# **Complete Summary**

#### **GUIDELINE TITLE**

Management of burns and scalds in primary care.

## **BIBLIOGRAPHIC SOURCE(S)**

New Zealand Guidelines Group (NZGG). Management of burns and scalds in primary care. Wellington (NZ): Accident Compensation Corporation (ACC); 2007 Jun. 116 p. [263 references]

## **GUIDELINE STATUS**

This is the current release of the guideline.

# **COMPLETE SUMMARY CONTENT**

SCOPE

METHODOLOGY - including Rating Scheme and Cost Analysis RECOMMENDATIONS
EVIDENCE SUPPORTING THE RECOMMENDATIONS
BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS
QUALIFYING STATEMENTS
IMPLEMENTATION OF THE GUIDELINE

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IDENTIFYING INFORMATION AND AVAILABILITY DISCLAIMER

#### SCOPE

# **DISEASE/CONDITION(S)**

Burn injuries and scalds

**Note**: The guideline specifically excludes consideration of large, full thickness burns that are more likely to be managed in secondary care.

## **GUIDELINE CATEGORY**

Evaluation Management Prevention Treatment

## **CLINICAL SPECIALTY**

Critical Care
Dermatology
Emergency Medicine
Family Practice
Internal Medicine
Nursing
Pediatrics

## **INTENDED USERS**

Advanced Practice Nurses
Allied Health Personnel
Emergency Medical Technicians/Paramedics
Health Care Providers
Health Plans
Hospitals
Managed Care Organizations
Nurses
Physician Assistants
Physicians
Psychologists/Non-physician Behavioral Health Clinicians
Public Health Departments

# **GUIDELINE OBJECTIVE(S)**

To provide a summary of current New Zealand and overseas evidence informing the assessment and management of burn injuries in the primary care setting in New Zealand

## **TARGET POPULATION**

Adults or children with burn injuries treated in primary or secondary care centers in New Zealand

## INTERVENTIONS AND PRACTICES CONSIDERED

# **Prevention**

- 1. Education, including appropriate first aid
- 2. Smoke alarms
- 3. Water temperature regulators

#### First Aid

- 1. Stopping the burning process and cooling
- 2. Gel pads
- 3. Initial coverings (polyvinyl chloride)

## **Initial Burn Assessment and Emergency Management**

- 1. ABCDEF survey (airway & cervical spine, breathing, circulation with hemorrhage control, disability & neurological status, exposure with environmental control, fluid resuscitation)
- 2. X-rays
- 3. Addressing analgesia requirements
- 4. Assessment and recording of total body surface area burn
- 5. Assessment of burn depth
- 6. Assessment for non-accidental injury and referral
- 7. Classification of burns
- 8. Tetanus prophylaxis

#### Referral

- 1. Emergency referral
- 2. Referral between services

## Management

- 1. Management of epidermal burns or scalds
  - Dressings and creams
- 2. Management of superficial and mid-dermal burns or scalds
  - Preventing infection (silver sulfadiazine cream and antibiotics)
  - Use of moist wound healing practices
  - Review of burns (timing)
  - Management of blisters
  - Referral for scar management
- 3. Management of chemical injury
  - First aid (irrigation)
  - Avoiding neutralization of chemical burns in primary care setting
  - · Referral of eye injuries to ophthalmology
  - Referral to burns units for hydrofluoric acid and phosphorus exposure
- 4. Management of electrical injury
  - Referral to burns unit
  - Electrocardiographic monitoring
- 5. Pain management
  - Paracetamol
  - Nonsteroidal anti-inflammatory drugs (NSAIDs)
  - Opioids
  - Referral to secondary care
  - Non-pharmacological approaches
- 6. Management of psychological consequences of burn injury
  - Monitoring for signs of stress disorders, depression, and sleep disorders
  - Recognizing and treating pre-existing disorders
  - Referral to mental health specialist
- 7. Special management considerations in Maori and Pacific peoples

## **MAJOR OUTCOMES CONSIDERED**

- Mortality
- Severity of tissue damage and scarring
- Frequency of skin grafting

- Length of hospitalization
- Reduction in edema volume
- Reduction in pain
- Frequency of infection
- Time to healing
- Extent and speed of capillary refill
- Cost

#### **METHODOLOGY**

## METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

## **DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE**

The literature searches for this guideline concentrated on finding high-grade evidence to answer the identified clinical questions, such as systematic reviews, randomised clinical trials (RCTs) and, where these were not available, observational studies such as well designed cohort and case control studies.

Individual sub-committee members searched for new studies in narrowly-focused topic areas and reviewed the evidence. In order to avoid the substantial costs and delays associated with translating foreign language publications, only English language articles were used. Only the most rigorous studies for each question were retrieved for the assessment and extraction of data. Details of the clinical questions, comprehensive search strategy and evidence tables are available on the NZGG (<a href="http://www.nzgq.org.nz">http://www.nzgq.org.nz</a>) website.

### **NUMBER OF SOURCE DOCUMENTS**

Not stated

# METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

## RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Good (+)
Fair (~)

Poor (x)

# METHODS USED TO ANALYZE THE EVIDENCE

Systematic Review with Evidence Tables

## **DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE**

Only systematic reviews, randomised clinical trials (RCTs) observational studies such as well designed cohort and case control studies were graded. Where these types of study were not available, less rigorous study designs such as cross-sectional studies and case studies were considered but were not formally graded.

Study details and levels of evidence are summarised in evidence tables, which are used to formulate recommendations. The evidence tables are available at <a href="http://www.nzgg.org.nz">http://www.nzgg.org.nz</a>. Studies with an 'x' level of evidence had questionable validity and were not considered relevant to the formulation of recommendations. Descriptive research, included for information, was not graded for quality.

Studies were graded using a two-tier system that is detailed in the *Handbook for the Preparation of Explicit Evidence-Based Clinical Practice Guidelines*, published in November 2001 by the New Zealand Guidelines Group (NZGG). This system was adapted from other grading systems currently in use, in particular the Scottish Intercollegiate Guideline Network system.

The two-tier system followed this process:

- Critical appraisal of individual relevant studies (identified from the searching)
  and assigning of a **level of evidence** for the first section of the GATEFRAME
  checklist that was incorporated into the evidence tables. A random sample of
  appraisals in the guideline was performed independently by two assessors
  and the results compared.
- Joint consensus by the Guideline Development Team on the issues of volume, consistency, clinical relevance and applicability of the body of evidence in the evidence table (filling out the NZGG Considered Judgement form for each clinical question) and the development of graded recommendations that attempted to answer the clinical questions posed.

#### METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

# DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

In 2005, the Accident Compensation Corporation (ACC) commissioned the New Zealand Guidelines Group (NZGG) to develop an adapted guideline based on reliable and valid evidence-based sources of summarised evidence available internationally. The Guideline Development Team agreed to use two other relevant guidelines as a template to further define the scope of the project. This approach has allowed the Guideline Development Team to conduct its own systematic reviews of key question areas and to consider the syntheses and synopses of the evidence performed and published by others. This process of adaptation was thought appropriate in a topic area where there are few large, well conducted randomised studies.

The Guideline Development Team was convened by NZGG and the Counties Manukau District Health Board (CMDHB). This involved formally approaching representative professional colleges and stakeholder organisations to invite them to nominate people to be members of the Team.

Two face-to-face meetings were held in Auckland during August 2005. The goals of the first meeting were to train members of the team in the processes of guideline development, to identify relevant clinical questions and to make decisions about the scope of the guideline.

The second meeting of the Guideline Development Team was held in November 2005. At this meeting the evidence in each area was presented in evidence tables to the Guideline Development Team and a Considered Judgement process was used to agree levels of evidence and draft recommendations. The Guideline Development Team also drafted an algorithm at this stage.

Recommendations were formulated by joint meetings of the multidisciplinary Guideline Development Team. The Team considered the entire body of evidence (summarised in the evidence tables) and filled out Considered Judgement forms for each clinical question that was identified as being relevant to the guideline (see <a href="http://www.nzgg.org.nz">http://www.nzgg.org.nz</a>). The following aspects were discussed: volume of evidence, applicability to the New Zealand setting, consistency and clinical impact, with the aim of achieving consensus. Consensus was sought and achieved over the wording of the recommendation and grading. In this guideline, where a recommendation is based on the clinical experience of members of the Guideline Development Team, this is referred to as a good practice point.

The statement and recommendations were drafted, reviewed and revised by subgroups then reviewed by the whole team. Resources and appendices were drafted in the same way. This process continued until the draft document was at a stage for peer review and consultation. Opinions were sought at this stage about the feasibility of implementing the recommendations in the guideline.

## RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

- **A** The recommendation is supported by good evidence (where there are a number of studies that are valid, consistent, applicable and clinically relevant).
- **B** The recommendation is supported by fair evidence (based on studies that are valid, but there are some concerns about the volume, consistency, applicability and clinical relevance of the evidence that may cause some uncertainty but are not likely to be overturned by other evidence).
- **C** The recommendation is supported by international expert opinion.
- **GPP** Where no evidence was available, best practice recommendations were made based on the experience of the Guideline Development Team, or feedback from consultation within New Zealand.

# **COST ANALYSIS**

- A study found that adequate first aid treatment resulted in fewer people with burns requiring split-skin graft procedures. There was also an association with fewer surgical debridement procedures. Scald injuries in particular required fewer procedures following adequate burns first aid treatment. The potential savings estimated in 2002 from scald injury care alone amounted to \$75,000 to 100,000 per annum.
- Evidence from the US experience with trauma systems indicates that a regional approach to providing specialist burn management expertise and a central approach to treating the very severely injured on a national basis can both improve a person's outcome and be cost-effective.
- One randomised clinical trial (RCT), reported in three publications, compared time to healing, pain and cost-effectiveness in moist exposed burn ointment and conventional dressings such as paraffin gauze and silver sulphadiazine. Outcomes were similar in both groups.
- Two other small unblinded RCTs of moist exposed burn ointment, both by the same author, reported that moist exposed burn ointment may be more costeffective for second-degree (dermal) burns than a range of standard therapies. However, 'standard therapies' in these studies included a wide variety of dissimilar comparators.

### **METHOD OF GUIDELINE VALIDATION**

External Peer Review Internal Peer Review

#### DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Copies of the draft were sent to key individuals and sector groups for comment and peer review. Māori and Pacific perspectives on burn injuries and their management were incorporated. These comments were approved by the Team and incorporated into the final document. The draft guideline was sent to sector groups for peer review in February 2006 and the final guideline was re-circulated in July 2006.

## RECOMMENDATIONS

## MAJOR RECOMMENDATIONS

Definitions for grades of recommendation (A-C and good practice points [GPP]) are provided at the end of the "Major Recommendations" field.

### **Prevention**

## **Opportunities for Prevention**

- **A** Primary care providers should provide advice on smoke alarms.
- **C** Primary care providers should support local initiatives in primary prevention, where possible.

**GPP** - Primary care providers should provide advice on the regulation of hot water temperature and appropriate first aid management.

## First Aid

# Stopping the Burning Process and Cooling

- **C** Ensure your own safety.
- C If on fire, 'stop, drop and roll', smother with blanket or douse with water.
- **C** For electrical burns, disconnect the person from the source of electricity.
- **C** Remove clothing and jewellery.
- **C** Cool burns or scalds by immediate immersion in running tap water (8 to 15 degrees C) for at least 20 minutes. Irrigation of chemical burns should continue for one hour.
- **C** Do not use ice for cooling.
- **C** Avoid hypothermia: keep the person with the burn as warm as possible, consider turning the temperature of the water up to 15 degrees C (tepid).
- **C** If there has been a delay in starting cooling, this should still be started up to three hours after injury.
- **C** Do not attempt to remove tar.

#### **Gel Pads**

**C** - Gel pads can be used as an alternative to running tap water where water is unavailable or not practical.

## **Initial Coverings**

Polyvinyl Chloride Film (Cling Film)

- **C** Following cooling, polyvinyl chloride (PVC) film may be used as a temporary cover prior to hospital assessment. It should be applied by persons knowledgeable in its use.
- **C** PVC film should be layered onto the wound and not applied circumferentially around a limb.
- **C** Topical creams should not be applied as they may interfere with subsequent assessment.
- **GPP** PVC film should not be used as a substitute for a dressing product.

## **Burn Assessment**

## **Emergency Management**

- **C** For major burns perform an ABCDEF primary survey\* and X-rays, as indicated.
- **C** Address analgesic requirements.
- **C** Establish and record the cause of the burn, the exact mechanism and timing of injury, other risk factors and what first aid has been given.
- **C** Assess burn size and depth.
- **C** Give tetanus prophylaxis if required.
- **C** Be alert to the possibility of non-accidental injury.

\*ABCDEF primary survey:

Airway maintenance with cervical spine control

**B**reathing

Circulation with haemorrhage control

**D**isability: Neurological status

Exposure with environmental control

Fluid resuscitation

#### **Burn Size**

Assessment and Recording of Total Body Surface Area Burn (TBSA)

**B** - Where time allows, use the Lund and Browder chart as the standard assessment tool for estimating the TBSA of the burn.

# **Burn Depth**

- **C** The depth of a burn injury should be reassessed two to three days after the initial assessment, preferably by the same clinician.
- **C** Testing for pinprick sensation by using a needle should be avoided.
- **GPP** The extent and speed of capillary refill can be used as a clinical method of assessing burn depth.

## **Non-Accidental Injury**

- **C** If non-accidental injury is suspected, refer to a regional burns unit.
- **C** If non-accidental injury is suspected, examine for other signs of abuse and photograph injuries.

## **Classification of Burns**

- **C** Avoid use of the terms first-degree/primary, second-degree/secondary and third-degree burns.
- **C** Distinguish between burns that will probably heal without skin grafting and those that will probably require grafting (deep dermal burns and full thickness burns).
- **C** Burns that are unlikely to heal within 21 days without grafting should be referred early to secondary care, ideally by day 10 to 14.
- **GPP** Use the Australian and New Zealand Burn Association (ANZBA) system of burn classification (see Table 3.3 of the original guideline document for the ANZBA classification of burns based on depth with photographs).

## <u>Referral</u>

# **Emergency Referral**

- **C** Health care practitioners should follow the ANZBA referral guidance when deciding the level of care that is appropriate for people with a new burn injury.
- **C** When seen in primary care, smaller burns that look like they will fail to heal by 14 days should be discussed with a secondary care service for consideration of an acute referral.

## **Referral Between Services**

- **C** Transfer between services is facilitated by prompt assessment, recognised communication channels and locally developed protocols agreed between centres on whom to transfer and when to transfer.
- $\boldsymbol{\mathsf{C}}$  Referrals to National Burn Centre level care should be via the regional burns units.
- **GPP** Primary care and accident services will generally develop their own systems for referral depending on the distances involved in travel to secondary services or regional burns units. In general, those people who have less severe injuries than in the ANZBA criteria, but who still require inpatient care, should be referred to local secondary services.

## **Management of Epidermal Burns or Scalds**

## **Dressings and Creams**

- **GPP** A protective dressing or cream product can be used for comfort in epidermal burns and scalds.
- **GPP** Review epidermal burns or scalds after 48 hours. If the skin is broken, change to a moist wound-healing product (or alternatively double-layer paraffin gauze).

# Management of Superficial and Mid Dermal Burns or Scalds

## **Preventing Infection**

- **GPP** Products with antimicrobial action (such as silver sulphadiazine cream) should be used on all burns for the first 72 hours (three days) after burn injury.
- **GPP** Burn wounds with signs of mild cellulitis can be treated with topical silver sulphadiazine and/or oral antibiotics.
- **GPP** Acute referral to secondary care is required for people with burns with signs of serious or systemic infection.

## **Wound Healing**

- **C** Use dressings that encourage re-epithelialisation by moist wound healing.
- **B** The prolonged use of silver sulphadiazine cream (more than seven days) should be avoided in non-infected burns.
- **GPP** Following initial silver sulphadiazine cream or antimicrobial dressing, a technique that promotes moist wound healing (such as a hydrocolloid dressing) is recommended.
- **GPP** The convenience of a reduced number of dressing changes with hydrocolloid products should be considered where this is important to the person.
- **GPP** Double-layer paraffin gauze can be used where hydrocolloids are unavailable.
- **GPP** Moisturisers and non-drying, non-perfumed soap should be used to protect the skin after burn injury and may also be helpful for pruritus.
- **GPP** Burn wounds require extra care when exposed to sun.

## When to Review

**GPP** - Superficial and mid dermal burns should be reviewed daily for the first three days, then subsequently every three days.

## **Management of Blisters**

- **GPP** Preferably leave small blisters intact unless likely to burst or interfere with joint movement.
- **GPP** If necessary, drain fluid by snipping a hole in the blister.

# Scarring

- **C** Any burns that are unlikely to heal within 21 days without grafting should be referred to a burns unit for scar management by day 10 to 14.
- **GPP** A person presenting with scarring some months after a burn should still be referred for specialist opinion.

## **Management of Chemical Injury**

## **General Treatment Advice**

First Aid

- **C** Irrigation of chemical burns should continue for one hour.
- C All chemical burns should be referred to a burns unit.
- GPP Acid burns should not be neutralised with an alkali in primary care.

## **Eye Injury**

- **C** All significant chemical injuries to the eye should be referred acutely to ophthalmology services.
- **C** Treat all chemical burns to the eye with copious irrigation of water.

## **Specific Substances**

Hydrofluoric Acid

**GPP** - Anyone exposed to hydrofluoric acid should be promptly referred to a burns unit for definitive treatment after appropriate first aid.

Phosphorus

**GPP** - Anyone exposed to phosphorus should be promptly referred to a burns unit for definitive treatment after appropriate first aid.

## **Management of Electrical Injury**

**C** - All electrical injuries should be referred to a burns unit.

## **Electrocardiogram (ECG) Monitoring**

- **C** Following electrical injuries people should receive a resting 12-lead ECG.
- **B** If this initial ECG is normal in people with low-voltage injuries, there is no need for a repeat ECG or for continuous monitoring.

## **Pain Management**

## **Burn Pain Management**

- **C** Immediately after the injury, cooling and covering the burn may provide analgesia.
- **C** Paracetamol and nonsteroidal anti-inflammatory drugs (NSAIDs) can be used to manage background pain.
- **C** Consider administering opioids for intermittent and procedural pain.
- **GPP** Refer to secondary care if failing to manage dressing-change pain.
- **GPP** Consider the use of non-pharmacological approaches as a supplement to pharmacological management of pain.

## **Psychological Consequences of Burn Injury**

## **Adverse Psychological Responses to Trauma**

- **C** Monitor people with burn injuries for signs of stress disorders or depression.
- **B** Recognise and treat pre-existing disorders and comorbidities (including alcohol and drug dependence) associated with post-traumatic stress disorder (PTSD).
- **C** Refer people with acute or chronic PTSD for specialist mental health management.
- **GPP** Be aware of services that may be able to support families affected by the psychological impacts of burn injuries.
- **GPP** Be aware of the increased risk of sleep disorders after burn injuries.

## **Burn Injuries in Maori**

- **GPP** Be aware that Māori tamariki (children) are at increased risk of burn-related injuries and deaths.
- **GPP** Consider ways to deliver care that will overcome access barriers, if necessary, such as nurse home visiting for dressing changes.

## **Burn Injuries in Pacific Peoples**

- **GPP** Be aware that Pacific children may be at increased risk from hot water scalds.
- **GPP** Consider ways to deliver care that will overcome access barriers, if necessary (such as nurse home visiting for dressing changes).
- **GPP** Be aware that language can be a barrier. Encourage a bilingual family member or practice nurse to assist with communication. Ideally, Pacific Island

population-specific translators should be made available to services that provide for Pacific peoples.

## **Definitions:**

## **Grades of Recommendation**

- A The recommendation is supported by good evidence (where there are a number of studies that are valid, consistent, applicable and clinically relevant).
- **B** The recommendation is supported by fair evidence (based on studies that are valid, but there are some concerns about the volume, consistency, applicability and clinical relevance of the evidence that may cause some uncertainty but are not likely to be overturned by other evidence).
- **C** The recommendation is supported by international expert opinion.
- **GPP** Where no evidence was available, best practice recommendations were made based on the experience of the Guideline Development Team, or feedback from consultation within New Zealand.

# **CLINICAL ALGORITHM(S)**

The original guideline document contains clinical algorithms for:

- Initial assessment and management of burns and scalds
- Ongoing assessment and management of burns and scalds in primary care

## **EVIDENCE SUPPORTING THE RECOMMENDATIONS**

## TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is identified and graded for each recommendation (see "Major Recommendations").

# BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

## **POTENTIAL BENEFITS**

Appropriate assessment and management of burns in the primary care setting and appropriate referral practice from primary care to secondary care and regional burns unit services

## **POTENTIAL HARMS**

## First Aid

Be aware of the risk of hypothermia, especially in children and older people.

## **Wound Healing**

Prolonged use of silver sulphadiazine cream (more than seven days) may delay healing.

# **Pain Management**

- Aspirin products should be avoided because of platelet inhibition and the risk of bleeding.
- Pethidine should be avoided because of side effects associated with the metabolite norpethidine, including dysphoria, agitation and seizures.

# **QUALIFYING STATEMENTS**

# **QUALIFYING STATEMENTS**

- Evidence-based best practice guidelines are produced to help health
  practitioners and consumers make decisions about health care in specific
  clinical circumstances. Research has shown that, if properly developed,
  communicated and implemented, guidelines can improve care. The advice in
  this guideline is based on clinical and epidemiological studies and other
  research evidence. Where no evidence is available, but guidance is needed,
  recommendations for best practices are developed through a systematic
  consensus process based on the experience of the Guideline Development
  Team.
- While guidelines represent a statement of best practice based on the latest available evidence (at the time of publishing), they are not intended to replace the health practitioner's judgement in each case.
- Where guidelines are modified for local circumstances, significant departures from the national guidelines should be fully documented and the reasons for the differences explicitly detailed.

## **IMPLEMENTATION OF THE GUIDELINE**

## **DESCRIPTION OF IMPLEMENTATION STRATEGY**

## **Overview**

The aim of this guideline is to ensure that for individuals with burn injuries there:

- Is appropriate initial assessment and care in the primary care setting
- Are more appropriate referrals to secondary care and regional burns units
- Is more information sharing between providers (common language and tools)
- Is more uniformity in burn assessments and outcome measurements
- Is improved targeting and use of effective interventions

## **Distribution Strategies**

## **Publication of the Full Guideline**

See the "Guideline Availability" field.

It is recommended that efforts are made to create weblinks to the full guideline and summary from medical colleges, professional bodies and other interest groups.

## **Quick Reference Clinical Format**

See the "Availability of Companion Documents" field.

A summary booklet is being produced with the key messages and algorithms to guide the management of people with burns and scalds in primary care. The availability of a quick reference summary will make the use of the guideline recommendations easier for clinicians.

#### Dissemination

The full guideline/summary should be distributed to the following groups:

- General practitioners
- Primary health care nurses
- Iwi/Māori health providers
- Pacific health providers
- The Australian-New Zealand Burn Association (ANZBA)
- Burn support groups
- Safety and prevention groups
- Armed services, fire services, and ambulance services
- District health boards
- Primary health organizations
- Independent practitioner associations
- Academic lecturers/curriculum planners involved in medical training
- Medical colleges/professional bodies
- Pharmacists

#### Promotion

## **Guideline Launch**

The Guideline Development Team suggests that the guideline be launched at an appropriate event or conference to signal the start of the implementation phase. Such an event might be a conference held by the Royal New Zealand College of General Practitioners or other primary health care organisation, or a conference focusing on wound care. Further opportunities for presentations at other relevant local meetings and conferences will be pursued to help primary care practitioners become familiar with the guideline.

#### Media

The guideline needs to be promoted in the media, including the local medical press. Publicity needs to encompass journals and health professional publications such as: *New Zealand Medical Journal*, *New Zealand Nursing Journal* and *NZ Doctor*. Mainstream media can also be targeted through the use of media releases

to newspapers and television programmes. This could include Māori and Pacific magazines, radio and television.

# **Promoting Safety Messages**

It is recommended that the development of consumer information be funded to inform people about safety measures to prevent burns and scalds.

Additional strategies should be considered to promote burns safety measures through primary care, as young children, the population most at risk, are usually seen routinely.

Consumer information should be offered in Maori and Pacific languages in written and oral forms, eg, CDs and DVDs.

## **Education**

### **Professional Education**

Professional education activities could include:

- Organising information and education seminars/workshops (based on the guideline) for practitioners, primary health organisations, independent practitioner associations and district health boards.
- Specific educational initiatives and ongoing updates for particular groups (eg, general practitioners, practice nurses).
- Local continuing medical education activities that include this guideline as part of their programme.
- Developing local strategies to reduce barriers to follow-up care for people with burns, particularly Maori and Pacific peoples.

## **Community Education**

Community education activities could include:

- School-based education to teach safe practices to children, which is tailored to meet the needs of children from different communities.
- Education to teach safe practices to children under five years old.
- Encouraging existing home-visit providers to families with young children (particularly with infants 12 to 18 months of age) to remind them about burn risk and burns first aid.
- Offering training to providers of home-visit services (eg, Plunket, Tamariki Ora), pre-school units and health clinics where pre-schoolers are seen.
- Designing a consumer resource for Maori in consultation with Iwi providers.
- Monitoring the educational information that is given out.

## **Evaluation**

An appropriate response to this guideline will be a decrease in the number of late referrals to burn services. Successful implementation of the guideline may result in an increase in overall referrals to secondary care. Another outcome of interest

would be the incidence of skin grafting and scarring following burn injuries. Currently, there is no benchmark for this information to measure any change in these areas.

The actual impact of this guideline in practice can be evaluated by the collection of the following information:

 The effect on referrals for hospital-level care or regional burns unit care.

Making a comparison of baseline referral information before the distribution of the guideline, and referral numbers and patterns after guideline implementation

Referral indications for hospital-level care or regional burns unit care.

Making a comparison before and after referral indications.

### **IMPLEMENTATION TOOLS**

Clinical Algorithm

Quick Reference Guides/Physician Guides

For information about <u>availability</u>, see the "Availability of Companion Documents" and "Patient Resources" fields below.

# INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

#### **IOM CARE NEED**

Getting Better Staying Healthy

#### **IOM DOMAIN**

Effectiveness Safety Timeliness

## **IDENTIFYING INFORMATION AND AVAILABILITY**

# **BIBLIOGRAPHIC SOURCE(S)**

New Zealand Guidelines Group (NZGG). Management of burns and scalds in primary care. Wellington (NZ): Accident Compensation Corporation (ACC); 2007 Jun. 116 p. [263 references]

## **ADAPTATION**

Not applicable: The guideline was not adapted from another source.

## **DATE RELEASED**

2007 June

# **GUIDELINE DEVELOPER(S)**

New Zealand Guidelines Group - Private Nonprofit Organization

# **SOURCE(S) OF FUNDING**

Accident Compensation Corporation (ACC)

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Guideline Development Team

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# FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

There have been no competing interests declared for this guideline.

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### **GUIDELINE STATUS**

This is the current release of the guideline.

#### **GUIDELINE AVAILABILITY**

Electronic copies: Available in Portable Document Format (PDF) from the <u>New Zealand Guidelines Group Web site</u>.

Print copies: Available from the New Zealand Guidelines Group Inc., PO Box 10-665, The Terrace, Wellington, New Zealand; Tel: 64 4 471 4188; Fax: 64 4 471 4185; e-mail: info@nzqq.org.nz.

## **AVAILABILITY OF COMPANION DOCUMENTS**

The following is available:

Management of burns and scalds in primary care: guideline summary.
 Wellington (NZ): New Zealand Guidelines Group (NZGG); 2007 Jun. 12 p.

Available in Portable Document Format (PDF) from the <u>New Zealand Guidelines</u> <u>Group Web site</u>.

## **PATIENT RESOURCES**

None available

## **NGC STATUS**

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