For more information or to provide feedback on this or any other decision support tool, email certifiedpractice@bccnp.ca

ADULT INTEGUMENTARY ASSESSMENT

Nurses with Remote Nursing Certified Practice designation (RN(C)s)[1] are able to manage the following skin conditions:

- Abscess and furuncle
- Cellulitis
- Impetigo
- Bites

The following assessment must be completed and documented.

ASSESSMENT

History of Present Illness and Review of System

General

The following characteristics of each symptom should be elicited and explored:

- Onset (sudden or gradual)
- Location and spread
- Duration, chronology
- Characteristics/quality/severity of symptoms
- Associated symptoms
- Precipitating and aggravating factors including environmental such as skin and hair products
- Relieving factors
- Timing and frequency
- Current situation (improving or deteriorating)
- Previous diagnosis of similar episodes
- Previous treatments and efficacy
- Effects on daily activities

Cardinal Signs and Symptoms

In addition to the general characteristics outlined above, other characteristics of specific symptoms should be elicited as follows:

[1] RN(C) is an authorized title recommended by CRNBC that refers to CRNBC-certified RNs, and is used throughout this Decision Support Tool (DST).

General
- Fever
- Malaise
- Arthralgia

Skin
- Changes in texture or colour
- Unusual dryness or moisture
- Itching, burning, pain or numbness
- Rash
- Bruises, petechiae
- Changes in pigmentation
- Lesions, blisters or crust
- Changes in moles or birthmarks

Hair
- Changes in amount, texture, distribution

Nails
- Changes in texture, structure

Medical History (Specific to Integumentary System)
- Allergies (e.g., medication, environmental, food)
- Allergic manifestation (e.g., photosensitivity, asthma, hay fever, urticaria, Stevens-Johnson Syndrome)
- Medications (over the counter, and prescriptions e.g., tetracycline, sulphonamides, steroids, oral contraceptives, antibiotics, anticoagulants, acetylsalicylic acid (ASA))
- Herbal preparations and complimentary therapies
- Immunization status (particularly tetanus and shingles)
- Diseases:
  - Recent or current viral or bacterial illness
  - Known Methicillin Resistant Staphylococcus Aureus (MRSA) positive
  - Immunocompromised
  - Seborrheic dermatitis, contact dermatitis, psoriasis, eczema
  - Asthma
  - Diabetes, Rheumatoid Arthritis (RA), thyroid disorder, collagen or vascular disorder
  - Skin cancer
- Current skin complaint; detailed history
- Sun exposure, tanning beds
- Surgeries or recent collagen, Botox, microdermabrasion, chemical peel
- Keloid formation

Family History Specific to Integumentary System
- Allergies (e.g., seasonal, food)
- Seborrheic dermatitis
- Psoriasis
- Skin cancer

- Atopy and asthma
- Autoimmune disorders

Personal and Social History Specific to Integumentary System

- History of sensitive skin
- Obesity
- Hot or humid environment, poor environmental sanitation
- Use of hot tubs, swimming pools
- Tattoos and piercings
- Stress or emotional disturbance (may precipitate flares of chronic skin problem such as psoriasis)
- Exposure to new substances (e.g., soaps, foods, pets, plants)
- Recent travel
- Others at home with similar symptoms
- Recent insect bite/sting
- Substance use

PHYSICAL ASSESSMENT OF THE INTEGUMENTARY SYSTEM

Vital Signs

- Temperature
- Pulse
- Respiration
- SpO_2
- Blood Pressure (BP)

General

- Apparent state of health
- Appearance of comfort or distress
- Colour
- Nutritional status
- State of hydration – older adult at risk
- Hygiene
- Match between appearance and stated age

Inspection and Palpation of the Skin

- General skin examination
    - Colour
    - Temperature, texture, turgor, tenderness
    - Dryness or moisture
    - Scaling
    - Pigmentation
    - Vascularity (erythema, abnormal veins)
    - Bruises, petechiae
    - Edema
    - Induration
    - Skin folds
    - Hair, nails, mucous membranes

- Individual lesions
    - Colour
    - Type
    - Texture;
    - General pattern of distribution
    - Shape of single lesions, including the character of lesion edge i.e. whether raised or flat
- Joint involvement

Note: examination of patients with darker skin colour requires awareness that pigmentation influences the colour of the lesion and how certain lesions manifest clinically.

Other Aspects

- Examine lymph nodes
- Examine area distal to enlarged lymph nodes

Major Types

The major types and characteristics of skin lesions are given in Tables 1 and 2

- Jaundice, spider angiomata, palmar erythema or a necklace of telangiectasia may indicate alcoholic liver disease
- Petechiae or purpura suggest a coagulation problem

Table 1: Major Types of Skin Lesions

Type of Lesion	Characteristics
Primary Lesions	Physical changes caused directly by the disease process
Atrophy (may be secondary)	Skin thin and wrinkled
Macule and patches	Flat, circumscribed, discoloured spot; size and shape variable (e.g., freckle, mole, port-wine stain). Macules less than 1 cm, patches greater than 1 cm.
Nodule	Palpable, solid lesion that may or may not be elevated (e.g., keratinous cyst, small lipoma, fibroma). Usually greater than 1 cm
Papule	Solid elevated lesion (e.g., wart, psoriasis, syphilitic lesion, pigmented mole). Less than 1 cm in diameter
Petechiae, ecchymosis and purpura	Extravasation of blood into skin causing non-blanching red macules and patches. Petechiae less than 2 mm. Ecchymosis more than 2 mm. Purpura are groups of petechiae and or ecchymosis that may be confluent, macular or raised.
Plaque	Well-defined plateau-like elevation compared to its height above the skin. For example eczema, psoriasis.

Pustule	Superficial elevated lesion containing pus (e.g., impetigo, acne, furuncle, carbuncle)
Telangiectasia	Fine, often irregular red line produced by dilatation of a normally invisible capillary. Blanch with pressure.
Ulcer (may be secondary)	Loss of epidermis and at least part of the dermis
Vesicle and bulla	Circumscribed, elevated lesion < 5 mm in diameter containing clear fluid; larger vesicles are classified as bullae or blisters (e.g., insect bite, allergic contact dermatitis, sunburn)
Wheal	Transient, irregularly shaped, elevated, indurated, changeable lesion caused by local edema (e.g., allergic reaction to a drug, a bite, sunlight)
Secondary Lesions	May evolve from primary lesions, or be caused by external sources such as trauma, infection and scratching
Crust	Dry exudate, e.g. a 'scab'
Erosion	Loss of part or all of the epidermis
Excoriation	Superficial linear or hollowed-out crusted area, caused by scratching, rubbing or picking
Exudative: Dry (crust or scab)	Dried serum, blood or pus
Exudative: Wet (weeping)	Draining serum, blood or pus
Lichenification	Skin thickened, skin markings accentuated (e.g., atopic dermatitis)
Pigmentation changes	Hyperpigmentation (increased skin pigment); hypopigmentation (decreased skin pignment); depigmentation (complete loss of skin pigment)
Scales	Heaping-up of the horny epithelium (e.g., psoriasis, seborrheic dermatitis, fungal infection, chronic dermatitis)
Scar	Various skin manifestations of healed process. (e.g., keloid or acne cicatrisation)

Table 2: Major Arrangements of Skin Lesions

Arrangement of Lesions	Characteristics of lesions
Annular	Arranged in a circular pattern
Confluent	Merge and run together – e.g. exanthema
Discrete	Individual, separate and distinct – e.g. insect bites
Generalized	Scattered over the body – e.g. measles
Grouped	Clustered – e.g. herpes simplex

Linear or serpiginous	Form a line or snakelike shape – e.g. poison ivy, dermatitis
Polycyclic	Concentric circles resembling a bull's eye – e.g. drug reactions, urticaria
Zosteriform	Linear arrangement along a nerve root – e.g. shingles

Sources: Estes, Mary Ellen Zator. (2010). First Nations and Inuit Health Branch. (2009). Leblond, R., Brown, D., & DeGowin, R. (2009).

Symptoms Requiring Referral Or Consultation

The first step is to differentiate a major skin eruption, infection or event from a minor one that can be managed by nurses with certified practice designation.

The following signs and symptoms require referral to a physician or nurse practitioner:

- Petechiae or widespread purpura
- Unusual bruising
- Palmer erythema
- Spider angioma
- Caput medusa
- Jaundice
- Butterfly Rash
- Skin presentation in the presence of systemic disease
- Any cellulitis covering or involving a joint
- Facial, periorbital and orbital cellulitis are particularly worrisome, as they can lead to meningitis
- Known or suspected MRSA
- Suspicious pigmented lesions

Diagnostic Tests

The RN(C) may consider the following diagnostic tests to support clinical decision-making:

- Culture and Sensitivity (C&S) of weeping lesions
- Blood glucose if poorly healing wounds

REFERENCES

More recent editions of any of the items in the Reference List may have been published since this DST was published. If you have a newer version, please use it.

Ball, J. W., Dains, J. E., Flynn, J. A., Solomon, B. S., & Stewart, R. W. (Eds.). (2015). *Seidel's guide to physical examination* (8th ed.). St. Louis, MO: Elsevier.

BC Centre for Disease Control. (2014). *Guidelines for the management of Community-associated Methicillin-Resistant Staphylococcus aureus (CA-MRSA)-related skin and soft tissue infections in primary care*. Vancouver, BC: Author. Retrieved from http://www.bccdc.ca/NR/rdonlyres/C85DFF3A-DB43-49D6-AEC7-2C1AFD10CD69/0/MRSAguidelineFINALJuly7.pdf

Estes, M. E. Z. (2014). *Health assessment and physical examination* (5th ed.). Clifton Park, NY: Cengage Learning.

Goldstein, B. G., & Goldstein, A. O. (2015). Approach to dermatologic diagnosis. *UptoDate.* Retrieved from http://www.uptodate.com/contents/approach-to-dermatologic-diagnosis?source=search_result&search=skin+assessment&selectedTitle=1~150

Health Canada, First Nations and Inuit Health Branch. (2009, July). *Clinical practice guidelines for nurses in primary care: Adult care: Chapter 9: Skin*. Retrieved from http://www.hc-sc.gc.ca/fniah-spnia/services/nurs-infirm/clini/adult/skin-peau-eng.php

Jarvis, C. (2014). *Physical examination and health assessment* (2nd Canadian ed.). Toronto, ON: Elsevier Canada.

Leblond, R. F., DeGowin, R. L., & Brown, D. D. (2009). *DeGowin's diagnostic examination* (9th ed.). New York, NY: McGraw-Hill Medical.

MacNeal, R. J. (2013). Description of skin lesions. Kenilworth, NJ: Merck & Co. Retrieved from http://www.merckmanuals.com/professional/dermatologic-disorders/approach-to-the-dermatologic-patient/description-of-skin-lesions

Stephen, T. C., Skillen, D. L., Day, R. A., & Bickley L. S. (2010). *Canadian Bates' guide to health assessment for nurses.* Philadelphia, PA: Lippincott, Williams & Wilkins.

Swetter, S. & Geller, A. C. (2015). Clinical features and diagnosis of cutaneous melanoma. Retrieved from http://www.uptodate.com/contents/clinical-features-and-diagnosis-of-cutaneous-melanoma?source=search_result&search=clinical+features+melanoma&selectedTitle=1~150