



STEP 7:

# Care for Scars

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## Step 7: Care for Scars

### Introduction

A scar forms when a wound or burn heals. It results if the skin's injury is deeper than its outer layer (epidermis). The scar is never as strong, flexible or protective as the original skin and is at higher risk for injury. Therefore, the scar requires lifelong protection from moisture loss, trauma and sun damage. Good scar care decreases pain, minimizes itching and improves flexibility and appearance. It also decreases adhesions and soft tissue contractures that can limit movement. The scar's strong contracting forces can restrict movement and/or cause a visible impairment sometimes called "deformity." Early, careful positioning and exercise to oppose these forces can help preserve joint mobility. If caregivers, health workers and affected persons neglect scar care, it can lead to unnecessary complications.

#### Goal

Practice scar care that improves appearance, preserves movement and prevents complications that may lead to disability.

#### Key Messages

1. Scars at or near a joint are at higher risk of restricting movement.
2. Complete healing of a scar takes 1-2 years, and the scar is never as strong, flexible or protective as the original skin. Therefore, scars require lifelong protection from moisture loss, trauma and sun damage.
3. Keep the scar soft and flexible by soaking or applying wet compresses, applying moisturizers, and gently mobilizing the scar.
4. Early, careful positioning and exercise stretches the scar's strong pulling forces in the opposite direction to prevent movement limitation or to regain movement.
5. Sun-damaged scars and those that repeatedly break down and re-heal over time have a higher risk of developing cancer.

#### References

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- Hill, S., Kowalske, K., & Holavanahalli, R. (2011). *Wound care and scar management: Based on research by burn injury model systems*. University of Washington Model Systems Knowledge Translation Center (MSKTC). <http://www.msktc.org/burn/factsheets/Wound-Care-And-Scar-Management>
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## A Quick Supervisory Checklist for Step 7

Care of Scars	Yes	No	Not Obs	Observations & Recommendations
1. Identifies scars at risk (dry and/or at or near a joint)				
2. Keeps scars hydrated and flexible (water and Vaseline, shea butter or other)				
3. Keeps scars flat and mobile (compression and massage)				
4. If scar is contracting and limiting movement, positions and stretches it in the opposite direction				
<b>Teaches affected person and caregiver how to:</b>				
5. Do self-care to keep scar hydrated, flexible and stretched to permit full movement				
6. Protect the scar from injury (sun, work, play)				

### Guidelines for Teaching the Module

Health Coach/Facilitator should use the local language and ensure that all terms are found in the local language.

**Estimated time: 2 hours**

### Learning Objectives

At the end of the module, participants will be able to:

1. Identify scars at risk for causing movement limitation.
2. Demonstrate how to teach affected persons to care for their scars (hydrate, moisturize, mobilize, stretch and protect).
3. Demonstrate how to apply light compression to a new (less than two years old) thick and raised scar to make the scar flatter and more flexible, and to improve scar appearance.

### List of Teaching Activities and Learning Materials

#### Activity 1

Scar Screening and Home Self-Care Program

#### Activity 2

Problem Solving for Scar Scenarios

#### Handouts

- 7.1 Scar Screening Instructions
- 7.2 Individual Impairment Record Form (IIRF) – Scar Section
- 7.3 Preventive and Referral Actions for Scar Care
- 7.4 Home Self-Care Activities for Scar Care
- 7.5 Home Recording Form for Self-Care Practices
- 7.6 Scar Care Scenarios



## Step 7: Care for Scars

### Activity 1: Scar Screening and Home Self-Care Program

#### Handouts

- 7.1 Scar Screening Instructions
- 7.2 Individual Impairment Record Form (IIRF) – Scar Section
- 7.3 Preventive and Referral Actions for Scar Care
- 7.4 Home Self-Care Activities for Scar Care
- 7.5 Home Recording Form for Self-Care Practices

#### Equipment & Materials

- Flip chart stand and paper
- 4 – 6 colored markers

#### Instructions for Teaching the Activity

Room Arrangement: Participants sit in a semicircle.

- 1. Health Coach distributes handouts, 7.1 Scar Screening Instructions, 7.2 IIRF – Scar Section, 7.3 Preventive and Referral Actions for Scar Care, 7.4 Home Self-Care Activities for Scar Care and 7.5 Home Recording Form for Self-Care Practices.**
- 2. Health Coach reviews and demonstrates how to do scar screen and record findings.**
- 3. Health Coach uses handout 7.3 Preventive Actions for Scar Care to reinforce issues affecting scar care:**
  - Complete healing of a scar takes one to two years and the scar remains more fragile than the original skin.
  - Scars that “stick” to the underlying structures can be very painful and limit movement. Therefore, it is important to mobilize the scar.
  - Early care and light compression can improve the appearance of a scar.
  - Dry scars that crack increase the risk of infection.
  - Dry scars that are less flexible may break down and cause the recurrence of a wound.
  - Scars that repeatedly break down and re-heal over time have a higher risk of developing cancer.
  - Thick, strongly contracted scar(s) at or near a joint cause loss of motion.
  - Scars exposed to sunlight are at risk of sunburn and skin cancer.
- 4. Health Coach distributes and reviews handouts 7.4 Home Self-Care Activities for Scar Care and how to check off care completed at home on handout 7.5 Home Recording Form for Self-Care Practices.**



## Activity 2: Problem Solving for Scar Scenarios

### Handouts

- 7.6 Scar Care Scenarios (3 scenarios)

### Equipment & Materials

- Flip chart stand and paper
- 4 – 6 colored markers
- 3 copies of each type of scar scenario
- 1 bucket of clean water or 6 plastic bags of drinking water
- 6 small containers of moisturizers: Vaseline, shea butter, cocoa butter, other
- 1 sheet of furniture foam 1 meter x 1 meter x 0.5–1cm thickness
- 12 cloth bandage rolls (10–12cm x 2 meters)
- 6 10–12cm elastic (short-stretch) bandages
- 1 sheet of protective material approximately the size of A4 paper: cardboard, used x-ray film, plastic folder, large water bottle, other
- 1 pair large scissors that can cut the protective material
- 1 pair knee-high socks
- 1 roll of sticky adhesive tape (0.5cm width)

### Instructions for Teaching the Activity

Room Arrangement: Health Coach divides the large group into smaller groups of three to four persons.

- 1. There are three different scenarios of persons with scars. The Health Coach will distribute the different scenarios, giving one scenario to each group.**
- 2. Each small group will be given 15 minutes to read and discuss how to take care of the scar situation described in their group scenario.**
- 3. Health Coach asks which small group wants to present their scenario first. Each group has five minutes to present their scenario and care to the larger group.**
- 4. At the end of each small group presentation, the larger group is given five minutes to discuss key care issues for the specific scenario.**
- 5. After all groups have presented, the Health Coach summarizes and reinforces the following key care issues for each scenario:**

#### Scenario No. 1: Boy playing football

- Teach scar care to both father and son.
- Soak in water or wet compresses followed by application of shea butter or local moisturizer.
- Mobilize scar.
- Rest and stretch (positioning day and night).
- Protect leg from sunburn and scrapes/scratches (options: cover scar with bandage or wear knee-high sock).
- Protect the shin of the leg. A shin protector can be made out of cardboard, used x-ray film or a plastic sheet/bottle and lining it with padding such as foam.
- Encourage the boy's safe participation in football and help the father to know how the boy can play football safely.

#### Scenario No. 2: Woman pounding fufu

- Teach woman how to care for the scar at home.
- Wash hands and elbow with soap and water to prevent infection.
- Soak scarred elbow in water or use wet compresses followed by application of shea butter or other local moisturizer.
- Mobilize scar, gently.
- Rest and stretch (positioning day and night).
- Move and stretch often during the day.
- Encourage the women to continue pounding fufu.

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## Step 7: Care for Scars

### Activity 2: Problem Solving for Scar Scenarios (continued)

#### **Scenario No. 3: Man doing farm work**

- Teach the farmer self-care for his scar.
- Soak scarred leg and ankle in water or use wet compresses followed by application of shea butter or other local moisturizer.
- Mobilize scar, gently.
- Rest and stretch (positioning day and night).
- Move and stretch often during the day.
- Protect leg/ankle from sunburn and scratches (options: wear long trousers, cover scar with bandage or knee-high socks).
- Encourage farmer to continue his participation in farming activities.

### Conclusion

In conclusion, the Health Coach summarizes key messages and clarifies any misconceptions.



## Handout 7.1: Scar Screening Instructions

Gather together equipment and supplies: sensory test device(s), IIRF record form, pen or pencil.

Wash hands with soap and water before and after each screen.

Complaints	Ask
Patient or family complaints or observations	<p><b>Ask the following:</b> Do you currently have any of the following complaints with your scars: itching, painful, limiting movement, not attractive, other:</p> <p>_____</p> <p><b>Record on IIRF form:</b> Circle symptom(s), Yes, R and/or L.</p>
History	Ask
Previous scar cracks or injury	<p>Have you ever had your scar crack open or be injured during your daily activities? If yes, where and what kind of injury?</p> <p><b>Record on IIRF form:</b> Circle Yes, R and/or L and if cracked or injured. Mark location on body chart.</p>
Scar Conditions	Observe, feel and ask
Scar is at or near a joint	<p>Is the scar at or near a joint? If yes,</p> <p><b>Record on IIRF form:</b> Circle Yes, R and/or L. Mark on body chart.</p>
Scar is dry	<p>Is the scar dry? If yes,</p> <p><b>Record on IIRF form:</b> Circle Yes, R and/or L.</p>
Scar is sticking to or adhering to underlying structures	<p>Touch and move the scar. Does the scar stick or not move easily across underlying structures as compared to unaffected side? If yes,</p> <p><b>Record on IIRF form:</b> Circle Yes, R and/or L.</p>
Scar is very thick and less than one year old	<p>Observe and feel the scar. Is the scar thick, raised and less than one year old? If yes,</p> <p><b>Record on IIRF form:</b> Circle Yes, R and/or L.</p>

## Step 7: Care for Scars

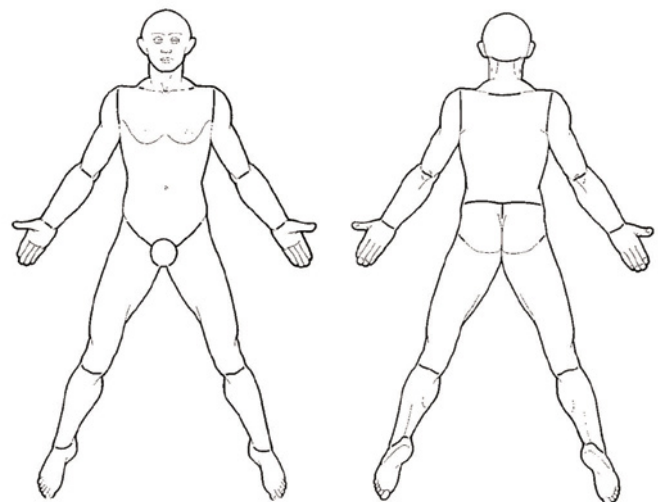
### Handout 7.2: Individual Impairment Record Form (IIRF) – Scar Section

(See handout 7.1 for instructions on how to do a scar screen)

<b>Complaints:</b>			
Scar is itching, painful, limiting movement, not attractive, other: _____	Yes	R	L
<b>History:</b>			
Previous scar cracks or injury. Type: _____	Yes	R	L
<b>Scar conditions:</b> (circle area, test or condition that applies)			
Scar is at or near a joint	Yes	R	L
Scar is dry	Yes	R	L
Scar is sticking to or adhering to underlying structures	Yes	R	L
Scar is very thick and less than one year old	Yes	R	L

<b>Key for Recording</b>	
Skin Lesion	○
Crack	≡
Wound	∩
Scar Location	X
Joint with Movement Limitations	↓
Swelling	┌
Location of Amputation	—

**Body Map**







## Handout 7.3: Preventive and Referral Actions for Scar Care

Problem	Action Details
1. Dry scars	<p>Moisturizing dry scars soothes itching. It keeps scars soft and flexible so they can resist cracks with stretching movements during daily activities.</p> <ul style="list-style-type: none"> <li>• Use local products for moisturizing; e.g., shea butter, coconut oil, cocoa butter, palm oil, mineral oil.</li> <li>• The best time for moisturizing is after bathing or soaking the dry areas.</li> <li>• Rub the moisturizer into the skin/scar slowly, avoiding areas between toes and in skin folds.</li> </ul>
2. Scars sticking to underlying structures	<p>Use local moisturizer and gently mobilize scars:</p> <ul style="list-style-type: none"> <li>• To keep scars from sticking to underlying structures.</li> <li>• To massage and gently stretch skin/joints to maintain full range of motion.</li> </ul>
3. Strong contracting forces of scars limiting movement when scar is at or near a joint	<p>Prevent loss of movement by:</p> <ul style="list-style-type: none"> <li>• Carefully positioning day and night opposite the scar's strong contracting forces. Splints for maintaining and gently stretching scars may be needed at night.</li> <li>• Frequently exercising in the opposite direction of the scar's strong contracting forces.</li> </ul>
4. Fragile, easily injured	<p>Protect from:</p> <ul style="list-style-type: none"> <li>• Sunburn and injury during daily activities.</li> <li>• Repeated breakdown and re-heal over time, which has a higher risk of developing cancer.</li> </ul>
5. Thick scars less than one year old	<p>Constant light pressure (23hrs of 24hrs) with scars less than one year old:</p> <ul style="list-style-type: none"> <li>• Helps scars become flatter.</li> <li>• Helps improve appearance.</li> </ul>
6. Thick scars limiting movement	<p>If no improvements with good community care in one to two months, refer for progressive splinting, physical rehabilitation and surgical correction.</p> <p>If deep cracking or further loss of motion occurs, refer as soon as possible.</p>

## Step 7: Care for Scars

### Handout 7.4: Home Self-Care Activities for Scar Care

#### 1. Hydrate & Lubricate Scar



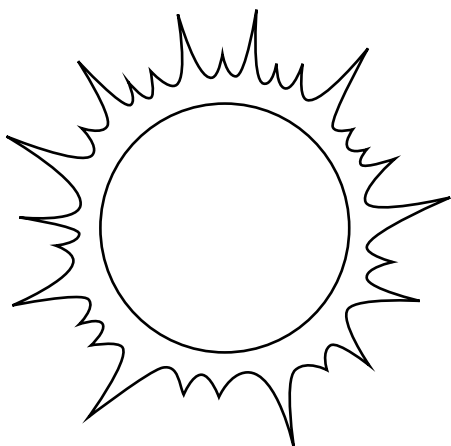
#### 2. Mobilize Scar



#### 3. Move & Stretch the Area Affected by the Scar



#### 4. Protect Scar from Injury & Sunburn

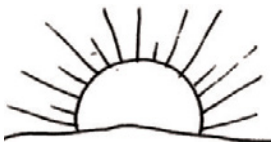




Illustrations: Valerie Simonet and WHO/NTD



## Handout 7.5: Home Recording Form for Self-Care Practices

	✓ the activities to be done at home
1. <b>Elevate and Exercise</b> – 10 minutes (3–4 songs)	
2. <b>Move and Stretch</b> – Stretch 10 seconds x 10 times	
3. <b>Rest and Stretch</b> – 10 minutes (3–4 songs)	
4. <b>Scar Care</b> – Hydrate, Lubricate, Mobilize Scar, Move, Stretch & Protect	

Start Date: (dd/mm/yy) ____/____/____			
	<b>Morning</b>	<b>Afternoon</b>	<b>Night</b>
Day 1			
Day 2			
Day 3			
Day 4			
Day 5			
Day 6			
Day 7			
Day 8			
Day 9			
Day 10			
Day 11			
Day 12			
Day 13			
Day 14			

At the end of the 14 days, how is your scar?  
(Circle if Better or Worse)

Better



Worse



Date patient demonstrates to health worker (dd/mm/yy): \_\_\_\_/\_\_\_\_/\_\_\_\_

Patient is able to demonstrate self-care correctly? \_\_\_\_ Yes or \_\_\_\_ No

Reference: Lehman, L. (2012). *Buruli ulcer drug trial protocol: Patient home self-care*. WHO.

## Step 7: Care for Scars

### Handout 7.6: Scar Care Scenarios

#### **Scar Care Scenario No. 1: Boy playing football**

You are following up with a young boy of 12 years old in his village who has recently completed his Buruli ulcer antibiotic treatment. He has a scar on his right shin. The father has told the son not to play football because he does not want him to hurt the scar. You find out that the boy is playing football without his father's knowledge. How will you manage this situation? What kind of care would you teach the boy?

#### **Scar Care Scenario No. 2: Woman pounding fufu**

You are following up with a woman 32 years old in her village who has a scar from a recently healed burn on her left elbow. The scar is very thick, raised and dry. You notice the scar is cracking. Talking with the woman you discover she first noticed the crack after pounding fufu. She wonders if she should stop pounding fufu. How will you manage this situation? What kind of care would you teach the woman?

#### **Scar Care Scenario No. 3: Man doing farm work**

You are following up with a 54-year-old farmer in his village who has a large scar on his left lower leg and ankle from a recent accident. He is worried about injuring the scar when he goes to the fields to work all day. He usually wears short trousers when he works in the fields. How will you manage this situation? What kind of care would you teach this man?