# Pattern 7A: Primary Prevention/Risk Reduction for Integumentary Disorders

# **Inclusion**

The following examples of examination findings may support the inclusion of clients in this pattern:

# Risk Factors or Consequences of Pathology/Pathophysiology (Disease, Disorder, or Condition)

- Amputation
- Congestive heart failure
- Diabetes
- Malnutrition
- Neuromuscular dysfunction
- Obesity
- Peripheral nerve involvement
- Polyneuropathy
- Prior scar
- Spinal cord involvement
- Surgery
- Vascular disease

#### Impairments of Body Functions and Structures, Activity Limitations, or Participation Restrictions

- Decreased level of activity
- Decreased sensation
- Edema
- Inflammation
- Ischemia
- Pain

# **Examination**

Read Physical Therapist Examination and Evaluation: Focus on Tests and Measures.

#### **Tests and Measures for Pattern 7A**

Tests and measures for this pattern may include those that characterize or quantify:

- Anthropometric Characteristics
- Assistive Technology
- Circulation (Arterial, Venous, Lymphatic)
- Cranial and Peripheral Nerve Integrity
- Integumentary Integrity
- Mental Functions
- Muscle Performance (Including Strength, Power, Endurance, and Length)
- Posture
- Sensory Integrity

### **Evaluation, Diagnosis, Prognosis (Including Plan of Care)**

#### Read Principles of Physical Therapist Patient and Client Management.

Factors That May Require New Episode of Care or That May Modify Frequency of Visits/Duration of Care:

- Accessibility and availability of resources
- Adherence to the intervention program
- Age
- Anatomical and physiological changes related to growth and development
- Caregiver consistency or expertise
- Chronicity or severity of the current condition
- Cognitive status
- Comorbidities, complications, or secondary impairments
- Concurrent medical, surgical, and therapeutic interventions
- Decline in functional independence
- Level of impairment
- Level of physical function
- Living environment
- Multisite or multisystem involvement
- Nutritional status
- Overall health status
- Potential discharge destinations

- Premorbid conditions
- Probability of prolonged impairment, functional limitation, or disability
- Psychological and socioeconomic factors
- Psychomotor abilities
- Social support
- Stability of the condition

### **Intervention**

#### Read Intervention.

The categories of interventions for this pattern are listed alphabetically, with patient or client instruction first:

- Patient or Client Instruction
- Biophysical agents
- Functional Training in Self-Care and in Domestic, Education, Work, Community, Social, and Civic Life
- Motor Function Training
- Therapeutic Exercise

# **Reexamination**

Read Physical Therapist Examination and Evaluation: Focus on Tests and Measures.

### **Outcomes for Patients or Clients**

Read Measurement and Outcomes.

### **Concluding an Episode of Care**

# Pattern 7B: Impaired Integumentary Integrity Associated With Superficial Skin Involvement

# **Inclusion**

The following examples of examination findings may support the inclusion of clients in this pattern:

# Risk Factors or Consequences of Pathology/Pathophysiology (Disease, Disorder, or Condition)

- Amputation
- Burns (superficial/first degree)
- Cellulitis
- Contusion
- Dermopathy
- Dermatitis
- Malnutrition
- Neuropathic ulcers (grade 0)
- Pressure ulcers (stage 2)
- Vascular disease
  - Arterial
  - Diabetic
  - Venous

#### Impairments of Body Functions and Structures, Activity Limitations, or Participation Restrictions

- Edema
- Impaired sensation
- Impairments associated with abnormal fluid distribution
- Impaired skin
- Ischemia

The following examples of examination findings may support exclusion from this pattern or classification into additional patterns. Depending on the level of severity or complexity of the examination findings, the physical therapist may determine that the patient/client would be more appropriately managed through (1) classification in an entirely different pattern or (2) classification in both this and another pattern.

#### Findings That May Require Classification in a Different Pattern

- Frostbite
- Recent amputation

#### Findings That May Require Classification in Additional Patterns

• Superficial burn with inhalation injury

# **Examination**

#### Read Physical Therapist Examination and Evaluation: Focus on Tests and Measures.

#### **Tests and Measures for Pattern 7B**

- Anthropometric Characteristics
- Assistive Technology
- Balance
- Circulation (Arterial, Venous, Lymphatic)
- Cranial and Peripheral Nerve Integrity
- Gait
- Integumentary Integrity
- Mobility (Including Locomotion)
- Muscle Performance (Including Strength, Power, Endurance, and Length)
- Pain
- Range of Motion
- Self-Care and Domestic Life
- Sensory Integrity

#### Read Principles of Physical Therapist Patient and Client Management.

Factors That May Require New Episode of Care or That May Modify Frequency of Visits/Duration of Care:

- Accessibility and availability of resources
- Adherence to the intervention program
- Age
- Anatomical and physiological changes related to growth and development
- Caregiver consistency or expertise
- Chronicity or severity of the current condition
- Comorbidities, complications, or secondary impairments
- Concurrent medical, surgical, and therapeutic interventions
- Level of impairment of body functions and structures
- Level of independence in activity and participation
- Living environment
- Mental status
- Multisite or multisystem involvement
- Nutritional status
- Overall health status
- Potential destinations at conclusion of care
- Premorbid conditions
- Probability of prolonged impairment of body functions and structures and probability of activity limitations and participation restrictions
- Psychological and socioeconomic factors
- Psychomotor abilities
- Social support
- Stability of the condition

# **Intervention**

#### Read Intervention.

The categories of interventions for this pattern are:

- Patient or Client Instruction
- Functional Training in Self-Care and in Domestic, Education, Work, Community, Social, and Civic Life
- Integumentary Repair and Protection Techniques

- Manual Therapy Techniques
- Motor Function Training
- Therapeutic Exercise

### **Reexamination**

Read Physical Therapist Examination and Evaluation: Focus on Tests and Measures.

### **Outcomes for Patients or Clients**

Read Measurement and Outcomes.

# **Concluding an Episode of Care**



# Pattern 7C: Impaired Integumentary Integrity Associated With Partial-Thickness Skin Involvement and Scar Formation

### **Inclusion**

The following examples of examination findings may support the inclusion of clients in this pattern:

# Risk Factors or Consequences of Pathology/Pathophysiology (Disease, Disorder, or Condition)

- Amputation
- Burns (partial thickness/second degree)
- Dermatologic disorders
- Epidermolysis bullosa
- Hematoma
- Immature scar
- Malnutrition
- Neoplasms (including Kaposi's sarcoma)
- Neuropathic ulcers (grade 1)
- Pressure ulcers (stage 2)
- Prior scar
- Status post spinal cord injury
- Surgical wounds
- Toxic epidermal necrolysis
- Traumatic injury
- Vascular ulcers
  - $\circ$  Arterial
  - Diabetic
  - $_{\circ}$  Venous

#### Impairments of Body Functions and Structures, Activity Limitations, or Participation Restrictions

- Impairments associated with abnormal fluid distribution
- Impaired sensation
- Impaired skin
- Muscle weakness

The following examples of examination findings may support exclusion from this pattern or classification into additional patterns. Depending on the level of severity or complexity of the examination findings, the physical therapist may determine that the patient/client would be more appropriately managed through (1) classification in an entirely different pattern or (2) classification in both this and another pattern.

#### Findings That May Require Classification in a Different Pattern

- Electricity-related injuries
- Frostbite
- Multiple fractures
- Recent amputation

#### Findings That May Require Classification in Additional Patterns

• Spinal cord injury

# **Examination**

#### Read Physical Therapist Examination and Evaluation: Focus on Tests and Measures.

#### **Tests and Measures for Pattern 7C**

- Anthropometric Characteristics
- Assistive Technology
- Balance
- Circulation (Arterial, Venous, Lymphatic)
- Community, Social, and Civic Life
- Cranial and Peripheral Nerve Integrity
- Education Life
- Gait
- Integumentary Integrity
- Mobility (Including Locomotion)
- Muscle Performance (Including Strength, Power, Endurance, and Length)
- Pain
- Range of Motion

- Self-Care and Domestic Life
- Sensory Integrity
- Work Life

#### Read Principles of Physical Therapist Patient and Client Management.

Factors That May Require New Episode of Care or That May Modify Frequency of Visits/Duration of Care:

- Accessibility and availability of resources
- Adherence to the intervention program
- Age
- Anatomical and physiological changes related to growth and development
- Caregiver consistency or expertise
- Chronicity or severity of the current condition
- Comorbidities, complications, or secondary impairments
- Concurrent medical, surgical, and therapeutic interventions
- Level of impairment of body functions and structures
- Level of independence in activity and participation
- Living environment
- Mental status
- Multisite or multisystem involvement
- Nutritional status
- Overall health status
- Potential destinations at conclusion of care
- Premorbid conditions
- Probability of prolonged impairment of body functions and structures and probability of activity limitations and participation restrictions
- Psychological and socioeconomic factors
- Psychomotor abilities
- Social support
- Stability of the condition

# **Intervention**

#### Read Intervention.

The categories of interventions for this pattern are:

- Patient or Client Instruction
- Functional Training in Self-Care and in Domestic, Education, Work, Community, Social, and Civic Life
- Integumentary Repair and Protection Techniques
- Manual Therapy Techniques
- Motor Function Training
- Therapeutic Exercise

# **Reexamination**

Read Physical Therapist Examination and Evaluation: Focus on Tests and Measures.

### **Outcomes for Patients or Clients**

Read Measurement and Outcomes.

# **Concluding an Episode of Care**

# Pattern 7D: Impaired Integumentary Integrity Associated With Full-Thickness Skin Involvement and Scar Formation

### **Inclusion**

The following examples of examination findings may support the inclusion of clients in this pattern:

# Risk Factors or Consequences of Pathology/Pathophysiology (Disease, Disorder, or Condition)

- Abscess
- Amputation
- Burns
- Frostbite
- Hematoma
- Immature, hypertrophic, or keloid scar
- Lymphostatic ulcer
- Malnutrition
- Neoplasm
- Neuropathic ulcers (grade 2)
- Pressure ulcers (stage 3)
- Prior scar
- Surgical wounds
- Toxic epidermal necrolysis
- Vascular ulcers
  - $_{\circ}$  Arterial
  - $_{\circ}$  Diabetic
  - $_{\circ}$  Venous

# Impairments of Body Functions and Structures, Activity Limitations, or Participation Restrictions

- Impairments associated with abnormal fluid distribution
- Impaired sensation
- Impaired skin
- Muscle weakness

The following examples of examination findings may support exclusion from this pattern or classification into additional patterns. Depending on the level of severity or complexity of the examination findings, the physical therapist may determine that the patient/client would be more appropriately managed through (1) classification in an entirely different pattern or (2) classification in both this and another pattern.

#### Findings That May Require Classification in a Different Pattern

- Crushing injury
- Electricity related injury
- Lymphedema
- Recent amputation

#### Findings That May Require Classification in Additional Patterns

• Diabetic neuropathy

# **Examination**

#### Read Physical Therapist Examination and Evaluation: Focus on Tests and Measures.

#### **Tests and Measures for Pattern 7D**

- Anthropometric Characteristics
- Assistive Technology
- Balance
- Circulation (Arterial, Venous, Lymphatic)
- Community, Social, and Civic Life
- Cranial and Peripheral Nerve Integrity
- Education Life
- Gait
- Integumentary Integrity
- Mobility (Including Locomotion)
- Muscle Performance (Including Strength, Power, Endurance, and Length)
- Pain
- Range of Motion
- Sensory Integrity
- Work Life

#### Read Principles of Physical Therapist Patient and Client Management.

Factors That May Require New Episode of Care or That May Modify Frequency of Visits/Duration of Care:

- Accessibility and availability of resources
- Adherence to the intervention program
- Age
- Anatomical and physiological changes related to growth and development
- Caregiver consistency or expertise
- Chronicity or severity of the current condition
- Comorbidities, complications, or secondary impairments
- Concurrent medical, surgical, and therapeutic interventions
- Level of impairment of body functions and structures
- Level of independence in activity and participation
- Living environment
- Mental status
- Multisite or multisystem involvement
- Nutritional status
- Overall health status
- Potential destinations at conclusion of care
- Premorbid conditions
- Probability of prolonged impairment of body functions and structures and probability of activity limitations and participation restrictions
- Psychological and socioeconomic factors
- Psychomotor abilities
- Social support
- Stability of the condition

### **Intervention**

#### Read Intervention.

The categories of interventions for this pattern are:

- Patient or Client Instruction
- Functional Training in Self-Care and in Domestic, Education, Work, Community, Social, and Civic Life
- Integumentary Repair and Protection Techniques
- Manual Therapy Techniques
- Motor Function Training
- Therapeutic Exercise

# **Reexamination**

Read Physical Therapist Examination and Evaluation: Focus on Tests and Measures.

### **Outcomes for Patients or Clients**

Read Measurement and Outcomes.

# **Concluding an Episode of Care**

# Pattern 7E: Impaired Integumentary Integrity Associated With Skin Involvement Extending Into Fascia, Muscle, or Bone and Scar Formation

### **Inclusion**

The following examples of examination findings may support the inclusion of clients in this pattern:

# Risk Factors or Consequences of Pathology/Pathophysiology (Disease, Disorder, or Condition)

- Abscess
- Burns
- Chronic surgical wound
- Electrical burns
- Frostbite
- Hematoma
- Kaposi's sarcoma
- Lymphostatic ulcer
- Necrotizing fasciitis
- Neoplasm
- Neuropathic ulcers (grades 3, 4, 5)
- Pressure ulcers (stage 4)
- Recent amputation
- Subcutaneous arterial ulcer
- Surgical wounds
- Vascular ulcers
  - Diabetic
  - Venous

# Impairments of Body Functions and Structures, Activity Limitations, or Participation Restrictions

- Impaired joint integrity
- Impaired sensation
- Impaired skin
- Impairments associated with abnormal fluid distribution
- Muscle weakness
- Decreased range of motion

The following examples of examination findings may support exclusion from this pattern or classification into additional patterns. Depending on the level of severity or complexity of the examination findings, the physical therapist may determine that the patient/client would be more appropriately managed through (1) classification in an entirely different pattern or (2) classification in both this and another pattern.

#### Findings That May Require Classification in a Different Pattern

• Impairments associated with lymphedema

#### Findings That May Require Classification in Additional Patterns

• Impairments associated with diabetes

### **Examination**

Read Physical Therapist Examination and Evaluation: Focus on Tests and Measures.

#### **Tests and Measures for Pattern 7E**

- Anthropometric Characteristics
- Assistive Technology
- Balance
- Circulation (Arterial, Venous, Lymphatic)
- Community, Social, and Civic Life
- Cranial and Peripheral Nerve Integrity
- Education Life
- Gait
- Integumentary Integrity
- Mental Functions
- Mobility (Including Locomotion)
- Muscle Performance (Including Strength, Power, Endurance, and Length)
- Pain
- Posture
- Range of Motion
- Self-Care and Domestic Life
- Sensory Integrity
- Skeletal Integrity
- Work Life

#### Read Principles of Physical Therapist Patient and Client Management.

Factors That May Require New Episode of Care or That May Modify Frequency of Visits/Duration of Care:

- Accessibility and availability of resources
- Adherence to the intervention program
- Age
- Anatomical and physiological changes related to growth and development
- Caregiver consistency or expertise
- Chronicity or severity of the current condition
- Comorbidities, complications, or secondary impairments
- Concurrent medical, surgical, and therapeutic interventions
- Level of impairment of body functions and structures
- Level of independence in activity and participation
- Living environment
- Mental status
- Multisite or multisystem involvement
- Nutritional status
- Overall health status
- Potential destinations at conclusion of care
- Premorbid conditions
- Probability of prolonged impairment of body functions and structures and probability of activity limitations and participation restrictions
- Psychological and socioeconomic factors
- Psychomotor abilities
- Social support
- Stability of the condition

# **Intervention**

#### Read Intervention.

The categories of interventions for this pattern are:

- Patient or Client Instruction
- Functional Training in Self-Care and in Domestic, Education, Work, Community, Social, and Civic Life
- Integumentary Repair and Protection Techniques

- Manual Therapy Techniques
- Motor Function Training
- Therapeutic Exercise

### **Reexamination**

Read Physical Therapist Examination and Evaluation: Focus on Tests and Measures.

### **Outcomes for Patients or Clients**

Read Measurement and Outcomes.

# **Concluding an Episode of Care**