



RURAL HEALTH

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**Health Education and Training Institute
NSW Hospital Skills Program
Rural Health module Version 1.1
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HSP Rural Health module development working group membership:

Dr Annie Balcomb, Ambulatory Care GP VMO, Orange Health Service

Ms Linda Cutler, Executive Director, Rural Education and Training, Health Education and Training Institute

Professor Graeme Richardson, Executive Medical Director, Murrumbidgee LHD

Dr Chris Trethewy, Emergency Physician, Director of Retrieval, Tamworth Rural Referral Hospital

Mr Peter Davy, Curriculum Developer Health Education and Training Institute

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Rural Health module

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Background

The Hospital Skills Program (HSP) is a professional development program for doctors working in the NSW public health system. Doctors participating in the HSP have at least two years of clinical postgraduate experience and are not currently participating in a specialist vocational training program. The HSP curriculum has been developed by the Health Education and Training Institute (HETI), on behalf of NSW Health as part of the broader Hospital Skills Program.

The curriculum is underpinned by the principles of adult learning. It is outcomes-based, providing a strong foundation for workplace learning and assessment, and facilitating doctors to reflect on their current practice and take responsibility for their own learning. A holistic approach is adopted, focusing on integrated learning and assessment, identifying commonalities between different activities and delineating meaningful key clinical and professional activities. Within the HSP, feedback on current performance is encouraged, enabling ongoing development of skills in a supportive environment.

HSP curriculum modules have been developed with reference to the Australian Curriculum Framework for Junior Doctors (ACFJD), prepared by the Confederation of Postgraduate Medical Education Councils. The ACFJD is an educational framework which identifies learning outcomes and capabilities required of junior doctors. The ACFJD is structured around three learning areas: Clinical Management, Communication and Professionalism.

The HSP curriculum framework has generally adopted a similar structure, with a major focus on communication and professionalism capabilities covered in the HSP Core module and clinical management learning outcomes covered in each of the ten HSP clinical modules (Hospital Medicine, Emergency Department, Mental Health, Aged Care, Children's Health, Women's Health, Sexual Health, Rural Health, Aboriginal Health, and Addiction Medicine).

HSP clinical management learning outcomes address common illness problems and conditions which are likely to be dealt with by HSP participants in the particular clinical context covered in the HSP module. The clinical modules also address specific skills and procedures that are expected to be achieved by HSP participants.

The HSP provides a pathway for self-directed medical professional development and education, using a range of educational resources and methods appropriate to the working environment of the HSP participant. Furthermore, the HSP

provides a mechanism to align clinical learning activities with the goals of the health system and to deliver high quality educational activities to hospital generalist doctors.

The HSP acknowledges the heterogeneous nature of the skills and circumstances of Career Medical Officers (CMOs) and equivalent generalist medical practitioners, their continuing value in the delivery of health services to the population of NSW, and their right to meaningful educational opportunities in a mode appropriate to their working lives and geographic locations.

Formative assessment and entrustable professional activities

The HSP provides a framework for workplace based, competency based formative assessment and the recognition of current competencies. The HSP framework for formative assessment is underpinned by core principles of authentic workplace based assessment. Assessment in the HSP is valid, reliable, feasible and fair.

Entrustable professional activities (EPAs) are sets of professional tasks that doctors perform in their clinical roles. The EPAs described in this module have been identified by the Rural Health module development group through an analysis of clinical activities that are of central importance to the practice of medicine in rural areas.

Because the sum of what doctors do in medical practice is greater than the parts described by individual competencies, EPAs provide an approach that minimises the effects of atomisation of professional competencies, which is an undesirable side-effect of some competency based assessments (Van der Vleuten and Schuwirth, 2005).

Ten Cate (2006) identifies the following criteria for EPAs:

- part of essential professional work
- require specific knowledge, skill and attitude
- generally acquired through training
- lead to recognised output of professional labour
- usually confined to qualified staff
- independently executable within a time frame
- observable and measurable in their process and their outcome
- lead to a conclusion (done well or not done well)
- reflect the competencies to be acquired.

In this module each EPA covers a number of learning outcomes and is observable and measurable, and as such provides a sound basis for ongoing professional development and workplace based assessment. There are links between some EPAs and, where possible, integrated learning and assessment is encouraged.

Using the concept of EPAs and building formal entrustment decisions into the HSP helps with:

- providing guidance for professional development and progression
- supporting supervision and guiding workplace based assessment
- integrating professional competencies into broader capabilities reflecting real-world practice in hospital medicine
- fostering a developmental continuum of workplace based learning, formative assessment and workplace progression.

Through involvement in the module's educational experiences (including access to relevant resources) HSP participants will be able to engage in the entrustable professional activities relevant to their practice at the HSP level designated. This will support a career-long process of increasing depth of expertise and synthesis of clinical skills for doctors working in medical contexts supported by the HSP.

Introduction to the Rural Health module

The Hospital Skills Program Rural Health Module identifies the capabilities required of doctors with greater than two years of postgraduate experience who are not participating in a specialist vocational training program and who are working in clinical areas related to the care of patients in rural and remote NSW.

The module has drawn on relevant work related to medical education and professional development and patient safety and quality health service. Where appropriate the module has also drawn on content from other HSP modules relevant to clinical management and patient safety. However, this module has been written with the intention of meeting the professional development needs of eligible doctors working in rural and remote NSW.

The Rural Health module is a key supporting document for implementing the HSP, which aims to improve the safety, efficiency and quality of healthcare in the NSW public health system. With regard to the presentation of the Rural Health module, the intention is to recognise and reinforce a mode of practice that focuses on the continuity and quality of clinical care and patient safety (ACSQHC, 2011).

Generalist medical practitioners have historically serviced the needs of rural communities (Pashen *et al*, 2007). This group of doctors provides a broad range of services in response to the geographical isolation of patients. As noted in 2007 report *The Expanding Role of the Rural Generalist in Australia – A Systematic Review* (p14):

“The scope of practice of rural generalists is largely driven by the needs of the community. A number of factors impact on this including: population size, community demographics, profile of high risk groups, burden of disease, morbidity and mortality, access to specialist care, geographical isolation and socio-economic status. Certain healthcare necessities that must be maintained outside of the reach of specialist services, including basic emergency, anaesthetic, surgical and especially birthing services.”

Working as a generalist medical practitioner in NSW regional, rural or remote settings is a demanding role. People who live and work in rural and remote Australia experience poorer health outcomes, with higher mortality and morbidity rates, than urban Australians. Rural Australians are also over represented in accident and injury incidents compared with urban Australians.

Moreover rural Australians suffer above average rates of premature mortality especially with regard to heart disease, diabetes, cancer and suicide.

Rural health medical practitioners have comparable medical knowledge and skills to doctors working in city or suburban medical practice, but there are often extra challenges. For example, regional, rural or remote medical practitioners:

- are often expected to take on greater clinical responsibility with less access to formal professional support
- will routinely exercise clinical responsibilities covering large geographical regions
- are usually responsible for high patient caseloads.

Regional, rural or remote generalist medical practitioners are frequently expected to exercise their in-depth knowledge of their community and the resources which can be drawn upon to support their patients.

The knowledge and skills that these doctors bring to their roles in NSW Health cover contextual aspects of regional, rural and remote medicine as well as addressing non-technical aspects of being a health professional such as exercising leadership, management, administration, research and supervision.

Challenges faced by medical professionals can be turned into opportunities for learning and development in these key roles and responsibilities. This HSP module seeks to facilitate workplace learning for doctors working in a regional, rural or remote context.

HSP levels

An HSP level has been allocated for each learning outcome in the Rural Health module. The three levels of the HSP (HSP 1, 2 and 3) reflect the developing knowledge and skills required for increasingly complex clinical management scenarios and increasing work role responsibility, entrustment and accountability. Each of the three levels broadly distinguishes doctors in terms of proficiency, experience and responsibility. The following is a summary of the criteria on which the HSP levels have been determined.

It is assumed that doctors will practise medicine with the degree of autonomy that is consistent with their level of experience (E), clinical proficiency (CP) and responsibility (R) to ensure patients receive care which is appropriate, effective and safe. The levels are cross-referenced with those described for the patient competencies in the National Patient Safety Education Framework (see Appendix 1).

Table 1: Defining the HSP levels

Key	HSP 1	HSP 2	HSP 3
Level of Experience (E)	Has limited workplace experience in this discipline.	Has moderate to comprehensive workplace experience in this discipline.	Has substantial workplace experience in this discipline.
Clinical Proficiency (CP)	Reliably recognises familiar situations and key issues. Has a good working knowledge of the management of these. Decision-making is largely bound by protocol. Demonstrates effective clinical decision making and clinical proficiency in defined situations.	Recognises many atypical presentations, recognises case-specific nuances and their relational significance, thus reliably identifying key issues and risks. Decision making is increasingly intuitive. Fluent in most procedures and clinical management tasks.	Has an intuitive grasp of a situation based on linking understanding of a situation to appropriate action. Able to provide an extensive repertoire of management options. Has a comprehensive understanding of the rural service, referral networks and links to community services.
Responsibility (R)	Uses and applies integrated management approach for all cases; consults prior to disposition or definitive management and arranges senior review of the patient in numerous instances, especially serious, complex, unclear or uncommon cases.	Autonomously able to manage simple and common presentations and consults prior to disposition or definitive management for more complex cases.	Works autonomously, consults as required for expert advice and refers to relevant teams about patients who require particular attention.
Patient Safety (PS)	Level 2	Levels 2 - 3	Level 3

Section 1: Patient assessment and management

EPA Use focused clinical skills **RH 1** to undertake patient assessment, problem formulation and investigation

Patient assessment

- RH 1.1 Use a systematic approach to the clinical assessment of the undifferentiated ill patient in rural contexts (HSP 2).
- RH 1.2 Use case notes and other information about the patient to create safe engagement and patient identification (HSP 2).
- RH 1.3 Elicit symptoms and signs within an empathic interview setting (HSP 2).
- RH 1.4 Elicit key information regarding predisposing, precipitating and perpetuating factors (HSP 2).
- RH 1.5 Elicit additional history from relevant family members/carer(s) as required (HSP 2).

Problem formulation

- RH 1.6 Undertake effective bio-psycho-social assessment (HSP 2).
- RH 1.7 Document information gained from the bio-psycho-social assessment (HSP 2).
- RH 1.8 Regularly re-evaluate the formulation as part of clinical management (HSP 2).
- RH 1.9 List differential diagnoses (HSP 2).

Investigations

- RH 1.10 Implement sensible safe practice around investigations (HSP 1).
- RH 1.11 Order and interpret investigations appropriately according to diagnosis and treatment (HSP 1).
- RH 1.12 Seek specialist information (eg, from a senior CMO, registrar or consultant) regarding investigation results as required (HSP 1).

EPA Refer patients in a timely **RH 2** manner, consult as required with other health professionals and maintain patient confidentiality

- RH 2.1 Use the multidisciplinary team for patient referral appropriately (HSP 2).
- RH 2.2 Communicate effectively with consultants (HSP 1).
- RH 2.3 Share information with local general practitioners as required (HSP 1).
- RH 2.4 Use telehealth technologies including email, fax, telephone, video-conferencing, e-therapy and online groups to assist patient assessment and management, for example online clinical consultations and telehealth case management systems for co-ordinating disability services, conducting mental health video-conferencing (HSP 2).
- RH 2.5 Recognise the issues related to confidentiality and maintaining professional boundaries in clinical work in remote and rural practice (HSP 1).
- RH 2.6 Recognise that risks to maintaining patient anonymity has specific consequences for sensitive health issues, such as HIV, other sexual health problems, and mental illness (HSP 1).
- RH 2.7 Identify strategies to maintain patient anonymity and professional boundaries in clinical work in remote and rural practice (HSP 2).

EPA **Supportively manage**
RH 3 **patients, being responsive**
 to their needs and managing
 complications

Specific and supportive management

- RH 3.1 Recognise the need to implement treatment, concurrent with the assessment of the patient, aimed at controlling symptoms (eg, analgesia), correcting abnormal physiological parameters and preventing complications (eg, prophylactic antibiotics) (HSP 1).
- RH 3.2 Implement therapies targeting presenting conditions which reflect best practice and which are appropriately individualised (HSP 1).
- RH 3.3 Define the impact of the presenting illness or injury on pre-existing illnesses (co-morbidities) and incorporate appropriate responses and modifications in the management plan (HSP 2).
- RH 3.4 Consult appropriately to formulate management plans (HSP 1).
- RH 3.5 Identify environmental and lifestyle risks and make recommendations to the patient to mitigate or avoid these risks (HSP 2).

Complications

- RH 3.6 Disclose, report, monitor and treat any complications appropriately (HSP 1).
- RH 3.7 Recognise changing clinical parameters that reveal complications or adverse outcomes (HSP 1).
- RH 3.8 Intervene to minimise the consequences of complications (HSP 1).
- RH 3.9 Practise open disclosure with patients and relatives (HSP 1).

- RH 3.10 Enter adverse incidents into incident management systems and notify appropriate authorities in the case of notifiable diseases and drug reactions (HSP 1).
- RH 3.11 Describe how to deal with the personal emotional issues surrounding critical incidents, breaking bad news and post-incident stress (HSP 1).
- RH 3.12 Recognise when to coordinate and participate in the debriefing of team members following an error, complication or bad outcome (HSP 2).
- RH 3.13 Sensitively convey information to bereaved or distressed relatives (eg, breaking bad news) (HSP 1).

EPA **Use effective consultation**
RH 4 **skills to communicate**
 clinical decisions for patients
 and carers

- RH 4.1 Describe the available human resources to assist with patient care both in hours and out of hours in the specific rural health facility (HSP 2).
- RH 4.2 Communicate effectively with patient and family allowing appropriate provision of information and consultation regarding choice and consent for treatment (HSP 1).
- RH 4.3 Involve patients and carers in clinical decision making (HSP 1).
- RH 4.4 Obtain verbal and formal consent appropriate to the circumstance (HSP 1).
- RH 4.5 Consult appropriately with colleagues and team members as required to support decisions and management plans (HSP 1).
- RH 4.6 Recognise the risk involved with different levels of support and describe measures to mitigate it (HSP 2).
- RH 4.7 Recognise when to call for additional support or advice (HSP 1).

EPA **Maintain effective clinical**
RH 5 **documentation and comply**
 with legislation

Documentation

- RH 5.1 Describe the importance of comprehensive, clear and contemporary medical records for direct patient care, assessment of quality and medico-legal inquiry (HSP 1).
- RH 5.2 Document patient management legibly, using the appropriate and required forms for use in coronial, medico-legal, judicial, quality and safety matters (HSP 1).

Legislative compliance

- RH 5.3 Implement compliance rules for Medicare and the Pharmaceutical Benefits Scheme (PBS) including use of provider and prescriber numbers and appropriate referral documentation (HSP 1).
- RH 5.4 Comply with the provisions of the Medical Practitioners Act, Coroners Act, NSW Health Codes of Conduct, NSW Mental Health Act, NSW Guardianship Act and other legislative and policy instruments applicable to the practice of medicine (HSP 1).
- RH 5.5 Comply with medication management techniques to reduce error (HSP 1).
- RH 5.6 Comply with rules for correct and legal prescribing (HSP 1).

EPA **Identify models of service**
RH 6 **delivery to best meet**
 the needs of the local
 community and improve
 access of Aboriginal people
 to healthcare

- RH 6.1 Relate the features of primary health care to the health status of Aboriginal people (HSP 2).
- RH 6.2 Identify features of effective Aboriginal health promotion (HSP 2).
- RH 6.3 Describe barriers that Aboriginal people face in accessing and receiving healthcare (HSP 2).
- RH 6.4 Describe the health status and profile of the local Aboriginal community/ies (HSP 2).
- RH 6.5 Work collaboratively with Aboriginal health and support workers and to improve patient access, community knowledge and linkages (HSP 2).
- RH 6.6 Implement strategies to promote inclusive and non-discriminatory service delivery to Aboriginal people (HSP 2).
- RH 6.7 Identify patients who are Aboriginal and facilitate access to programs and benefits such as 'Closing the Gap' initiatives (HSP 2).
- RH 6.8 Identify structural changes to own service that can assist Aboriginal people to access services (HSP 2).

Section 2: Common problems and conditions

EPA RH 7 Describe general factors and common health problems experienced by patients living in rural and remote NSW

- RH 7.1 Describe factors and common problems contributing to poor outcomes in rural and farm health and safety (HSP 1).
- RH 7.2 Assess symptoms and health problems presented by patients from rural and remote areas including farmers and farming families (HSP 2).
- RH 7.3 Use project outcomes from organisations such as the Sustainable Farm Families Project to increase awareness of the health status of farming communities (HSP 2).
- RH 7.4 Recognise that rural and remote areas comprise many diverse settlements, including Aboriginal, pastoral, farming, mining, tourism and that communities and health needs vary across these communities (HSP 1).
- RH 7.5 Recognise that the health needs of rural populations are likely to be influenced by the following complex population mix:
- a high proportion of FIFO (fly-in, fly-out) and DIDO (drive-in, drive-out) workers employed in mining and service industries
 - pockets of disadvantaged residents
 - an ageing population
 - male to female imbalance
 - seasonal tourist influxes (HSP 1).

EPA RH 8 Undertake prevention and management of heart disease

- RH 8.1 Present appropriate information designed to prevent heart disease in at risk patients (HSP 2).
- RH 8.2 Conduct care planning for heart disease with at risk patients (HSP 2).
- RH 8.3 Manage acute coronary syndrome and acute myocardial infarction according to NSW Health guidelines (HSP 2).
- RH 8.4 Use clinical pathways to stratify the risk of acute coronary syndrome and ensure appropriate investigation, referral and follow-up (HSP 2).
- RH 8.5 Advocate for rapid access to hospital based services and the implementation of pre-hospital intervention (eg, thrombolysis, analgesia) (HSP 2).
- RH 8.6 Provide appropriate therapeutic choices in renal failure, and adjust anti-hypertension medication with age (HSP 2).
- RH 8.7 Explain to patients the benefit of weight control/obesity and exercise management and together with patients implement such management strategies (HSP 2).

EPA RH 9 Provide management of diabetes

- RH 9.1 Conduct care planning for managing diabetes with at risk patients (HSP 2).
- RH 9.2 Describe how to recognise and treat diabetic emergencies:
- Ketoacidosis
 - Hyperosmolar coma
 - Hypoglycaemia (HSP 2).
- RH 9.3 Monitor for diabetic ketoacidosis, hyperosmolar states and hypoglycaemia (HSP 2).
- RH 9.4 Intervene appropriately to stabilise blood glucose and manage as appropriate (HSP 2).
- RH 9.5 Modify oral hypoglycaemia agents as required (HSP 2).

RH 9.6 Explain to patients the benefit of weight control/obesity and exercise management and together with patients implement such management strategies (HSP 2).

EPA Provide preventive care
RH 10 and management of cancer

- RH 10.1 Recognise that NSW rural and remote populations have a 60% higher death rate than urban populations due to melanoma and other malignant skin cancers (HSP 1).
- RH 10.2 Appraise the risk of melanoma and other malignant skin cancers within your own patient population and apply preventive care and management as required (HSP 2).
- RH 10.3 Recognise that men from NSW rural and remote populations have more than double the risk of death from prostate cancer compared to men from NSW urban areas (HSP 1).
- RH 10.4 Appraise the risk of prostate cancer within your own patient population and apply preventive care and management as required (HSP 2).
- RH 10.5 Recognise that NSW rural and remote populations have a 40% higher rate of deaths from cancer of the colon and rectum than urban populations (HSP 1).
- RH 10.6 Appraise the risk of cancer of the colon and rectum within your own patient population and apply preventive care and management as required (HSP 2).
- RH 10.7 Display equanimity by maintaining appropriate professional distance while providing empathic care (HSP 2).
- RH 10.8 Respect the patient's informed decisions regarding treatment options and, the content of advanced care directives (HSP 2).

EPA Provide supportive mental
RH 11 health and psychosocial
care for rural communities

- RH 11.1 Recognise that many people in rural, remote and farming communities suffer unrecognised mental health conditions, especially depression and anxiety states (HSP 1).
- RH 11.2 Recognise risk factors in the use of medications which may cause depression or make it worse (HSP 2).
- RH 11.3 Support patients experiencing loneliness, social isolation and loss of independence (HSP 2).
- RH 11.4 Recognise and respond appropriately to the consequences of depression including suicide risk, and the impact on recovery from other illnesses (HSP 2).
- RH 11.5 Provide effective interviewing, counselling and mental health education strategies to rural, remote and farming communities (HSP 3).
- RH 11.6 Identify psychosis, acute mood disorder and recognise how to implement legal frameworks of restraint (HSP 3).
- RH 11.7 Manage mental health emergencies in rural, remote and farming communities as required (HSP 3).
- RH 11.8 Support patients experiencing functional changes and mental health issues with prolonged or repeated hospitalisation (HSP 2).
- RH 11.9 Respond appropriately to discharge against medical advice (HSP 2).

**EPA
RH 12** **Conduct alcohol and other drug assessments**

- RH 12.1 Complete drug screening to identify drugs used, quantities, route and time of administration (HSP 1).
- RH 12.2 Undertake investigations such as urine, blood screening and blood alcohol levels as appropriate (HSP 1).
- RH 12.3 Complete health status history including:
- physical examination
 - assessment of mental health co-morbidity
 - suicide risk assessment
 - identification of health conditions that may be related to drug use (eg, septic presentation)
 - identification of other health issues requiring treatment (HSP 2).
- RH 12.4 Gather information on patient's circumstances as appropriate:
- detailed drug use history
 - family
 - social
 - housing
 - financial
 - forensic (HSP 2).
- RH 12.5 Refer to other team members such as drug and alcohol worker to conduct patient assessment as appropriate (HSP 1).
- RH 12.6 Synthesise information and prioritise actions (HSP 2).
- RH 12.7 Regularly re-evaluate patient situation and progress and modify priorities to match needs (HSP 3).

**EPA
RH 13** **Implement an alcohol and other drug management plan for rural and remote patients**

- RH 13.1 Describe the short and long term management options available to patients with alcohol and other drug problems (HSP 2).
- RH 13.2 Develop and implement a management plan based on patient assessment (HSP 2).
- RH 13.3 Monitor, evaluate and adjust management plan (HSP 3).
- RH 13.4 Involve other members of the multidisciplinary team in patient management to enable best outcomes (HSP 3).

**EPA
RH 14** **Prescribe and monitor pharmacotherapies relevant to addiction**

- RH 14.1 Review the advantages and disadvantages of pharmacotherapies for individual patients (HSP 3).
- RH 14.2 Outline indications, contraindications and legal requirements of pharmacotherapies (HSP 3).
- RH 14.3 Ensure all mandatory prescriber requirements are met and current (HSP 1)
- RH 14.4 Prescribe pharmacotherapies to best manage patient's alcohol use, such as:
- naltrexone
 - acamprosate
 - disulfiram (HSP 3).
- RH 14.5 Prescribe pharmacotherapies to best manage patient's opiate use, such as:
- methadone
 - Buprenorphine & buprenorphine/naloxone (HSP 3).
- RH 14.6 Prescribe pharmacotherapies to best manage patient's tobacco use, such as:
- nicotine replacement therapies:
 - varencline
 - buprpoion (HSP 3).

EPA **Provide medical services**
RH 15 **to babies, children and**
adolescents in rural and
remote settings

- RH 15.1 Recognise that babies, children and adolescents from rural and remote areas are at a higher risk of accident and injury than their urban counterparts (HSP 1).
- RH 15.2 Practise an effective medical service for babies, children and adolescents in rural and remote locations liaising as required with Newborn and paediatric Emergency Transport Service (NETS) (HSP 2).
- RH 15.3 Manage special arrest situations – paediatric and neonatal (HSP 3).
- RH 15.4 Initiate treatment for a sick child (HSP 2).
- RH 15.5 Implement techniques for support of airway, breathing, circulation including selection of appropriately sized equipment, indications for support, resuscitation algorithms, use of appropriate resources to assist acute management and transfer (HSP 2).
- RH 15.6 Demonstrate a structured approach to management of airway problems in clinical practice (HSP 2).
- RH 15.7 Describe the clinical signs present in a “sick” child (eg, ABC fluids in and out, Yale Observation scale, vital signs and normal ranges for age, patterns of decompensation, high-risk clinical features and co morbidities) (HSP 1).
- RH 15.8 Implement the principles of safe drug prescribing for children including dosing by weight and body surface area (HSP 3).
- RH 15.9 Implement the principles of fluid and electrolyte management in children, including treatment for maintenance, deficit and replacement of ongoing losses of fluid (HSP 3).
- RH 15.10 Recognise the features indicating child at risk with inflicted injury or neglect (HSP 2).

EPA **Provide medical services**
RH 16 **in response to incidents**
involving transport accident
and injury

- RH 16.1 Recognise the importance of the initial medical response and anaesthetic aspects of early management of severe trauma in rural and remote areas (HSP 2).
- RH 16.2 Respond effectively to common rural and remote motor vehicle accidents (eg, tractor incidents, motorcycle, car and truck accidents) (HSP 2).

EPA **Provide initial management**
RH 17 **of burns**

- RH 17.1 Use the principles involved in the initial management of burns (including chemical burns) making reference to: methods and timing of cooling and provision of analgesia appropriate to age (HSP 1).
- RH 17.2 Use the appropriate charts to calculate the percentage of burn area and refer patients as per the NSW Burn Guidelines (HSP 2).
- RH 17.3 Recognise circumferential burns and when to refer for escharotomy (HSP 1).
- RH 17.4 Define the risk factors for airway burns, compartment syndromes and vascular or respiratory compromises from burn contraction (HSP 2).
- RH 17.5 Elicit the clinical findings suggestive of significant airway burn (HSP 1).
- RH 17.6 Describe the appropriate management of a suspected airway burn (HSP 1).
- RH 17.7 Describe the principles of burns dressings in adults and children and describe the various dressings available and their application (HSP 1).
- RH 17.8 Provide appropriate documentation to the referral hospital, calculate fluid requirements for maintenance, and dress burns appropriately for transfer (HSP 2).

EPA **Provide medical services**
RH 18 **in response to common**
respiratory conditions
and problems

Upper airway

- RH 18.1 Recognise stridor and wheeze and their differential diagnoses and management (HSP 1).
- RH 18.2 Use investigations and antibiotics to manage URTI (HSP 1).
- RH 18.3 Describe a rational approach to management of upper airway foreign body incidence (HSP 2).

Asthma

- RH 18.4 Describe how to recognise and initiate treatment and management of an acute attack of asthma (HSP 1).
- RH 18.5 Clinically define the severity of asthma and tailor appropriate acute and preventive therapy (HSP 1).
- RH 18.6 Ensure appropriate education, development of management (action) plans and follow-up to reduce the incidence, recurrence and representation of asthma attacks (HSP 1).

Pneumonia

- RH 18.7 Describe how to recognise and treat pneumonia with a rationale to determine the need for treatment in the home, admission to hospital or through outpatient management (HSP 1).

Chronic obstructive pulmonary disease (COPD)

- RH 18.8 Describe how to recognise and treat an acute exacerbation of chronic obstructive pulmonary disease (HSP 2).
- RH 18.9 Organise appropriate referral to outpatient programs providing self-management education with the aim of reducing the re-presentation of COPD (HSP 1).
- RH 18.10 Ensure appropriate community follow-up for smoking cessation assistance and influenza or pneumococcal vaccination (HSP 1).

Pneumothorax

- RH 18.11 Elicit the clinical signs and symptoms of pneumothorax (HSP 1).
- RH 18.12 Describe a rationale for the minimally invasive approach to management of pneumothorax and indications for aspiration, small and large bore intercostal catheter and pleural suction (HSP 2).

Anaphylaxis

- RH 18.13 Describe how to recognise and treat an anaphylactic reaction (HSP 1).
- RH 18.14 Ensure appropriate follow-up after anaphylactic reaction, including the patient's education regarding avoidance, prevention, desensitisation and use of self-injected adrenaline (HSP 2).

Pulmonary emboli

- RH 18.15 Demonstrate a high degree of suspicion for pulmonary embolus and a rational approach to exclusion, diagnosis and treatment (HSP 1).

EPA **Provide medical services in**
RH 19 **response to farm-specific**
rural health problems and
other rural workplace risks

- RH 19.1 Identify farm-specific risks such as working with pesticides and exposure to zoonotic diseases (HSP 2).
- RH 19.2 Assess and manage patients exposed to specific pesticides including arranging for decontamination and the provision of antidotes (HSP 2).
- RH 19.3 Use information from the Poisons Information Centre in providing patient assessment and management as required (HSP 2).
- RH 19.4 Provide diagnosis and management of patients with common zoonoses, including:
- anthrax
 - brucellosis
 - leptospirosis
 - Q fever
 - toxoplasmosis (HSP 2).

- RH 19.5 Identify parasite and manage patients with parasitic exposure to common worms, including:
- fluke
 - hook
 - pin
 - round
 - tape (HSP 2).
- RH 19.6 Educate patients on strategies to prevent parasitic worm infections (eg, hydatid tapeworms) (HSP 2).

Section 3: Skills and procedures

EPA RH 20 Use effective professional interaction skills and establish an effective interprofessional patient management team

- RH 20.1 Implement principles of effective communication (HSP 1).
- RH 20.2 Actively contribute to positive patient outcomes as an effective interprofessional team member during assessment and management phases (HSP 1).
- RH 20.3 Recognise situations where calling for additional or more senior help is required and marshal human resources with appropriate expertise is required (HSP 1).
- RH 20.4 Lead a interprofessional team for the management of a patient with a complex problem or set of problems (HSP 3).

EPA RH 21 Implement infection control and safe work health and safety measures

- RH 21.1 Comply with control measures and relevant legislation including hand washing before and after patient contact (HSP 1).
- RH 21.2 Comply with safe handling and disposal of sharps and clinical waste including protection of patients and colleagues (HSP 1).
- RH 21.3 Use the correct procedures for wearing of personal protective equipment (PPE) (eg, mask, gown and gloves) (HSP 1).
- RH 21.4 Describe the indications for public health notification of disease and use the systems in place (HSP 1).
- RH 21.5 Describe the principles of disease pandemic management and demonstrate the procedures for implementation in the local workplace (HSP 2).

EPA RH 22 Effectively use laboratory and other diagnostic tests and critically appraise evidence

- RH 22.1 Implement principles of rational test and investigation ordering as defined by evidence-based guidelines and clinical protocols (HSP 1).
- RH 22.2 Explain the meaning of test specificity and sensitivity and the effect of pre-test probability (HSP 1).
- RH 22.3 Explain the relevance of ethical risk management and cost-effective health economics to the limiting and tailoring of diagnostic tests, including listing the potential adverse outcomes arising from diagnostic tests (HSP 1).
- RH 22.4 Identify relevant medical studies that critically appraise literature, using the evidence in rural health practice (HSP 2).
- RH 22.5 Describe the benefits of policies, procedures, protocols and clinical guidelines and access and use as appropriate (HSP 1).

EPA **Use effective preventive**
RH 23 **medicine skills and**
 knowledge to support the
 health of rural, regional or
 remote patients

- RH 23.1 Implement and if required develop effective prevention and health promotion programs addressing the health and safety of farmers and farming families (HSP 3).
- RH 23.2 If suitably qualified conduct a preventive health check for rural patients between the ages of 45 and 49 (MBS item #717) who are at risk of developing a chronic disease (HSP 3).
- RH 23.3 Recommend to patients and implement primary, secondary and tertiary prevention interventions especially with regard to common illness problems and conditions experienced by people in rural, regional or remote areas (HSP 3).
- RH 23.4 Support improvements in health literacy in rural and remote communities (HSP 3).

EPA **Provide effective**
RH 24 **basic emergency and**
 surgical care

- RH 24.1 Perform as team leader for advanced life support (HSP 2).
- RH 24.2 Provide airway and respiratory support (HSP 2).
- RH 24.3 Prepare and administer high flow and controlled oxygen therapy (HSP 2).
- RH 24.4 Use a spacer device for metered dose inhalation (HSP 1).
- RH 24.5 Prepare and use an oxygen/air driven nebuliser and continuous nebulisation and describe the indications for use of either device (HSP 2).
- RH 24.6 Implement BiPAP/CPAP (HSP 1).
- RH 24.7 Implement needle pleurocentesis (HSP 1).

- RH 24.8 Implement tracheal intubation and establishment of mechanical ventilation in a patient requiring the use of hypnotic drugs and muscle relaxants (HSP 2).
- RH 24.9 Implement tracheal intubation in the setting of severe facial trauma (HSP 3).
- RH 24.10 Insert a nasogastric and orogastric tube (HSP 2).
- RH 24.11 Insert an intercostal catheter (HSP 2).
- RH 24.12 Describe how to set up, insert and manage a chest drain (HSP 2).
- RH 24.13 Prepare an intraosseous cannulation (HSP 1).
- RH 24.14 Prepare an intravenous infusion (HSP 1).
- RH 24.15 Prepare an IM injection (HSP 1).
- RH 24.16 Provide fluid resuscitation in 10% blood volume loss (HSP 1).
- RH 24.17 Effectively manage shock (HSP 2).
- RH 24.18 Initiate inotropic therapy (HSP 2).
- RH 24.19 Manage a massive haemorrhage (including blood products) (HSP 3).
- RH 24.20 Effectively use a venom detection kit (HSP 2).
- RH 24.21 Administer antidotes as required (HSP 2).
- RH 24.22 Perform suturing (HSP 1).
- RH 24.23 Perform wound cleaning and debridement (HSP 1).
- RH 24.24 Use plaster (eg, short arm backslab) (HSP 1).
- RH 24.25 Apply a Thomas splint (HSP 1).
- RH 24.26 Perform an escharotomy (HSP 2).
- RH 24.27 Reduce fractures and dislocations, shoulder, elbow, temporomandibular joint (TMJ), finger joint (HSP 2).
- RH 24.28 Stabilise pelvic fracture (HSP 2).

EPA **Provide effective anaesthetic management and preparation for patient retrieval**

- RH 25.1 Implement principles of peri-anaesthetic management and regional anaesthetic techniques (with reference to the Professional Documents from the Australasian and New Zealand College of Anaesthesia), including:
- provide topical anaesthesia
 - administer nitrous oxide
 - administer conscious sedation for minor procedures midazolam, ketamine, propofol
 - administer regional nerve blocks (eg, femoral, intercostal, digital) as required (HSP 2).
- RH 25.2 Respond to emergencies and provide adequate preparation for safe patient or stabilisation until assistance arrives (HSP 2).
- RH 25.3 Prepare patients for retrieval in rural and remote areas (HSP 2).

EPA **Provide effective emergency gynaecological, obstetric, birthing services and neonatal care**

- RH 26.1 Recognise the causes and management of PV bleeding including the exclusion and detection of miscarriage and ectopic pregnancy (HSP 2).
- RH 26.2 Recognise and provide appropriate referral and management for hypertensive disease of pregnancy and other problems in early pregnancy (miscarriage and ectopic pregnancy) (HSP 2).
- RH 26.3 Manage, with midwifery assistance if available, a normal vaginal delivery (HSP 2).
- RH 26.4 Recognise the signs of foetal distress and refer as appropriate (HSP 2).
- RH 26.5 Provide effective neonatal resuscitation based on assessment of ABC (HSP 3).
- RH 26.6 Manage obstetric emergencies including neonatal distress, eclampsia, haemorrhage, cord prolapse, cord around neck, shoulder dystocia (HSP 3).

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Appendix 1 Patient Safety Framework

Four levels of knowledge and performance elements have been defined in the Patient Safety Framework. The level of knowledge and performance required by an individual is determined by their level of patient safety responsibility:

- Level 1:** Foundation knowledge and performance elements are required by all categories of health care workers (as defined below).
- Level 2:** Knowledge and performance elements are required by health care workers in Categories 2 and 3.
- Level 3:** Knowledge and performance elements are required by health care workers in Category 3.
- Level 4:** Organisational knowledge and performance elements are required by health care workers in Category 4.

Some knowledge and performance elements in levels 2 and 3 may not be relevant for all non-clinical managers.

Four categories of health care workers have been defined in the Patient Safety Framework.

- Category 1:** Health care workers who provide support services (eg, personal care workers, volunteers, transport, catering, cleaning and reception staff).
- Category 2:** Health care workers who provide direct clinical care to patients and work under supervision (eg, ambulance officers, nurses, interns, resident medical officers and allied health workers).
- Category 3:** Health care workers with managerial, team leader and/or advanced clinical responsibilities (eg, nurse unit managers, catering managers, department heads, registrars, allied health managers and senior clinicians).
- Category 4:** Clinical and administrative leaders with organisational responsibilities (eg, chief executive officers, board members, directors of services and senior health department staff).

Health care workers can move through the Patient Safety Framework as they develop personally and professionally.



HSP

HOSPITAL SKILLS PROGRAM