

# APPENDIX 1

## STEPS TO ADAPTING WSO GLOBAL STROKE CARE GUIDELINE FOR LOCAL USE

### Adapting the WSO Global Stroke Care Guideline for Local use

**The WSO Global Stroke Care Guideline** defines ideal care of stroke patients across the continuum. This guideline highlights topics that have the highest levels of evidence for effectiveness or are considered key system drivers. We recognize that users of the WSO Stroke Care Guideline and Action Plan may only be able to implement some recommendations, and/or may be working on just some parts of the stroke care continuum (as defined in the framework above) at a time.

Clinical practice guidelines are produced as enablers for getting evidence into clinical practice. Stroke audits from around the world have repeatedly shown that a wide gap continues to exist between what the evidence shows as best practices in stroke care and the care that is actually delivered in practice. Some goals of the WSO Global Stroke Care guidelines are to facilitate the implementation of evidence into practice, support clinical decision making, specify beneficial therapeutic approaches, and influence public policy (Kastner et al 2011).

Local uptake and implementation of stroke care recommendations should follow a validated and rigorous process. The WSO Global Stroke Guidelines and Quality Committee has developed a framework to assist groups in implementing the WSO Global Stroke Guidelines, based on existing models such as the ADAPTE model (ADAPTE Collaboration, 2009) and the AGREE Guidelines assessment tool (AGREE Trust, 2010).

The following flow diagram describes the steps that should be undertaken when any local, regional or national group adopts the WSO Stroke Care Guideline for local use. It is then followed by more detailed descriptions for each step. Practical considerations are provided where possible for each step. This section also provides links to useful resources should more detailed information be required.

In areas where resources are limited, some steps may be modified or skipped altogether. It is important to weigh the benefits and risks of doing this. For example, in establishing the working group, a decision may be made to keep it small; however, it should still ideally include representation from multiple disciplines.

# A ROAD MAP FOR QUALITY STROKE CARE

## Steps to adapting the WSO global stroke care guideline and action plan for local use.

<b>Set up working group</b>	<ul style="list-style-type: none"> <li>• Ensure key stakeholders represented</li> <li>• Seek experts from other jurisdictions</li> </ul>
<b>Define scope and topics</b>	<ul style="list-style-type: none"> <li>• Identify the applicable stages of the stroke care continuum</li> <li>• Choose the main topics to be addressed in your local guideline</li> </ul>
<b>Find best evidence</b>	<ul style="list-style-type: none"> <li>• Review and select appropriate guidelines from countries contributing to WSO Stroke Care Guideline as basis for local development</li> <li>• Use evidence reviews available from existing global guidelines</li> <li>• Conduct evidence search to identify additional up-to-date evidence</li> </ul>
<b>Appraise and Collate evidence</b>	<ul style="list-style-type: none"> <li>• Follow systematic process for appraising quality and strength of new evidence</li> </ul>
<b>Select recommendations and modify as required for local context</b>	<ul style="list-style-type: none"> <li>• Be as clear and concise as possible.</li> <li>• Include critical content to cover scope (Appendix One)</li> <li>• Link evidence to the recommendations</li> </ul>
<b>Consultation and External Review</b>	<ul style="list-style-type: none"> <li>• Include discussions with end-users, system leaders and funders</li> <li>• External review by experts not involved in original development and adaptation work</li> </ul>
<b>Dissemination and Implementation</b>	<ul style="list-style-type: none"> <li>• Provide tools to support implementation</li> <li>• Provide education and skills training to all involved in care delivery</li> </ul>
<b>Evaluation Strategy</b>	<ul style="list-style-type: none"> <li>• Identify key quality indicators to measure implementation and impact on patient outcomes</li> <li>• Mechanism to collect data through a registry or regular audit process</li> </ul>

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## Detailed Steps in Uptake and Implementation of the WSO Global Stroke Guideline and Action Plan

### 1.0 Set up the Working Group

Guidelines should be developed by a group of people with a broad range of expertise relevant to the guideline topic being developed. Lists of people to be considered are found in the various guideline developer handbooks (refer to links at the end of this document). The way the group works together can have a significant effect on the outcome of the process.

For stroke care, healthcare professionals from the following disciplines should be considered for participation in guideline development: medicine (neurology, internal medicine, emergency, primary care, Physiatry), nursing, rehabilitation (physiotherapy, occupational therapy, speech-language pathologists, rehab assistants), social work, psychology, and pharmacy. Other disciplines and system leaders may be relevant as well, depending on the phase(s) of the continuum being included in the guideline. It is important to include stroke survivors and carers in the group as well.



#### **Practical notes:**

- Keep a list of people involved in the process
- Contact any professional organization and ask for recommendations for a representative from that profession with expertise in stroke
- Make sure you think about all the stakeholders involved in stroke care e.g. Primary care doctor, hospital administrator etc.
- Development groups should be kept to a manageable size (6 – 10 people) where possible.
- Expertise in stroke guideline development is available in other jurisdictions. You may consider contacting the World Stroke Guidelines Committee Chair for referrals to stroke guideline experts in your country or region if additional expertise is required by your group.

### 2.0 Define scope and topics

The group will normally have a good idea what topics they want included in the guideline. It is important for the group to agree on exactly which questions/topics to be addressed as this decision will direct the searching and appraisal steps.

Stroke care encompasses the full continuum of care from primary prevention to long term recovery and reintegration into the community. The scope of any guideline could cover a few distinct segments of the continuum or they can be more comprehensive and incorporate much more of the continuum.



#### **Practical notes:**

- Review existing stroke guidelines and identify ones that most closely fit with the topics you have identified and start with those and work to adapt them.
- The more topics are included the more work it takes to develop a guideline.
- Make sure the group understands the resources and timeframes and agrees only on the KEY topics to include.
- Look to existing guidelines to see what topics are commonly included to be able to draw on the evidence summaries (Refer to Appendix 2 for a list of the critical topics to address at each segment of the continuum).
- Decide on the breadth and depth of content to be included for each topic (level of granularity and amount of detail for each recommendation)
- Links are provided in Appendix One for existing stroke guidelines.

### 3.0 Find the best evidence

Like most research, the quality and trustworthiness of a guideline is based on the methods used to reduce any bias. Finding and appraising the best and most current evidence is possibly the most important part of guideline development and requires a systematic approach.

When searching for evidence, it is strongly recommended that this process be done with the help of an expert in the area of literature searching. To complete this step the working group should carefully develop questions they want answered and articulate the topics they plan to address in the guideline. Questions generally focus on the effects of a specific intervention and are developed in three parts: the intervention, the population and the outcomes. An example is “What is the effect of anticonvulsant therapy on reducing seizures in people with post-stroke seizures?” In this example, anticonvulsant therapy is the intervention, reduction of post-stroke seizures is the outcome, and the population is people with post-stroke seizures.

The more specific the questions and phrases the easier it will be for the information specialist to identify relevant studies. Searching for studies should include:

- a) Electronic databases (e.g. Cochrane, MEDLINE, CINAHL and EMBASE) – see links in Canadian Medical Association Handbook p14.
- b) Contact with international experts in the field and specific topic areas of interest
- c) Manual search in key journals and reference lists in articles and other stroke-related guidelines.

Search efforts could produce an extremely large number of research papers, especially for topics such as hypertension. Additional criteria should be identified to assist in narrowing down the articles that would undergo detailed appraisal.

#### Using Existing Searches as a Starting Point:

An alternate and simpler way of finding the best evidence, especially when resources are scarce, is to use the searches done by an existing guideline. Evidence summaries are normally produced by guideline development groups. Your guideline development group may choose to contact another guideline development group and ask for their search or evidence tables if not publically available. Alternatively, it may be decided to use such summaries but update the list by searching for subsequent studies since the last search date included in the previous effort. This approach considerably reduces time, effort and resource use without compromising quality.

When deciding to update and use searches done for previous guidelines, it is important that the searches you are drawing from have been carried out in a robust way. The AGREE tool is a measure that allows you to identify the quality of the process used to develop an existing guideline.<sup>1</sup> If you have multiple existing guidelines to draw upon, you can use the AGREE tool to choose which guidelines have followed the most systematic development process on which to base your own guideline (See Appendix 3 for a list of existing stroke guidelines). This process may also help you to identify other guidelines that more closely resemble your population or resource availability, making them more appropriate for adaptation or adoption.



#### Practical notes:

- If undertaking searches, employ an information specialist experienced in this area.
- Use existing good quality guidelines where possible to identify the key evidence for a particular topic. Contact previous developers for additional information and sharing of resources when possible.
- If a recent guideline exists a decision can be made to search for studies published subsequently or just use existing information and save time searching for other information.
- Regardless of approach, some effort should be made to ensure that emerging research which may significantly affect the content and direction of a recommendation is identified. This will reduce the risk of guidelines becoming outdated before they ever get finalized and implemented.
- Always aim to find and use the highest level of evidence (systematic reviews). Where these exist there is normally no need to search for further evidence.
- Have a preset list of inclusion criteria to keep the results of the search on target and manageable.

1. Brouwers M, Kho ME, Browman GP, Burgers JS, Cluzeau F, Feder G, Fervers B, Graham ID, Grimshaw J, Hanna S, Littlejohns P, Makarski J, Zitzelsberger L for the AGREE Next Steps Consortium. AGREE II: Advancing guideline development, reporting and evaluation in healthcare. *Can Med Assoc J.* 2010. Dec 2010; 182:E839-842; doi:10.1503/090449

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## 4.0 Appraise and collate evidence

Once the key literature has been identified, the working group must review the evidence from the primary literature search and summarize the findings for each topic. As with identifying the evidence, it is strongly recommended that a systematic approach be followed to appraise the evidence. The working group should agree at the start which approach to use to guide grading the evidence and forming recommendations. Members of the group should be familiar with and have some training in the grading system chosen. Most of the stroke guideline developers use a similar process as that outlined by the Scottish Intercollegiate Guidelines Network (SIGN) –see link to SIGN guideline handbook in the resource section.

Several databases also have evidence summaries available on selected topics. Some examples include:  
[www.effectivestrokecare.org](http://www.effectivestrokecare.org)  
[www.strokingengine.org](http://www.strokingengine.org)  
[www.ebrsr.com](http://www.ebrsr.com)



### **Practical notes:**

- Evidence summaries from existing guideline/s can be used to allow for easy collation of the evidence for specific topics.
- Use existing evidence appraisal and summary resources where possible.
- Levels of evidence may be assigned differently by different guideline development groups. Choose your preferred method and be consistent in the approach to evidence grading for all research your group reviews or chooses to include.

## 5.0 Select recommendations and modify as required for local context

Once the evidence has been found and summarised the working group must carefully draft the recommendations for each topic. It is important that recommendations are as clear as possible and that it is easy to see the link between the recommendation and the evidence. Grading the strength of the recommendations is also useful and various systems are used around the world (see various handbooks for more details).

Research suggests that a formal process of forming conclusions/recommendations is better than an informal consensus processes (i.e. it minimises potential bias for strong opinions from one or two members of the group). Two common formal consensus approaches are the nominal group technique and the Delphi approach. More information on these approaches can be found in the guideline development resources.

- Where existing guidelines have been used to identify and summarise the evidence, the ADAPTE approach suggests<sup>2</sup> you can:
  - accept an entire guideline and recommendations;
  - accept the evidence summaries only and write your own recommendations;
  - accept specific recommendations but not others;
  - modify specific recommendations.

It is important to make sure you reference the sources and process used. When adapting an existing guideline it is important and helpful to contact the original guideline development group in order to obtain permission to use the guideline, to discuss any modifications to the actual recommendations (to make sure it still accurately reflects the evidence as applied to the local setting), and to gain helpful suggestions and lessons learned from professionals who have experience with the guideline development process.

2. ADAPTE: manual for guideline adaptation. ADAPTE Group; 2007. <http://www.adapte.org>

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## **Practical notes:**

- Each recommendation statement should be clear, concise and only address one topic, action or intervention.
- Avoid ambiguity.
- Include recommendations on what not to do (e.g., Procedure xx is NOT recommended)
- It is good to include a brief summary of the evidence for each topic as well as the recommendation/s.
- Specifically link the recommendations to the evidence (where possible note the type or level of evidence and the recommendations strength).
- Where possible and appropriate, align wording of recommendations with those included in stroke-related recommendations produced by other disease groups in your jurisdiction (such as diabetes group, hypertension group, and local guidelines related to primary prevention)
- Including suggested performance indicators can also encourage sites to monitor their adherence to the guidelines.
- Clearly reporting what was done increases transparency and trust in the guideline.
- Present each recommendation with supporting documentation including: rationale, system implications, performance measures and summary of the evidence.

## 6.0 Consultation and External Review

It is important to seek feedback from all those expected to use the guidelines (clinicians, administrators, professional bodies etc) prior to final public release of a guideline. This process can improve the wording of recommendations, allow wide buy-in and improve uptake once finalized. It also provides face and content validity and provides an opportunity to identify potential areas of controversy prior to release so that the guideline development group can be prepared to respond to these potential issues. It is important that all feedback is reviewed systematically and a summary of final changes recorded in the process report. Once all consultation and updates are completed the final document can be submitted to relevant health authorities and professional bodies for endorsement. Endorsement has been shown to improve acceptance and uptake of.



## **Practical notes:**

- Consult as widely as possible. This alerts people to the fact that the guideline is being developed and will soon be available. It also ensures that key professional groups do not get inadvertently excluded from the process.
- Transparency in the external review process also increases the credibility of the guideline development process.
- Seek consultation from individuals who were not directly involved in the development process, even if other members of their peer group or professional body were formally engaged in the process.
- It is useful to contact the relevant authorities and professional bodies as early as possible in the whole process. The authorities may have requirements that must be considered during the development process.
- Publicly acknowledging such endorsements and including them within the guideline documentation may increase acceptance and uptake of guidelines.

## 7.0 Dissemination and Implementation

Once complete, the guideline must be made as widely available as possible. A dissemination strategy should be developed and launched as soon as the guideline is available for public release. A master list of all relevant stakeholders should be created as well as a mechanism for dissemination of the guideline to these stakeholders

Often organizations will produce a dissemination package that may include a summary document along with summary slides to supplement the full document but provide an overview of the guideline. Electronic copies of any resource should be circulated to all relevant organizations and health professional networks. You may choose to publish a summary of the guidelines in a relevant journal.

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Development of a quality guideline does not automatically equate to greater use and most strategies to implement guidelines produce only modest effects at best. An implementation plan should be developed simultaneously to developing the content of the guideline, and executed as soon as possible. Guidelines should be implemented along with other strategies to encourage their uptake, such as professional education, audit and feedback, and where possible, accreditation. The challenge is to use a systems approach that links guidelines to quality data collection, effective multi-pronged implementation, and a mechanism for evaluation. There are many opportunities to learn from other countries that routinely develop and use guidelines.

Strategies to promote uptake of guidelines are discussed in many existing guideline handbooks (e.g. see p45 of the SIGN guideline) and in the reference section of this handbook.



### **Practical notes:**

- Use the links and networks of your working group to disseminate and promote the guidelines.
- Considering implementation early in the process as this will help you focus on how you write the recommendations and improve their uptake.

## 8.0 Evaluation

Evaluation of stroke care delivery is an essential component to include in planning and implementation. Collecting key data on stroke care and patient outcomes in a systematic way enables ongoing improvements in care delivery, and as well provides data for developing business case and advocacy materials to expand and further develop stroke services and resources. The goal of the information contained in this manual is to increase consistency and standardization of measuring stroke care performance, and allow for cross-group comparisons and the development of validated benchmarks for appropriate peer groups.



### **Practical notes:**

Work in tandem with data analysts and evaluation specialists to develop appropriate audit and feedback processes. These can be very basic or more complex.

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