

Compression garment selection, fitting and monitoring education resource

Component 1: Self guided learning package workbook

Version 4.0 June 2014

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An electronic version of this document is available at

<http://www.health.qld.gov.au/ahwac/docs/self-guided-wbook.pdf>

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1. Introduction to self guided learning package workbook

1.1 Background

This workbook accompanies the self guided learning package for therapists engaged in the Compression Garment Selection, Fitting and Monitoring Redesign Trial. The workbook contains the activities outlined in each of the 4 modules of the learning package.

1.2 Purpose

This workbook acknowledges that many therapists have a wealth of existing knowledge in this area. The learning activities in this workbook are designed to assist the therapist to reflect on their existing knowledge and integrate any new information that might be presented.

The completed workbook will also be used as a starting point for the period of supported practice (Component 2 of the package).

1.3 How to use this book

This book is designed to be used in conjunction with the self guided learning package. As you work through the package you will be asked to complete certain activities. These are to be completed in this work book.

1.4 Mind mapping as a learning tool

Throughout this learning package you will be encouraged to use mind maps for your written activities. Mind maps can be hand drawn or drawn using computer software (see link to free software at end of this section).

Meaningful learning is about assisting individuals to relate new knowledge to relevant existing knowledge they already have. Mind maps are an attempt to ascertain what the learner knows and bring this to the forefront. New knowledge is then provided and the organisation of new knowledge into the learners existing knowledge is facilitated. The mind map provides a visual road map of how ones knowledge is organised.

Mind mapping (or concept mapping) involves writing down a central idea and thinking up new and related ideas which radiate out from the centre. Mapping information in this way helps to identify key ideas and connections between these ideas. Mind maps are tools to assist in understanding and remembering information

The following process is recommended if you wish to use mind-mapping to assist your learning:

1. At the start of each module take an initial brief look at the presentation, readings and/or resources.

Do not review the material in depth, and then put it away.

Now start your mapping task.

For each topic

- Brainstorm anything you know about the topic. Write these down without worrying about order or category.
 - Once you have exhausted the information decide which items can be grouped together in some logical manner. You may like to place them in categories and number them category 1, category 2 etc.
 - Next label these groups with a heading which describes the category and transfer them to a new page with groupings according to their relationship to each other. If a clear hierarchy exists then place groupings from top to bottom.
 - Finish by drawing arrows between the groups to depict the relationship between the groupings – they may be uni-directional or bi-directional arrows.
2. Once you have completed this task it is time to listen to the audio with the PowerPoint and read the readings.
 3. After you have finished the module construct a second mind map which illustrates the integration of the new information into your existing knowledge on that topic.

Mind maps have been around in many forms from the 1970s. Early exponents were *Tony Buzan* and *Edward de Bono*. Tony Buzan's work identified the usefulness of this tool to solve problems and demonstrate the multiplicity of information, knowledge and skills that any one person, or a group or team may generate. Edward de Bono has developed the use of coloured "hats" as a way to help an individual identify what information they have or may know about a topic but which initially is hidden or constrained.

WHITE HAT

These are the facts of the matter. It is what is known or needs to be known. Are there still gaps in this area?

BLACK HAT

This hat links to difficulties, the risk of problems or accidents or adverse events or even a barrier.

RED HAT

The self in so much as it looks at how one feels, likes, dislikes or fears about a topic.

BLUE HAT

Consider the priorities, depth or resources required to manage this condition.

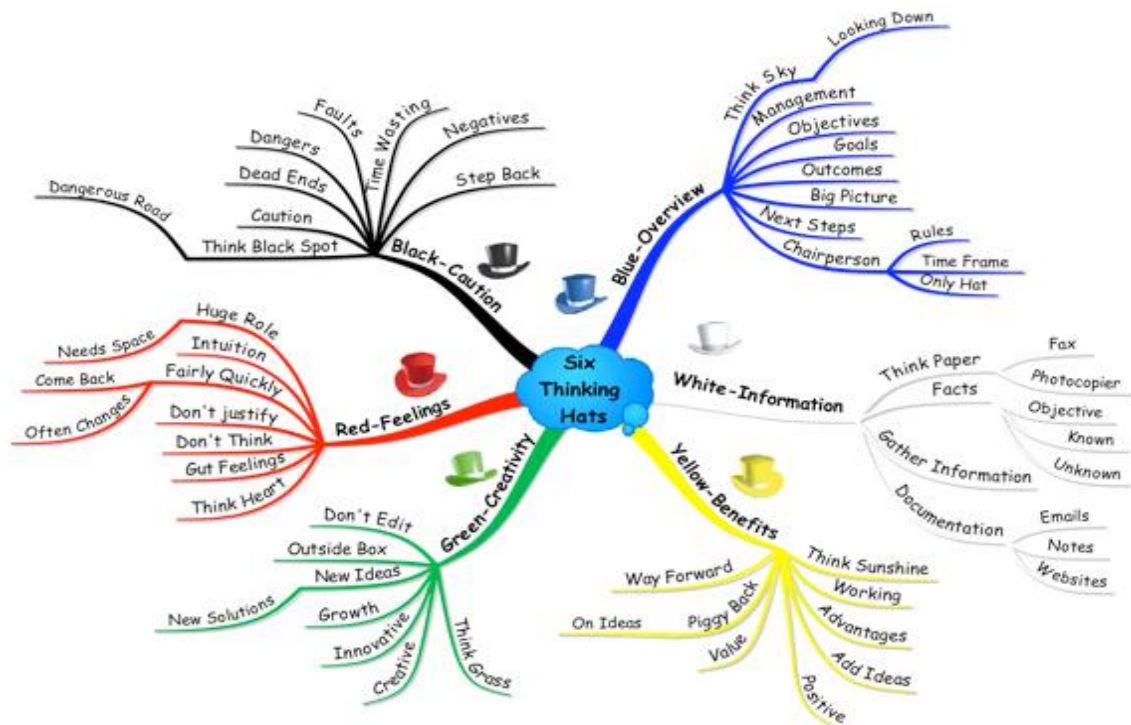
YELLOW HAT

Consider the new ideas and how they can be incorporated into your practice.

GREEN HAT

Consider the new information creatively, this is important for new directions or for seeing potential in areas of work which may in the normal way, not be considered.

Figure 1 Example of mind map showing Edward de Bono's 6 hats. The use of colour is strongly encouraged in drawing mind maps.



There are many more examples of mind maps on the internet (search for mind map images).

There is free software available at <http://mindmapfree.com/> to assist you in developing your mind map.

For more information see the following links:

[Mind Mapping Resource Link](#)

mindwerx.com

[How To Mind Map](#)

Module 1: Overview of lymphatic system & lymphoedema

1.2 Intended learning outcomes

At the end of this module, you will be able to:

Describe the basic anatomy and physiology of the lymphatic system

- Identify risk factors for malignancy related lymphoedema and the grade of lymphoedema
- Identify the functional and psychosocial impact of malignancy related lymphoedema

Activity 1: Draw a mind map to illustrate what you know about the lymphatic system & lymphoedema.

Activity 2: Following your review of the module learning resources, write down a summary of key information that you have identified about the lymphatic system. You can use your mind map to do this.

Activity 3: Consider the following scenario and write responses to the questions.

You are a generalist therapist working in a small rural town. The local CWA are going to have a 'Biggest Morning Tea' event and have invited you to come and speak. They have asked that you specifically talk about what lymphoedema is, what causes it and how people can tell if they are developing lymphoedema.

Plan the main points of your talk either using a mind map or by writing a summary of the main points you will include in your talk.

Activity 4: From your reading, what are some of the main issues that people with lymphoedema have to deal with on a day to day basis?

In your own practice, what have patients/consumers told you about living with lymphoedema?

Activity 5: Draw a mind map for each of the following questions:

What is the lymphatic system and how does it work?

What are the types, risk factors and stages of lymphoedema?

How does having lymphoedema impact on everyday life?

2. Module 2: Assessment of lymphoedema

2.1 Intended learning outcomes

At the end of this module, you will be able to:

- Describe the components of a comprehensive assessment of a client with lymphoedema
- Outline the roles of the generalist and lymphoedema therapists within the assessment process
- Identify signs of the clinical presentation of lymphoedema
- Classify the clinical presentation of lymphoedema into stages/grades
- Measure and monitor stable malignancy related lymphoedema

Activity 1: Draw a mind map to illustrate what you know about diagnosis, assessment and monitoring of lymphoedema.

Activity 2: Consider the following scenario:

You have been referred a patient/consumer who has been in a large metropolitan health service for cancer treatment. She has returned to her home town in a rural area and has stabilised lymphoedema of her (L) arm.

- Outline the main topics/ areas that you will cover in your initial appointment with her. You can use a mind map for this activity.

- Now look at the lymphoedema assessment form found in appendix 1. What are the similarities and differences between this form and your assessment plan? Are there areas not included on the form that you will include in your assessment? Are there any areas that you have missed that are included in the form?

Activity 3: With a colleague, perform circumferential measurements as described in the ALA measuring standards document. Use the circumferential measurement form in Appendix 2 to record your measurements. Repeat the set of measurements three times to determine your accuracy.

Activity 4: Plan the referral pathway that you will use if you need to refer onto a lymphoedema therapist. Consider the following aspects:

- Who are the lymphoedema therapists in your local area?
- Where is your closest tertiary lymphoedema centre?
- How you will make the referral (what format will you use)?
- What information will be required for the referral?
- Are there any specific forms or requirements at a local level?

Can you develop a flow chart that reflects this below?

3. Module 3: Management of lymphoedema

3.1 Intended learning outcomes

At the end of this module, you will be able to:

- Describe the full scope of malignancy related lymphoedema management
- Outline the scope of practice for generalist therapists in the management of malignancy related lymphoedema
- Identify contraindications and precautions to compression therapy
- Develop appropriate self-management plans with clients with malignancy related lymphoedema, including the use of compression garments, risk reduction strategies, skin care and exercise advice.

Activity 1: Draw a mind map to illustrate what you know about the management of lymphoedema.

Activity 2: In the table below, list the absolute contraindications and precautions for compression and the possible implications of applying compression in the presence of these conditions.

Contraindications and Precautions	Potential consequence of compression

Activity 3: Consider the following scenario and write your responses below.

You have a long standing client who has stable lymphoedema and wears a compression garment as part of her long term management. She reports she is intending to travel to see family in Canada, and will also be traveling throughout Alaska on a holiday. She has asked you to provide a written list of ways she can best manage her lymphoedema while traveling.

Compile instructions for her for her holiday to reduce the risk of exacerbating her lymphoedema while she is traveling and away from home.

- How would your advice differ if it was her upper limb rather than her lower limb?

Activity 4: Write answers to the following questions below. You can use mind maps if you prefer.

- A client with stable lymphoedema wants to start exercising. They ask you for advice about the benefits of exercising if there are any types of exercise that are better than others for lymphoedema. What advice do you give?

- They ask should they wear their compression garment when exercising? What advice do you give?

Activity 5: Write answers to the following questions below.

- What skin care advice would you provide for a person with lymphoedema?

- How would you explain cellulitis to a patient/ consumer?

- What signs should you or a patient/consumer look for if they thought they may have cellulitis?

- What advice would you give to that person if you thought they may be developing cellulitis?

Activity 6: The pictures below are from the Module 3 PowerPoint slides. Match the condition and the picture. There are more than one image of some conditions.

A: Cellulitis

B: Metastatic disease

C: Radio therapy damage

D: Collateral veins

E: Folliculitis



Picture 1



Picture 2



Picture 3



Picture 4



Picture 6



Picture 7



Picture 8

4. Module 4: Compression therapy and garments

4.1 Intended learning outcomes

At the end of this module, you will be able to:

- Explain the purpose of compression therapy
- Describe, compare and contrast the range and characteristics of compression garments available
- Apply knowledge to select and order a compression garment for a patient with malignancy-related lymphoedema
- Evaluate the fit of a compression garment
- Decide on appropriate donning and doffing methods and equipment and use of other accessories
- Develop an education and follow up plan for use, care and replacement of compression therapy garments

Activity 1: Draw a mind map to illustrate what you know about compression therapy and compression garments.

9. Populate the table in your work book with the appropriate manufacturing technique. When complete, each column in the table should have cut and sew, circle knit and flat knit listed.

	Lowest	Mid	Highest
Thickness of fabric			
Ability to bridge skin folds			
Ability to accommodate shape distortion			
Compression class			
Elasticity			

Activity 5: Write responses to the following questions. You can use a mind map to demonstrate your answers.

- You have placed an order for a compression garment and the patient/consumer asks you to post it out to them when it arrives. What response do you give to their request?

- A patient/consumer asks why it is necessary to wash the garments so regularly. What is your response?

- You have just provided a compression garment to a new patient/consumer with stable lymphoedema.
 - What are the key points you will take note of at the initial fitting?

5. Case studies

The following case studies are designed to provide you with the opportunity to apply and consolidate the information presented in this learning package. They can also be used as the basis for discussion/clarification during the Supported Practice meetings.

5.1 CASE STUDY: HELEN

Helen is 55 years old and works part time in a child care centre in a fairly large regional town. She lives with her husband Ben and has 2 adult children, the youngest living at home.

Medical History

- 5 years ago Helen was diagnosed with breast cancer and underwent axillary lymph node dissection and radiotherapy.
- She developed malignancy related (L) upper limb (non-dominant) lymphoedema which has been stable for the past 3 years.
- She reports that her (L) arm aches and feels heavy most days.

Assessment information

- Sum of arm circumference (SOAC) – L > R 12.5 cm
- Texture: Non-pitting soft swelling throughout upper arm with small area of pitting proximal forearm
- Lymphoedema stage classification - ISL Stage 2
- BMI 35 (Obesity classification)

1. What are the characteristics of Stage 2 lymphoedema?

2. What is Helen' self management plan likely to involve?

3. Provide details of the type of compression garment you might consider appropriate for Helen.

- Type of fabric?
- Style of garment?
- Level of compression?



- Level of compression?

3. What other intervention are you going to provide to Joyce?



6. CASE STUDY: JACK

Jack is a 60 year old man who recently retired having worked for most of his life running his own business. He lives with his wife Rona in a large regional city. They spend much of the winter traveling with their caravan around Australia but usually spend the summer months at home near their family.

Medical History

- Melanoma left calf with inguinal lymph node dissection and radiotherapy 3 years ago

Current presentation

- Malignancy-related lymphoedema past 2 years
 - Heavy, aching leg
 - Limits mobility
 - Texture: Mild thickening, adipose proliferation
 - ISL Stage: 2
- Wears compression garment some days but finds it uncomfortable

Questions for discussion:

1. What are the characteristics for Stage 2 lymphoedema?
2. Provide details of the type of compression garment you might consider appropriate for Jack.
 - Type of fabric?
 - Style of garment?
 - Level of compression?



7. GARMENT SELECTION CASE STUDIES

7.1 Which garments would suit these patients?

7.1.1 CASE 1

- 50 year old female
- R) WLE & ALND 0/7 +ve & XRT to breast 1 year ago
- Subjective - heaviness in upper arm, ache in forearm
- Objective - mild soft oedema distal upper arm and proximal forearm, No finger/hand oedema
- Left handed
- BMI 24

	Left	Right
MCP	19.0	19.4
Mid P	19.0	19.7
0	15.8	16.0
10	20.4	19.7
20	24.9	25.0
30	25.1	25.5
40	30.1	32.0
SOAC	154.3	157.3



7.1.2 CASE 2

- 55 year old female
- BMI 28; Right handed
- Melanoma right upper trapezius
- WLE right arm & ALND 1/32
- XRT 48 Gy 20# to R axilla
- History of bilateral frozen shoulders
- Soft non pitting oedema right forearm and hand

	Left	Right
MCP	22.9	21.7
Mid P	19.0	18.5
0	19.2	17.6
10	24.3	22.0
20	30.4	28.2
30	37.2	36.5
40	40.1	40.3
SOAC	193.1	184.8
Length	43cm	



7.1.3 CASE 3

- Myxoid Sarcoma 2007
- Radiation L) thigh 2008 30# 60Gy
- Occupation: Chef
- Other: on feet long hours, allergic to silicone
- Oedema presentation: oedema calf and ankle when working, nil oedema upper leg

	left	right
MTP	23.2	23.1
TMT	24.5	24.5
DAC	33.0	32.3
10	27.1	25.6
20	28.9	27.5
30	40.9	38.6
40	33.5	33.5
50	36.1	37.5
60	39.5	41.7
70	47.0	47.3
Sum	333.7	331.6



