CARPA
Standard Treatment Manual

A clinic manual for primary health care practitioners
in remote and Indigenous health services
in central and northern Australia

7th edition

Centre for Remote Health
Alice Springs, 2017
Preface

The Central Australian Rural Practitioners Association (CARPA) is a multi-professional grass roots group that formed in 1984 out of a shared recognition of the need to support practice in remote and rural communities in Central Australia. This professional support function led to the development of the CARPA Standard Treatment Manual (CARPA STM) by a small group of practitioners from Central Australia with ‘fire in their bellies’. The ongoing development of the manual has increasingly seen the involvement of practitioners from a broad range of disciplines and regions.

Since its first publication in 1992, as a collection of protocols for the management of common conditions seen in remote (mainly Aboriginal) health practice, the CARPA STM has become the flagship of CARPA’s activities. It has a strong reputation, among its users and farther afield, as an essential tool to support evidence-based practice in remote and Aboriginal and Torres Strait Islander health services.

Many practitioners arrive in remote Australia without specific training relevant to remote practice. The CARPA STM helps them to deal with a range of health, social and work conditions unique to the context.

Remote primary health care continues to evolve, and so too do the demands on those providing health services. There is now an expectation that services will incorporate a public health approach and preventative health care, as well as evidence-based clinical practice. The CARPA STM also continues to evolve, partly in response to these changes and partly as a leader and agent of change. We are pleased to bring you the seventh edition of this well-established and well-regarded primary health care clinic manual.

Cover painting
The painting tells the story of some women who are ill due to the loss of their ‘souls’ (kurrunpa). They are being healed by Ngangkaris (traditional healers) who are restoring their souls.

Remote Primary Health Care Manuals logo
The RPHCM logo, developed by Margie Lankin, tells this story:

The people out remote, where they use the manuals, are coming into their health service. They are being seen from one of the manuals … desert rose, the colours of the petals. The people sitting around are people who use the manuals – men and women. People who are working for Indigenous health… doctors and nurses and health workers. Messages are being sent out to the community from the clinic, from the people, to come in to the clinic to be seen. Messages about better health outcomes. People are walking out with better plans, better health, better health outcomes.
About this manual

The seventh edition of the CARPA Standard Treatment Manual has been produced as part of the suite of Remote Primary Health Care Manuals, through a collaboration between the Central Australian Rural Practitioners Association, Central Australian Aboriginal Congress, CRANAplus, and the Centre for Remote Health. The other manuals in the suite are the Minymaku Kutju Tjukurpa Women’s Business Manual (WBM), the Clinical Procedures Manual for remote and rural practice (CPM), and the Medicines Book for Aboriginal and Torres Strait Islander Health Practitioners (Medicines Book).

In producing this edition we have maintained the essential and distinctive components of past manuals. The seventh edition of the CARPA STM continues to provide:

- One easily portable manual for Aboriginal and Torres Strait Islander health practitioners (ATSIHPs), nurses and doctors
- Simple language, without compromise in the content
- A brief, easy-to-read style
- A focus on what makes a difference to clinical practice and health outcomes
- A manual combining technical expertise with input by remote practitioners for remote practitioners.

The CARPA STM does not claim to be comprehensive. It covers conditions that:

- Are common or clinically significant in remote practice
- Have different presentations and management issues to those in ‘mainstream’ practice
- Are life-threatening and need emergency management
- Are frightening for practitioners
- Have important public health implications
- Need coordinated, standardised care.

The CARPA STM does not stand alone. It is designed to be used with:

- Other books in the suite of Remote Primary Health Care Manuals
  - WBM — covers women’s health issues including obstetrics, gynaecology, well women’s screening, menopause, infertility, and contraception
  - CPM — explains how to do procedures referred to in the CARPA STM and the WBM
  - Medicines Book — a guide to medicines in the CARPA STM and WBM in an easy to read format, to assist practitioners and clients with lower English literacy levels

- Australian Immunisation Handbook

In order to avoid unnecessary duplication between the manuals, the WBM and CPM are cross-referenced throughout the CARPA STM.

The style of the manual uses short directives without explanation — ‘Check ...’, ‘Take blood ...’ or ‘Give ...’. In any health interaction the rights of the patient must be remembered. As a part of health care provision a patient has the right to:

- Determine what medical treatment they choose to accept or not to accept
• Be given easily understandable explanations, in their first language, about their specific health problem, any proposed treatments or procedures, and the results of any tests performed
• Have access to all health information about themselves
• Have their privacy respected, be treated with respect and dignity, and know that all health information is confidential.

Your input
Feedback is an essential component of keeping the manuals ‘by the users for the users’. Please submit your suggestions and comments via either
• Online feedback form at www.remotephcmanuals.com.au
• Email to remotephcmanuals@flinders.edu.au

Acknowledgements
This manual was produced with funding from the Australian Government Department of Health. Project management for the revision was provided by the Centre for Remote Health, Alice Springs. Oversight of the project was provided by the Remote Primary Health Care Manuals Governance Committee, made up of representatives from Central Australian Rural Practitioners Association, Central Australian Aboriginal Congress, CRANAPlus, and the Centre for Remote Health. Oversight of the review process was provided by the Remote Primary Health Care Manuals Editorial Committee.

Contributors
Thank you to the practitioners, from all over Australia, who volunteered their time and expertise to ensure the manual remains evidence-based, relevant, practical and user-friendly. More information about the review process can be found at www.remotephcmanuals.com.au
This acknowledges those contributors known to us. Due to the large number of volunteers, we have only recorded the highest level of participation.

Remote Primary Health Care Manuals Editorial Committee
Lyn Byers (chair), Christine Connors, David Atkinson, Frances Vaughan, George Tripe, Kerrie Gell, Lesley Neiuwoudt, Margaret Gaff, Nicholas Williams, Peter McCormack, Robbie Charles.
We wish to recognise Sabina Knight, founding chair, for 30 years of leadership, inspiration and commitment to improving health care in remote and Indigenous Australia.

Editorial Working Group chairs
Anna Ralph, Anne Patton, Chris Zeitz, Deb Fearon, Fred Miegel, Geoff Isbister, Graeme Maguire, Jennifer Delima, Louise Maple-Brown, Lukas Arkapaw, Malcolm McDonald, Nathan Ryder, Paul Lawton, Peter May, Phil Humphris, Richard Johnson, Rosalie Schultz, Sheila Kavanagh, Simon Wooley, Steven Tong, Terrie Ivanhoe, Tobias Speare.
Editorial Working Group members

Primary reviewers
Adele Northwood, Alexander Wetten, Ali Thorn, Angela Hall, Ann Chang, Anna Fairbairn, Annie Whybourne, Balan Iyngkaran, Bart Currie, Ben Hamlyn, Ben Saxton, Bronwyn Silver, Cameron Phillips, Charlie Coulton, Chris Turnbull, Christina Ly, Claire Waddington, Dale Edgar, David Di Fiore, David Thomas, Des O’Shaughnessy, Elise Lam, Ella Muemann, Emma Harris, Gabrielle Watt, Georgie Wood, Graham Williams, Gurmeet Singh, Hang Nguyen, Heather Cleland, Heather Ferguson, Ho Wah Ng, Ian Marr, Jessica Sommers, John Scopel, John Wright, Josh Davis, Josh Francis, Josh Hanson, Josiah Murphy, Kane Vellar, Katie Hardie, Kerry Sims, Keshan Satharasinghe, Lauren Kharsas, Lloyd Noon, Manoji Gunathilake, Mark Hoffman, Matthew Leach, Natalie Strobel, Nick Tyllis, Paul Torzillo, Rebecca Youd, Rosalind Webby, Rowena Ivers, Sam Lehman, Sarah Lynar, Sarah McGuinness, Scarlett Tung, Sheena Gune, Shirley Alexander, Simon Smith, Sophie Koh, Stephanie Sherrard, Steven Skov, Sue Gordon, Sue Orsmond, Tom Snelling, Usman Khalid, Verena Tinning.

Secondary reviewers
Alex Hope, Alison Finlay, Amy Rosser, Annette Mikecz, Annie Wilson, Bernard Longbottom, Bonny King, Cameron Edgell, Carmel Hattch, Caroline McDonald, Catherine Gargan, Cathy Chapple, Celia Gallo, Cherryl Wirtanen, Chriss Ingliss, Colleen Court, Dana Fitzsimmons, Danny Tsai, David Chapman, Debbie Jolley, Donna Simmonds, Eileen Quinn, Eleanor Parker, Emily Lawton, Emily Whitelaw, Emma Budgen, Fabian Schwarz, Fiona Bell, Fiona Djerrkura, Francis Colahan, Gavin Chin, Genevieve Lewis, Heidi Bainbridge, Jacob Whitty, Jan Saunders, Jane Whitehead, Janice Finlayson, Jeff Cook, Jessie Anderson, John Death, John Kelly, Kathliene Robinson, Kathy Currie, Katie Michell, Keith Forrest, Keith Hunter, Kerr Wright, Kim Henderson, Kimmaree McDermott, Kym Stanton, Laurencia Grant, Liz Swan, Loretta Bancroft, Lorna Murakami-Gold, Luke Vos, Maricar Alcedo, Marie McElhinney, Mary Wicks, Melanie Herdman,

Project team
Janet Struber, Stephanie Mackie-Schneider, Victoria Orpin, Sandeep Reddy, Sally Herring, Allison Gray

Assisting the team: Karen Montey, Malissa Hodgson, Ross Carter, Sheree Zadow

Content
The following content has been reproduced or adapted for use in the manual.

- Patient Health Questionnaire PHQ2 and PHQ9 — reproduced with permission version adapted for use with Indigenous people by Dr Alex Brown, Baker IDI Heart and Diabetes Institute, Alice Springs
- Trachoma grading photos — WHO website: www.who.int/blindness/causes/trachoma_documents/en/
- Ear examination chart — photos provided by Dr Michael Hawke, Hawke Library: otitismedia.hawkelibrary.com
- Absolute cardiovascular risk charts — adapted from: Australian Cardiovascular Risk Charts (National Vascular Disease Prevention Alliance, 2011) and New Zealand Cardiovascular Risk Charts (New Zealand Guideline Group, 2009)
# Contents

Using the CARPA Standard Treatment Manual ................................................. 1
Cultural safety tips .......................................................................................... 3

## 1. Emergencies and assessments ................................................................. 5

Early recognition of sick or deteriorating patients ........................................ 6
Life support — DRS ABC .............................................................................. 10
Resuscitation reference table ................................................................. 16
Abdominal pain .............................................................................................. 18
Anaphylaxis — severe allergic reaction ..................................................... 30
Bites — insect, spider and snake ............................................................... 35
Burns .............................................................................................................. 38
Chest pain ........................................................................................................ 47
Domestic and family violence ................................................................. 54
Fits — seizures ............................................................................................. 57
Hypothermia .................................................................................................. 62
Injuries — abdomen and pelvis ................................................................. 64
Injuries — bleeding ....................................................................................... 66
Injuries — chest ............................................................................................ 68
Injuries — head ............................................................................................. 72
Injuries — limbs ............................................................................................ 80
Injuries — soft tissue ................................................................................... 82
Injuries — spinal: risk and assessment ..................................................... 88
Low blood glucose (hypoglycaemia) ......................................................... 91
Marine bites, stings and poisonings .......................................................... 94
Meningitis ..................................................................................................... 101
Nausea and vomiting .................................................................................. 104
Near hanging ................................................................................................. 108
Nose bleeds (epistaxis) ............................................................................... 110
Poisoning ....................................................................................................... 112
Unconscious person ..................................................................................... 113

## 2. Child health ............................................................................................. 115

Anaemia (weak blood) in children ............................................................... 116
Babies under 2 months who are sick or have a fever ................................ 121
Breathing problems in children ................................................................ 123
Chest infections — 2 months to 5 years ..................................................... 124
Chronic suppurative lung disease and bronchiectasis in children .......... 131
Asthma in children ...................................................................................... 134
Child neglect, abuse, sexual abuse ................................................................. 143
Child development issues ........................................................................... 151
Infant and child growth and nutrition ........................................................ 154
Dental and oral problems — 6 months to 5 years ...................................... 164
Diarrhoea ...................................................................................................... 165
Ear and hearing problems .......................................................................... 172
Urine problems — 2 months to 12 years ..................................................... 184

3. Mental health and drug problems ........................................................... 191
Mental health emergency ........................................................................... 192
Anxiety ......................................................................................................... 196
Confusion — delirium and dementia .......................................................... 198
Depression .................................................................................................. 201
Psychosis .................................................................................................... 205
Suicide risk .................................................................................................. 207
Alcohol withdrawal ....................................................................................... 209
Amphetamines and other stimulants ......................................................... 214
Cannabis ..................................................................................................... 218
Kava ............................................................................................................ 220
Opioids ....................................................................................................... 221
Tobacco ...................................................................................................... 223
Volatile substance misuse ........................................................................... 226

4. Chronic diseases ..................................................................................... 229
Assessing and reducing cardiovascular risk .............................................. 230
Interpreting results ..................................................................................... 234
Combined checks for chronic diseases ..................................................... 239
Blood fats ................................................................................................... 242
Chronic kidney disease ............................................................................... 244
Coronary artery disease ............................................................................ 250
Diabetes ..................................................................................................... 254
Heart failure ............................................................................................... 264
High BP (hypertension) .............................................................................. 268

5. Sexual health .......................................................................................... 271
STI checks for men ....................................................................................... 272
STI checks for young people ....................................................................... 276
STI management ........................................................................................ 278
Discharge from penis or pain on passing urine ........................................... 286
Genital ulcers and lumps ............................................................................ 288
6. General topics

Acute rheumatic fever (ARF) and rheumatic heart disease (RHD) ......................................................... 294
Warfarin ........................................................................................................................................ 299
Anaemia (weak blood) in adults ......................................................................................................... 303
Bone infection .................................................................................................................................... 306
Breathing problems in adults ............................................................................................................. 307
Chest infections — over 5 years .......................................................................................................... 309
Chronic lung disease in adults ........................................................................................................... 314
Asthma in adults .............................................................................................................................. 323
Breathing related sleep disorders ....................................................................................................... 330
Chickenpox and shingles .................................................................................................................. 332
Dental and oral problems .................................................................................................................. 335
Eye assessment .................................................................................................................................. 343
Eye conditions ................................................................................................................................... 346
Eye injuries ......................................................................................................................................... 354
Headaches .......................................................................................................................................... 358
Heat illness .......................................................................................................................................... 360
Hepatitis ............................................................................................................................................ 363
Joint problems ................................................................................................................................. 369
Joint sprains ....................................................................................................................................... 373
Melioidosis .......................................................................................................................................... 375
Pain management .............................................................................................................................. 377
Painful scrotum ................................................................................................................................... 384
Skin infections ....................................................................................................................................... 387
Water-related skin infections ............................................................................................................. 392
Scabies .............................................................................................................................................. 394
Tinea .................................................................................................................................................... 400
Rashes ................................................................................................................................................. 403
Sore throat .......................................................................................................................................... 407
Tuberculosis .......................................................................................................................................... 408
Urine problems — over 12 years ......................................................................................................... 411
Worms ................................................................................................................................................. 416

7. Reference section

Clinical observations ............................................................................................................................ 422
Antibiotics doses table ...................................................................................................................... 423
Other medicines doses table ............................................................................................................. 439
Abbreviations ..................................................................................................................................... 444
Index .................................................................................................................................................. 448
Using the CARPA Standard Treatment Manual

The CARPA STM is intended for use by trained health professionals including ATSIHPs, nurses and doctors. It is not intended to be a layperson’s manual. It is designed to be used primarily in remote (largely Aboriginal and Torres Strait Islander) communities, and rural and urban Aboriginal Medical Services.

The CARPA STM supports a holistic approach to health care that incorporates collaborative practice, shared care, patient recall and follow-up. Use of the manual also facilitates standardised pharmacy imprest lists and quality assurance.

Use of the CARPA STM is not intended to replace clinical judgement, expertise, or appropriate referral. It does not support practitioners to work beyond their level of competence or confidence, or outside their scope of practice or health service policies. Supply of medicines recommended in this manual must occur within the constraints of organisational polices and jurisdictional drugs and poisons legislation. Safe practice requires that practitioners who are not sure what they are dealing with talk with someone more experienced or skilled.

Following protocols in the CARPA STM does not remove the need to complete normally accepted practices (even if unstated) such as:

- Observing privacy and confidentiality
- Getting informed consent
- Discussing procedures and treatment options with patients and/or their carers
- Discussing medicines, including side effects and the need to complete the whole course of treatment
- Actively involving parents and/or carers in the care and treatment of children
- Recording history, observations, findings and actions in the file notes.

When options are given they are listed in order of preference. Only move down the list if earlier options are not available, or are not acceptable to the person or their carer.

Practitioners should discuss with the person the impact of a diagnosis on their ability to hold an unconditional driver's license. Reporting requirements vary by jurisdiction. For more information see www.austroads.com.au/drivers-vehicles/assessing-fitness-to-drive

The protocols
Protocols are largely in dot point form. Activities are usually under 4 headings:

- **Ask** — subjective assessment, patient history (eg pain when passing urine)
- **Check** — objective assessment, observations, tests (eg temp, pulse, BP, BGL)
- **Do** — action, treatment, giving medicine (eg wash out eye with normal saline)
- **Follow-up** — plan, referral (eg review 1 week after treatment)
**Always** begin by reading the whole protocol, and carefully checking points in information boxes.

**Information boxes**
- Black boxes — easy to find information.
- Thin red boxes — important information.
- Thick red boxes — very important or life-saving information.

**Terms**

**Indigenous**
In this manual the term Indigenous is used to mean both Aboriginal and Torres Strait Islander Australians. We mean no disrespect by using this inclusive term for different cultural groups and apologise for any discomfort or sorrow it may cause.

**Abbreviations**
Abbreviations and acronyms may be used without explanation. There is an abbreviation list, including acronyms, in the reference section.

**Medical consult**
A medical consult involves seeking advice and/or authorisation for treatment from a doctor, appropriately qualified nurse practitioner, midwife or specialist. It occurs while the patient is present. It may be in person or by telehealth (eg phone, radio, videoconference).

**Medical review**
A medical review is an assessment of the patient by a doctor, appropriately qualified nurse practitioner, midwife, or specialist. This can be done in person or via case conference. It would usually involve making an appointment for the person to return to the clinic or to visit the practitioner at a future time.

**Medicines**
Medicines are named for their active ingredients. Where a brand name for a medicine or other product is used it is in italics, and usually in brackets. Mention of specific products does not imply that they are endorsed or recommended in preference to others of a similar nature that are not mentioned.

**Online version**
The CARPA Standard Treatment Manual is available online as part of the Remote Primary Health Care Manuals at: www.remotephcmanuals.com.au
Cultural safety tips

To be effective, health care must occur in a culturally safe/secure environment with practitioners who are culturally aware and competent. See Cultural safety for more information (CPM p6). Learn all you can about the local culture. Always be respectful, and carefully consider the following.

Cultural beliefs
- Traditional beliefs about health and illness remain intact, embedded and valid in many Indigenous communities
- Use of traditional healers and traditional medicine is common. It is very important to acknowledge and respect this

Loss and grief
- Indigenous communities may follow these practices after a death
  - Deceased person's name should not be spoken
  - Special rituals, such as smoking deceased person's house and work, or the clinic
  - Certain relatives of the deceased may choose not to speak
  - Relatives of the deceased may live outside the community to mourn
  - In some communities ‘sorry business’ (grieving) involves self-inflicted injury (sorry cuts), family fighting (payback), wailing, silence

Effective communication
- English can be a second or third language for Indigenous Australians
  - Ask if person would like an interpreter to assist
- Don't assume that conversations conducted in English have the same meaning for practitioner and patient
- Hearing problems are common and can make communication difficult
- While efforts to learn the local language are usually appreciated, don't try to use a language learnt in another community
- Be aware of non-verbal body language and gestures — pointing, hand signals, eye contact. Meanings may differ between cultures

How you question patients
- Direct questions can be considered rude
- Only ask one question at a time and allow person time to consider it
  - Person may be thinking in their own language before responding
- Check that you have understood what the person has told you
- Person may bring along a relative or friend
- Avoid double negatives. Example: ‘You don't do nothing like that, do you’
- Ready agreement can be a sign of misunderstanding, or courtesy
- Silence is often OK, give person plenty of time to answer. But remember that silence can also mean misunderstanding, or that practitioner is on culturally unsafe ground