Methodology for the 2014 International Guideline Update
of the NPUAP-EPUAP Pressure Ulcer Prevention and Treatment Guideline

Participants

Guideline Development Group

The revision of the guideline is being conducted by European Pressure Ulcer Advisory Panel (EPUAP), National Pressure Ulcer Advisory Panel (NPUAP) and the Pan Pacific Pressure Injury Alliance (PPPIA). The Pan Pacific Alliance consists of the Australian Wound Management Association, the New Zealand Wound Care Society, the Hong Kong Enterostomal Therapist Society and the Singapore Ministry of Health. Each of the three partner organizations nominated four representatives each to form the Guideline Development Group (GDG). The three groups each have four votes during joint deliberations, with the majority deciding. Examination of the evidence and consensus building will precede all votes. Minority opinions will be represented in meeting minutes. Each of the three groups will appoint a “lead individual.” The GDG determines and monitors the guideline development process.

A nonvoting observer from the Japanese Society of Pressure Ulcers (JSPU) will attend GDG meetings during the 2014 revision process with the option to join the GDG for the next revision.

GDG members and others involved in the actual development of the guideline are screened for potential conflicts of interest. In the interest of transparency, GDG members will be asked to complete a form identifying potential conflicts of interest on a yearly basis. Declarations of potential conflict will be published with the guideline.

Representatives of industry are excluded from developmental groups but are invited to participate as stakeholders.

Also see appendix 1 for a description of the GDG.

Small Working Groups

The guideline content is broken down into topics, and Small Working Groups (SWGs) will be formed to review the evidence available for each topic.

Guideline development is an iterative process, with GDG and SWG members maintaining close communication. Evidence summaries and draft recommendations developed by the SWGs will be reviewed by the GDG for (1) comprehensiveness and accuracy of literature reviews, (2) methodological rigor in evidence analysis and application to clinical practice, and (3) clarity and appropriateness of recommendations for an international audience.

Also see appendix 2 for a description of the SWG.
Stakeholders

The entire process of developing the guideline can be followed by stakeholders on a website, (http://internationalguideline.com). A stakeholder is someone who has interest in pressure ulcers and wishes to contribute to the guideline by reading the methodology, search strategies, references under consideration, and draft recommendations, ensuring that all relevant evidence had been included and commenting on the draft guideline within the timeframe allowed.

Anyone can become a stakeholder, either as an individual or as a representative for a society/organization. All members of the EPUAP, NPUAP and PPPIA will be encouraged to sign up as stakeholders and participate in this process. Individuals with a history of pressure ulcers will be recruited to review the guideline from a consumer perspective. When new recommendations are posted on the website, registered stakeholders will be notified by electronic mail. The GDG will review all stakeholder comments and any additional evidence recommended by stakeholders before approving final recommendations.

In 2009 a total of 903 individuals and 146 societies/organizations registered as stakeholders. Sixty-three countries on six continents were represented in this group. We will ask these stakeholders if they want to remain stakeholders for the 2014 update.

For the update, patient organisations will be contacted and asked to become a stakeholder. The organisations that participate as a stakeholder will be listed in the guideline.

Methods

The steps of the guideline development process are delineated below. For simplicity and clarity, the process is described as linear and sequential; however, the actual process will be iterative, with multiple drafts developed and progressively improved based on ongoing communication among GDG members, SWG members, and stakeholders.

Step 1: Identifying the Evidence

Databases

To identify the scientific literature on pressure ulcer prevention and treatment, several electronic databases will be consulted, including:

- PubMed
- CINAHL
- MEDLINE
- EMBASE
- Scopus
- Biomedical Reference Collection
- Health Business Elite
- The Cochrane Database of Systematic Reviews
- The Cochrane Central Register of Controlled Trials, Health Technology Assessment and AMED databases.
Inclusive dates will be January 2008 through 1st July 2013.

**Search strategies**

A sensitive search strategy was developed for the development of the guideline (see appendix 3).

New search terms may have to be added based on the scope of the update.

Full lists of articles identified by these search strategies will be available for guideline developer review. SWGs will also conduct additional focused searches to ensure the full depth and breadth of their topic area has been covered.

**Inclusion criteria**

All references retrieved by the electronic literature search will be screened by the SWG members based on the following inclusion criteria:

1. **General Inclusion Criteria**
   - The articles must be primarily focused on pressure ulcer prevention, risk assessment, and treatment in human subjects.
   - The articles must have been published in a peer reviewed journal.
   - An abstract must be available.
   - The studies should have used one of the following designs: randomized controlled trials, controlled clinical trials, quasi-experimental studies, cohort studies, cross-sectional studies, survey studies, prevalence or incidence studies, case-control studies, and case series.
   - At least ten subjects must have been included in any case series.
   - Systematic reviews or meta-analyses will be included if they used the Cochrane methodology or met at least 9 out of 11 quality criteria of AMSTAR.
   - SWG reviewers will be asked to review, analyze and use the original articles cited in systematic reviews and meta-analyses as the basis for guideline recommendations. Individual studies will be summarized in evidence tables. Systematic reviews will be mentioned as additional supporting evidence. In order to rate the level of evidence (see step 2) the quality of the systematic review will be assessed by the GDG, using the AMSTAR form. Meta-analyses should not be equated with systematic reviews.
   - Studies using established qualitative methodologies will also be considered as appropriate to the research question.
   - There is no restriction on the basis of the language of a study.
   - Economic evaluations will be evaluated for insights regarding resources required for guideline implementation and evidence of patient outcomes in cost effective studies. Economic evaluations will be reviewed in light of limitations such as differences in health care reimbursement policies across health systems and countries.

2. **Inclusion Criteria for Quality Improvement and Education Papers**

Additional inclusion criteria are:

- Articles with a time series design with at least 3 measurements
• Project should be institution-wide (not individual units). QI projects in individual units can be covered in special population sections as appropriate (e.g. pediatrics, critical care)
• Outcomes should be incidence or facility acquired rates.
• Quality improvement projects should be described in detail (i.e. specific methods used, barriers and facilitators).

3. Inclusion Criteria for Risk Factor Papers

Additional inclusion criteria are:

• Prospective study of risk in humans.
• Pressure ulcer incidence as the outcome.
• Multivariate analysis/logistic regression.
• Includes medical record reviews if risk factor preceded development of pressure ulcer
• Study not included in the PURAF study

4. Inclusion Criteria for Risk Assessment Papers

Additional inclusion criteria are:

• Prospective study of risk assessment tool(s).
• Incidence of pressure ulcers in at-risk humans is outcome.
• Includes medical record reviews when risk factors chronologically preceded pressure ulcer outcomes.
• The purpose of the analysis in this section is to evaluate how the various tools perform as a “structured approach” to risk assessment.

Studies not initially identified by bibliographic searches yet meeting these criteria will be included when listed in reference lists of identified articles and recommended by stakeholders.

**Direct versus indirect evidence**

Studies of pressure ulcers in humans and individuals at-risk for pressure ulcer development will be considered "direct evidence" and will be required to support an A or B strength-of-evidence rating. When studies of pressure ulcers in humans are not available, studies in normal human subjects, human subjects with other types of chronic wounds, or laboratory studies using animals can be used to support recommendations with a C strength-of-evidence rating.

**Step 2: Evaluating the Evidence**

**Data extraction**

The full papers of selected references will be obtained and divided according to topic and will be made available to the relevant SWGs on a Google Docs platform. The SWGs consist of trustees and members of the EPUAP, NPUAP and PPA. The members of the SWGs will create evidence tables and score a methodology checklist for each study.
The template of the evidence table consists of reference of the study, type of study, sample, intervention(s), outcome measures and length of follow-up, results, and limitations. See appendix 4.

**Appraisal of methodological quality**

The methodological quality of each study will be assessed by two reviewers using methodology checklists that were developed by the 2009 GDG, based on the Scottish Intercollegiate Guidelines Network (1). These checklists help the reviewers to judge the quality of the study. Evaluation of study quality will concentrate on the internal and external validity of the studies. The following quality criteria will be considered: internal validity of the study, clear and appropriate research question(s), selection of subjects, allocation, baseline comparability, outcomes, blinding, confounding factors, statistical analysis, overall assessment of the study, and bias.

There are different types of methodology checklists based on the study design (See appendix 5):

- cross-sectional/survey/prevalence studies,
- case-control studies,
- cohort studies,
- randomized controlled trials,
- quasi-experimental study,
- diagnostic studies,
- systematic reviews/reviews/meta-analyses
- SQUIRE guideline checklist will also be used for quality improvement papers
- AMSTAR criteria will be applied to all non-Cochrane systematic reviews.

All papers will be evaluated by two members of the SWGs. The methodologist will perform a quality check on 75% of the entries in completed evidence tables. In addition, the GDG will complete a quality check of a random sample of 10% of the completed evidence tables.

**Level of evidence**

The level of evidence for individual intervention studies will be noted for each study containing direct evidence, using a classification system adapted from Sackett(2). Sackett and his colleagues have developed more sophisticated and complex classification systems(3); however, the elegant simplicity of their early work provided greater consistency when used with a large international group of reviewers.

Levels of evidence (LOEs) are typically applied to intervention studies like randomized clinical trials (RCTs), controlled clinical trials (CCTs) or even case series studies because these types of studies are regarded as most important knowledge sources for clinical decision making. However, there are many more study designs like epidemiological or descriptive studies that provide valuable evidence to guide practice, yet cannot be classified with an intervention-based LOE system.
Table 1: Level of Evidence for Intervention Studies

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Randomized trial(s) with clear-cut results and low risk of error OR systematic literature review or meta-analysis according to the Cochrane methodology or meeting at least 9 out of 11 quality criteria according to AMSTAR (Measurement Tool to Assess Systematic Reviews)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 2</td>
<td>Randomized trial(s) with uncertain results and moderate to high risk of error</td>
</tr>
<tr>
<td>Level 3</td>
<td>Non randomized trial(s) with concurrent or contemporaneous controls</td>
</tr>
<tr>
<td>Level 4</td>
<td>Non randomized trial(s) with historical controls</td>
</tr>
<tr>
<td>Level 5</td>
<td>Case series with no controls. Specify number of subjects.</td>
</tr>
</tbody>
</table>

Studies on diagnostic and prognostic validity of pressure ulcer risk and pressure ulcer classification form an important body of knowledge in pressure ulcer management that need to be appraised separately from intervention studies. Diagnostic accuracy studies are studies where results of index tests are compared with results from reference standards at the same point in time (4). Therefore, cross-sectional designs are needed to establish the concurrent existence of both index test and reference standard results. Most studies in pressure ulcer risk research are not diagnostic accuracy studies according to this widely agreed upon definition, because the measured pressure ulcer risk is often compared with subsequent pressure ulcer occurrence. These designs resemble those of prognostic studies or diagnostic accuracy studies with imperfect reference standards (5).

Comparable to different phases of intervention research phases of diagnostic and prognostic research can also be distinguished. In diagnostic research, Phase I and II studies focus on differentiation between persons with the target from those without. Phase III studies are typical diagnostic accuracy studies whereas phase IV research investigates the clinical impact of diagnostic procedures (6). Prognostic studies are comparable with diagnostic accuracy studies with the difference that based on factors or diagnostic cues future events are predicted. These types of studies are typically used to develop prognostic models. Prognostic models, like PU risk scores, are used to predict the probability of future events in individual patients or groups (7).

Corresponding LOE hierarchies for diagnostic and prognostic accuracy and many other studies have been proposed (8,9) and are adopted by the EPUAP, NPUAP and PPPIA in the guideline update.
Table 2: Levels of evidence for diagnostic studies in the EPUAP-NPUAP-PPPIA guideline update (8,9)

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1</td>
<td>Systematic review of high quality (cross sectional) studies according to the quality assessment tools with consistently applied reference standard and blinding</td>
</tr>
<tr>
<td>Level 2</td>
<td>Individual high quality (cross sectional) studies according to the quality assessment tools with consistently applied reference standard and blinding among consecutive persons</td>
</tr>
<tr>
<td>Level 3</td>
<td>Non-consecutive studies, or studies without consistently applied reference standards</td>
</tr>
<tr>
<td>Level 4</td>
<td>Case-control studies, or poor or non-independent reference standard</td>
</tr>
<tr>
<td>Level 5</td>
<td>Mechanism-based reasoning, study of diagnostic yield (no reference standard)</td>
</tr>
</tbody>
</table>

Table 3: Levels of evidence for prognostic studies in the EPUAP-NPUAP-PPPIA guideline update (8,9)

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1</td>
<td>Systematic review of high quality (longitudinal) prospective cohort studies according to the quality assessment tools</td>
</tr>
<tr>
<td>Level 2</td>
<td>A prospective cohort study</td>
</tr>
<tr>
<td>Level 3</td>
<td>Analysis of prognostic factors amongst persons in a single arm of a randomized controlled trial</td>
</tr>
<tr>
<td>Level 4</td>
<td>Case-series or case-control studies, or poor quality prognostic cohort study, retrospective cohort study</td>
</tr>
<tr>
<td>Level 5</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

Test accuracy and validity estimates are only surrogate measures for clinical effectiveness (10). The clinical effectiveness of diagnostic test procedures can only be adequately investigated by diagnostic RCTs (8,11). In case of diagnostic or prognostic RCTs the described LOE hierarchy of intervention studies is used.

**Step 3: Drafting/Revising Recommendations**

Based on the identified, appraised and summarized empirical evidence recommendations are formed.

Each SWG will formulate conclusions about the body of available evidence based on the evidence tables and quality evaluations. Evidence tables from previous guidelines will also be made available to the treatment SWGs to ensure the full body of scientific literature was reviewed. A first draft of recommendations is developed by the respective SWGs. The GDG will review the draft recommendations, making revisions as necessary.
To ensure uniformity and internal consistency in the final guideline, the GDG provides the following guidance:

- Each recommendation should start with an action verb and be a simple, short, direct, declarative statement, free of jargon.
- Multiple complex recommendations should be broken down into a series of smaller, discrete recommendations.
- Authors are advised to start with broad, directive statements, followed by subsequent statements with more detail (how, when, how often).
- Recommendations should be specific and unambiguous.
- When available, information on health benefits, side effects and risks should be provided.
- Spelling will be based on the conventions of American English.

The GDG will review all recommendations to ensure the wording of the recommendations accurately translated available research into best practice while being sensitive to the many different individual cultures and professional standards represented among the international audience for these guidelines.

The term "individual" will be used to describe the patient, client, resident, or person with a pressure ulcer or at risk for a pressure ulcer. The term "professional" will be used when referring to the health care professional providing professional health care services to the individual. The disciplines of professionals performing a given service may vary from country to country based on the laws and regulations governing health care providers. Products available in one country may not be available in another. Use generic names when referring to drugs and other products.

**Step 4: Assigning Strength of Evidence Ratings**

Strength of evidence ratings are then assigned to recommendations. This rating identifies the strength of cumulative evidence supporting a recommendation.

**Table 4: Strength of Evidence Rating for Each Recommendation**

<table>
<thead>
<tr>
<th>Strength of Evidence</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>The recommendation is supported by direct scientific evidence from properly designed and implemented controlled trials on pressure ulcers in humans (or humans at-risk for pressure ulcers), providing statistical results that consistently support the guideline statement (Level 1 studies required)</td>
</tr>
<tr>
<td>B</td>
<td>The recommendation is supported by direct scientific evidence from properly designed and implemented clinical series on pressure ulcers in humans (or humans at-risk for pressure ulcers), providing statistical results that consistently support the recommendation. (Level 2, 3, 4, 5 studies)</td>
</tr>
<tr>
<td>C</td>
<td>The recommendation is supported by indirect evidence (e.g., studies in normal human subjects, humans with other types of chronic wounds, animal models) and/or expert opinion</td>
</tr>
</tbody>
</table>
Strength of evidence ratings of A requires Level 1 studies of humans with pressure ulcers or at risk for pressure ulcers. This rating is consistent with recommendations derived using the Cochrane methodology. Strength of evidence ratings of B requires Level 2, 3, 4, and/or 5 studies in these populations. Recommendations supported by A and B strength of evidence ratings are developed first. This strategy provides recommendations with very direct evidentiary support, but the guideline may lack the breadth and depth of guidance necessary to provide care. Previous guidelines have filled this "evidence gap" with "expert opinion" and given a strength of evidence rating of C.

The strength of evidence supporting the recommendation is not the same as the strength of the recommendation. For example, there are no randomized controlled trials in humans with pressure ulcers that evaluate debridement vs. no debridement. Therefore, this recommendation would have a relatively low strength of evidence supporting the recommendation, yet the recommendation is strongly recommended in many clinical situations based on evidence from studies of other types of chronic wounds, proof of principle from basic science research, and/or expert opinion. See step 6 for assigning strength of recommendations.

In this guideline, evidence gaps will be explicitly identified. Systematic literature reviews are then conducted to identify indirect evidence from studies of normal subjects, studies with intermediate or surrogate outcomes, studies of humans with other types of chronic wounds, and animal studies. For many recommendations, indirect evidence may be identified to support C strength of evidence ratings. In the absence of indirect evidence, consensus from previous guidelines may support C strength of evidence ratings, providing a broader base of expert opinion than that available in the SWGs and GDG. SWG members are encouraged to evaluate previous guidelines for quality using the AGREE II Tool (12). All recommendations, including those supported solely by expert opinion are reviewed by stakeholders.

**Step 5: Summarizing Supporting Evidence**

The SWGs summarize the evidence supporting each recommendation. There should be an explicit link between the recommendation and supporting evidence. The strengths and limitations of this body of evidence should be clearly described. All recommendations with a strength of evidence rating of A or B require an explicit summary of one or more studies of human subjects with pressure ulcers or at risk for pressure ulcer development. The level of evidence for each study is also identified.

The summary statements for recommendations with a strength of evidence of C clarify whether the recommendation was supported by (1) indirect evidence from studies of normal subjects, studies with intermediate or surrogate outcomes, studies of humans with other types of chronic wounds, and animal studies or other basic bench research, (2) expert opinion supported by previous evidence-based guidelines, and/or (3) the expert opinion of the SWG and GDG members as reviewed by international stakeholders. Evidence gaps identified in these summary statements serve as an agenda for future research efforts.
Step 6: Assigning Strength of Recommendation Grades

As previously discussed, strength of evidence ratings identify the strength of cumulative evidence supporting the recommendation. In contrast, strength of recommendation grades require a different type of analysis. The recommendations are rated based on their importance and based on their potential to improve patient outcomes. Strength of recommendations is the extent to which one can be confident that adherence to a recommendation will do more good than harm. The grading of importance is not necessarily related to the strength of internal or external evidence. The overall aim is to help practitioners to prioritize interventions. According to Atkins et al and Guyatt et al (13,14) the following points are considered to make recommendations:

- The balance between benefits and harms. The larger the difference between both, the higher the likelihood for giving a strong recommendation
- The overall quality of evidence across all studies upon the recommendation is based. The higher the quality, the higher the likelihood that a strong recommendation is warranted.
- Translation of the evidence into practice in specific settings or uncertainty of baseline risk in the populations of interest
- The higher the costs of an intervention, the greater the resources consumed, the lower the likelihood that a strong recommendation is warranted unless cost effectiveness can be demonstrated.

Besides overall methodological study quality and the balance between risks, harms and resources in diagnostic accuracy and prognostic studies the following additional question need to be considered for recommendation development:

- **How strong is the confidence, that estimated probabilities improve clinical decision making, treatment decisions and subsequent patient outcomes? (7,10,11)**

According to established guideline methodologies (15,16) and guideline quality criteria (17) the LOEs for individual studies and the strength of evidence ratings for each recommendation are assigned by the SWGs. Additionally the SWG members are also asked to suggest strength of recommendation grades for each recommendation. The final approval of these strength of recommendation grades is achieved via a formal consensus process using the GRADE grid (See table 5). In this final consensus process all members from all SWG and the GDG take part.
Table 5: The GRADE grid (18) is used for establishing consensus for every recommendation:

<table>
<thead>
<tr>
<th>Balance between desirable and undesirable consequences of intervention</th>
<th>Desirable clearly outweigh undesirable</th>
<th>Desirable probably outweigh undesirable</th>
<th>Trade-offs equally balanced or uncertain</th>
<th>Undesirable probably outweigh desirable</th>
<th>Undesirable clearly outweigh desirable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommendation</td>
<td>Strong: “definitely do it”</td>
<td>Weak: “probably do it”</td>
<td>No specific recommendation</td>
<td>Weak: “probably don’t do it”</td>
<td>Strong: “definitely don’t do it”</td>
</tr>
<tr>
<td>“Use a structured approach to risk assessment that includes assessment of activity and mobility”</td>
<td>…</td>
<td>…</td>
<td>…</td>
<td>…</td>
<td>…</td>
</tr>
<tr>
<td>“Limit head-of-bed elevation to 30° for individuals on bedrest”</td>
<td>…</td>
<td>…</td>
<td>…</td>
<td>…</td>
<td>…</td>
</tr>
</tbody>
</table>

In the final consensus process the GRADE grid is filled in by every voting member of the GDG and SWGs. Decisions about the final strength of recommendations are made according to the following rules:

- When at least 50% or more favor one particular category, then the decision is made for this grade of recommendation.
- When the 70% majority favors a “weak” or “strong” recommendation for using an intervention, but there is disagreement between “weak” and “strong”, than the “weak recommendation” is chosen.
- When the 70% majority favors a “weak” or “strong” recommendation against using an intervention, but there is disagreement between “weak” and “strong”, than the “weak recommendation” is chosen.
- In all other cases “no recommendation” is chosen.

The documents are sent, received and processed electronically. This will result in five strengths of recommendation in the guideline (see table 6).
### Table 6: Five types of recommendations (13,14,18) are used in this guideline:

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Description</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Do it</strong> (Strong recommendation for using an intervention)</td>
<td>Indicating a judgment that most well informed people would make.</td>
<td>For <strong>patients</strong>—Most people in this situation would want the recommended course of action and only a small proportion would not For <strong>clinicians</strong>—Most people should receive the intervention For <strong>quality monitors</strong>—Adherence to this recommendation could be used as a quality criterion or performance indicator. If clinicians choose not to follow such a recommendation, they should document their rationale</td>
</tr>
<tr>
<td><strong>Don’t do it</strong> (Strong recommendation against using an intervention)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Probably do it</strong> (Weak recommendation for using an intervention)</td>
<td>Indicating a judgment that a majority of well informed people would make but a substantial minority would not.</td>
<td>For <strong>patients</strong>—Most people in this situation would want the suggested course of action, but many would not For <strong>clinicians</strong>—Examine the evidence or a summary of the evidence yourself and be prepared to discuss that evidence with patients, as well as their values and preferences For <strong>quality monitors</strong>—Clinicians’ discussion or consideration of the pros and cons of the intervention, and their documentation of the discussion, could be used as a quality criterion.</td>
</tr>
<tr>
<td><strong>Probably don’t do it</strong> (Weak recommendation against using an intervention)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>No specific recommendation</strong></td>
<td>Trade-offs between risk and benefit unclear or lack of agreement in the GDG + SWG.</td>
<td>The advantages and disadvantages are equivalent The target population has not been identified Insufficient evidence on which to formulate a recommendation</td>
</tr>
</tbody>
</table>

### Final GDG Review and Recommendations

The GDG will be integrally involved in each of these steps. Following review and approval of individual recommendations, the GDG will review all guideline documents for internal consistency, logical coherence and adherence to the guideline methodology. Based on this final review, the GDG will provide a global assessment of the strengths and limitations of the body of evidence supporting the guideline and recommendation for future research. The GDG will continue to monitor guideline implementation after the guideline is published, encouraging translation of the guideline into non-English languages for maximum dissemination. The 2009 guideline was translated into 17 different languages.

To facilitate application of the guideline, the GDG will identify common facilitators and barriers to guideline implementation based on existing quality and safety literature. Potential resource implications of guideline implementation will be evaluated by analyzing existing literature on cost and resource allocation for pressure ulcer prevention and treatment. Professionals are encouraged to use the ADAPTE Tool (19) in adapting this guideline for specific populations and settings.

Additionally, the GDG will develop a website for the exchange of tools for application and criteria for ongoing quality monitoring and audits. The website will initially contain sample application tools and quality indicators as well as links to recommended websites providing similar information. Stakeholders will be invited to
contribute their tools and auditing criteria to the website to create and international pressure ulcer tool exchange.

The GDG will continue to monitor the pressure ulcer literature after the 2014 guideline has been published. Another revision is planned for 2019 (or sooner if the ongoing literature reviews reveal major advances in pressure ulcer prevention and treatment prior to 2019).

References


(8) Merlin T, Weston A, Tooher R. Extending an evidence hierarchy to include topics other than treatment: revising the Australian 'levels of evidence'. BMC medical research methodology. 2009;9:34.


