of insomnia but upon questioning reveals that they sleep six hours at night and take a two-hour nap each afternoon. Often, investigating discrepancies for clarity and accuracy leads to a clearer picture of the person's overall situation and reduces the chance of misinterpreting information.

Information and assumptions obtained from the person about their health are analysed using inference and reasoning to create specific premises about the health problems identified. Inference can be a challenging skill for the beginner nurse because they must possess a certain level of knowledge and experience in order to draw conclusions and provide alternatives in any given scenario. Explanation requires that the conclusions drawn from the inferences are correct and can be justified. The use of scientific and nursing literature constitutes the basis

for clinical justification. For example, if a person complains of increased incidences of asthma in the mornings, the nurse should inquire about a history of heartburn, also known as gastro-oesophageal reflux disease (GORD). There is a documented scientific link between GORD and asthma, in that many consumers who have one condition are likely to have the other, and GORD may make asthma worse.

The **evaluation** process examines the validity of the information and hypothesis to allow the nurse to develop a judgement of the issue. For example, the nurse assesses the incidences of GORD for the individual, and finds that when the GORD is well controlled, their asthma is also less active. Therefore, a goal in controlling their asthma will be to control their GORD as well.

Self-regulation via reflective practice is a key component of the critical-thinking process. During this process, the nurse reflects on the critical-thinking skills that were used and then determines which techniques were effective and which were problematic. After interviewing a consumer, the nurse reflects on whether leading, biased or judgemental questions were asked. The nurse might also reflect on the use of open-ended questions and the effectiveness of an interpreter. The recognition of both positive and negative outcomes is crucial to developing higher-level thinking skills and professional expertise, but is often the most difficult skill to develop without assistance. This is why most professional nursing programs require students to engage with the reflective process and to demonstrate a base level of competency for this skill.

CRITICAL THINKING AND THE NURSING PROCESS

Critical thinking and clinical reasoning are essential for nurses in contemporary health environments. In practice, these skills direct nurses to intervene effectively and at the right time to keep consumers from deteriorating. In most cases, people will have different levels of complexity requiring management; the nurse will need to be able to decide which health problems must be prioritised. In order to do this, the nurse must use critical thinking and clinical reasoning skills to enable safe and effective assessment and prioritisation of health problems. In health care, using frameworks helps standardise this type of thinking and guides decision making to focus on consumer safety.

There are many frameworks for critical thinking used by the healthcare professions. The nursing profession has developed its own unique tool to frame critical thinking: **the nursing process**. The nursing process is described in different ways, such as a four-, five- or six-phased process:

- > APIE: Assessment, Planning, Implementation and Evaluation
- > ADPIE: Assessment, Diagnosis, Planning, Implementation and Evaluation
- > APOPIE: Assessment, Patient problem, Outcomes identification, Planning, Implementation and Evaluation.

In Australia and New Zealand these frameworks are also referred to as clinical reasoning, as they assist practitioners with their critical thinking to apply knowledge for clinical purposes. In this text we are using a simplified process of Assess (including problem identification), Plan, Implement and Evaluate (APIE) as the overarching organising structure to undertake physical examination. Once a beginner nurse has a good understanding of this basic skills framework to assist in the clinical reasoning process, a similar but more advanced approach to explain how clinical reasoning should be approached is useful (see **Figure 1.1**). Decision making, however, is also tied to scope of practice, so please refer to your national competency standards (web links below) as well as your employer's local regulations on scope of practice within the organisation.

- > Australia: <http://www.nursingmidwiferyboard.gov.au/Codes-Guidelines-Statements.aspx>
- > New Zealand: <http://www.nursingcouncil.org.nz/Nurses/Scopes-of-practice/Registered-nurse>

Regardless of which nursing process framework is used, it remains dynamic and uses information in a meaningful way through problem-solving strategies to place the person, family or community in an optimal health state. The primary focus of this text is assessment and what to do with that assessment. Physical, emotional, mental, developmental, **spiritual** and cultural assessments provide the foundation for the other phases of the nursing process.

APIE has been used in this text for the layout of each chapter. It is used to organise the knowledge required and the processes that the nurse will need to apply to implement and evaluate the health assessment and physical examination of patients across the life span. Health assessment and physical examination are the basis for identifying health problems and deciding what nursing actions need to be taken. Levett-Jones et al. (2010) have researched and refined a process that assists nurses to extrapolate the critical thinking and clinical reasoning inherent in the nursing process for applied nursing practice (see **Figure 1.1**).

The clinical reasoning cycle (**Figure 1.1**) is presented here in the broader view, and the APIE way of organising information in each chapter forms the first four parts of the clinical reasoning cycle (e.g. consider the consumer's situation, collect cues/information, process information, identify problems/issues) used in caring for the person. We have used the APIE process to present most of the content in this text, and the clinical reasoning cycle is specifically applied in each chapter that has a consumer case study so you can see application to practice.

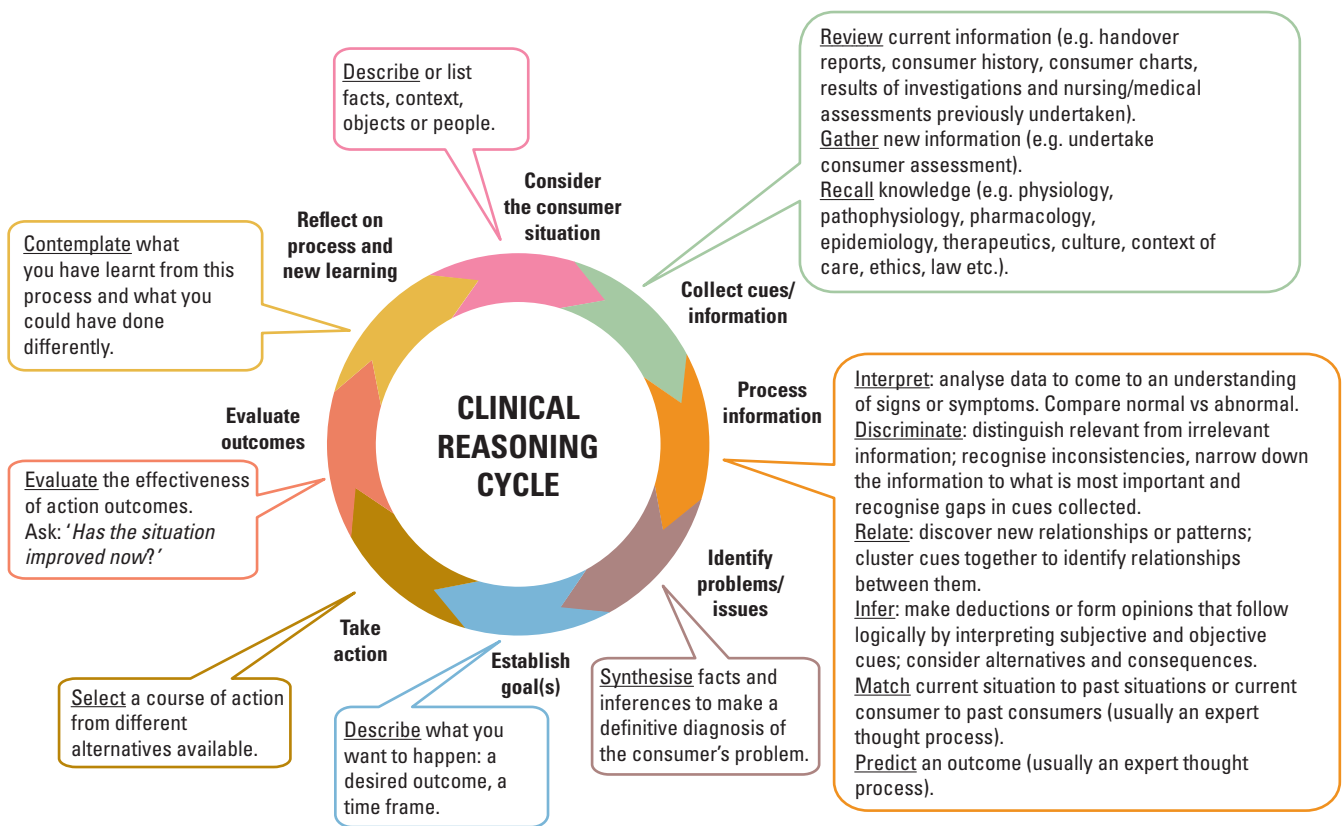


FIGURE 1.1 The clinical reasoning process with descriptors

LEVETT-JONES, T., HOFFMAN, K., DEMPSEY, J., JEONG, S.Y., NOBLE, D., NORTON, C.A., ROCHE, J. & HICKEY, N. (2010). THE 'FIVE RIGHTS' OF CLINICAL REASONING: AN EDUCATIONAL MODEL TO ENHANCE NURSING STUDENTS' ABILITY TO IDENTIFY AND MANAGE CLINICALLY 'AT RISK' PATIENTS. *NURSE EDUCATION TODAY*, 30, 515–20.

CRITICAL THINKING, CULTURAL CONSIDERATIONS FOR HEALTHCARE PRACTICE

Australia and New Zealand have diverse populations; therefore, nurses must be able to apply cultural safety and cultural competence when undertaking health history and physical examination. You will need to apply critical-thinking skills to effectively embed cultural safety in caring for diverse populations, and examine your own cultural identity to cognitively and actively provide culturally safe and appropriate person-centred care. The cultural background of consumers has a significant influence on beliefs about illness and death, and how illness and pain are experienced and expressed. In the health system, it is important that healthcare providers recognise that they hold power over consumers by the very nature of the structure and practice of their roles (Shephard et al., 2019). Being aware of this power helps to mediate the way providers interact with people in their care. Every consumer has the right to safe healthcare provisions that respect their cultural worldview, linguistic diversity, cultural practices and ways of viewing health (Jongen, McCalman & Bainbridge, 2018). This means we need to be aware of and mediate for racial bias.

Racial bias exhibited by health professionals affects the health care of consumers in multiple ways. The research shows ‘racial bias at structural, institutional and interpersonal levels’ produces healthcare disparities through multiple pathways (Yearby in Jongen et al., 2018: 24). Racial bias occurs in policies, legislation and the allocation of resources within and between institutions, as well as the individual behaviour of health professionals. It affects how people are treated, regarded and even believed. A negative influence of a health provider’s racial bias also affects communication and therefore all consumer interactions (Shen et al., 2017). Therefore, there are serious implications not only for consumer–provider interactions but also for treatment decisions and the individual’s health outcomes when racial bias goes unexamined and unchecked.

CULTURE

In this textbook we take the approach that **culture** is a learned and socially transmitted orientation and way of life of a group of people. Culture enables members of large groupings of people to find coherence and to survive in the world around them through the development of unique patterns of basic assumptions and shared meanings (Chao, Kung & Yao, 2015). The cultural beliefs, values, customs and norms that result from these assumptions and meanings shape how the group members think, act, and relate to and with others, as well as how they perceive aspects of life such as time, space, health, illness, and family, spousal, parental, work and community-member roles. The beliefs, values and norms of a cultural group are passed informally from one generation to another and exert a powerful force on all group members.

Over the last five decades, healthcare services and providers globally have recognised the vital importance of respecting and responding appropriately to a consumer’s culture and cultural worldview when providing health care (World Health Organization, 2020). In this way consumers are not harmed or injured through ignorance, stereotyping or discrimination based on their culture, and they can feel safe and comfortable to engage with and receive care.

Defining cultural competence and cultural safety

In the Australian and New Zealand health contexts, two key approaches that relate to the provision of culturally appropriate person-centred care are cultural competence and cultural safety. These are acknowledged as guides to the provision of safe and equitable healthcare practice and are expanded on in this chapter.

Cultural competence is best defined by Cross et al. (in Jongen et al., 2018: 1) as ‘a set of congruent behaviours, attitudes and policies that come together in a system, agency or among professionals that enable the system, agency or profession to work effectively in cross-cultural situations’. This definition is well recognised and applied across the world, as it is inclusive of marginalised minority groups and goes beyond ethnicity and race to encompass the diversity profile. This profile includes gender, age, ability and sexual orientation, as these are all variables that influence a person’s culture, worldview and the way they view health and wellbeing. Recent research regarding health differences also recommends that the diversity profile incorporates different language groups and social cultural differences, such as status of education levels (Jongen et al., 2018).

The approach of **cultural safety** as defined by Williams (1999) is the provision of a safe environment that is free from assault and challenge, and accepts an individual’s identity and needs. This includes consideration of the physical, mental, social, spiritual and cultural aspects of an individual’s wellbeing. The main aim of cultural safety is to respect every individual’s culture and beliefs, and to ensure that it is free from discrimination (Australian Human Rights Commission, 2011; CATSINaM, 2016; McGough, Wynaden, Gower, Duggan & Wilson, 2022). The concept of cultural safety is implemented widely in the Australian and New Zealand healthcare sectors, in response to improving the provision of appropriate health care and improved health status of our First Nations peoples. Chapter 4, ‘Aboriginal and Torres Strait Islander peoples’ health’, provides historical and cultural considerations that impact the health and wellbeing of Australian Aboriginal and Torres Strait Islander people today. Providing culturally safe health care is relevant when caring for any person, and means the focus of care is person-centred.

Given these two definitions, providing culturally competent care means to take a culturally safe approach to healthcare provision to ensure that everyone has equitable access to safe and respectful health care, while cultural safety encompasses the approach that a health practitioner should take to each consumer care interaction. What this means, in practice, is to create an environment that is composed of trust, equal power and a genuine partnership. In the next section these two approaches will be explored in more detail and related to the healthcare context and the role of the healthcare professional.

Cultural competence

The approach to cultural competence has shifted and merged to encompass many things over the last five decades. It was originally developed and became a model of social justice born out of the civil rights movement in the USA (Rosenjack Burchum, 2002). This was part of a response to improve health care in minority population groups, who were marginalised through discriminatory policy that created processes and procedures that limited access to basic rights and health care.

In today’s society, we continue to witness through popular media the atrocities being carried out by extremist groups or individuals who seek to punish and harm others because of their culture. This portrays a lack of respect for differences in culture, language, faith, geographical location, laws and practices. In Australia and New Zealand, we have diverse individuals from different cultures, who may have fled their homes and nations because of acts of genocide, poverty and more. As a result, they often arrive traumatised, impoverished, and in poor health care (Department of Health, Victoria, 2022). Although it can be challenging, it is important to understand and acknowledge the significance of the impact that discrimination has, particularly if you have not been exposed to being penalised as a consequence of your culture. How we as health professionals care for people in these situations can either extend the trauma and harm they have experienced, or it can make a positive difference and provide a safe healthcare encounter.

Over time, there has been an increased recognition of the need to address issues that go beyond those associated with cultural differences. As a result, the