Diabetic Foot Screening Tool Instructions for Use

General Guidelines: The Diabetic Foot Screening Tool has been designed to assist clinicians in conducting foot screening for individuals living with diabetes. Screening provides opportunity for early identification, education, and prompt treatment of foot complications reducing risk and incidence of foot ulcers and amputations. Basic Diabetic Foot Screening may be performed by any RN or LPN with training and demonstration of skill. The initial screen should be completed on any individual living with diabetes and then repeated as directed by identified risk level and clinical judgment. A flow chart indicating *Risk Level and Recommended Follow up* can be found on the Diabetic Screening Tool.

Specific Instructions:

Step 1: Explain the Diabetic Foot Screening Tool to the patient and have them remove their shoes and socks from both feet.
Step 2: Remove any dressings or devices that impair screening.
Step 3: Review each of the parameters, for each foot, as listed on the screen and select the appropriate score based on the patient's status. Individuals with a history of lower limb amputation are automatically classified as *Stable High*!
Step 4: Once the screen is completed determine care recommendations based on patient need, available resources and clinical judgment.
Step 5: Use the flow chart to determine risk level and recommended follow-up. Provide and review associated patient education material.
Step 6: Arrange an appointment for repeat screening based on risk level and clinical judgment.

Reminder:

Strategies for the prevention and management of diabetic foot ulcers need to consider more than just the results of the Diabetic Foot Screening Tool. It is important that individuals living with diabetes receive holistic assessment and education based on current recommended best practice guidelines and targets encompassing factors such as blood glucose, blood pressure, and cholesterol monitoring, smoking cessation, exercise, and diet. Persons with diabetes who are cognitively impaired or have diseases such as end-stage renal disease are at higher risk and may require more frequent screening than indicated.

Persons with cellulitis, draining ulcers, gangrene, cold white painful foot, or part thereof require immediate assessment and treatment and should be sent to the nearest Emergency Department.

For more information on the assessment and management of the diabetic foot refer to:

1. Wound Canada *Best Practice Recommendations for the Prevention and Management of Diabetic Foot Ulcers at www.woundscanada.ca*
2. *RNAO Best Practice Guideline Reducing Foot Complications for Persons with Diabetes* at www.rnao.org
3. *RNAO Best Practice Guideline Assessment and Management of Foot Ulcers for People with Diabetes* at www.rnao.org
4. *The International Working Group on the Diabetic Foot* at www.iwgdf.org
5. *Foot Care: A Step Toward Good Health at* https://guidelines.diabetes.ca/docs/patient-resources/foot-care.pdf

Parameters	Indicates/risk of:
	Self-Care Parameters:
1, 2, 4	Self-care deficit
	Integument Parameters:
4, 7	Callous formation
1, 6, 12	Infected ulcer
2, 6, 12	Infected nails
	Arterial Flow Parameters:
5, 10, 11	Peripheral arterial disease
	Sensation Parameters:
8, 9	Loss of protective sensation or neuropathy
	Boney Changes Parameters:
3, 8, 9	Charcot

Parameter Review

1. Skin
Assess the skin on the foot: top, bottom and sides including between the toes.

0 = skin is intact and has no signs of trauma. No signs of fungus or callus formation

1 = skin is dry, fungus such as a moccasin foot or interdigital yeast may be present. Some callus build-up may be noted

2 = heavy callus build-up

3 = Ulceration or history of ulceration

2. Nails
Assess toenails to determine how well they are being managed either by the patient or professionally.

0 = nails well-kept

1 = nails unkempt and ragged

2 = nails thick, damaged or infected

3. Deformity
Look for any bony changes that can put the patient at significant risk

0 = no deformity detected

2 = may have some mild deformities such as dropped metatarsal heads (MTHs) the bones under the fat pads on the ball of the foot). Each MTH corresponds to the toe distal to it, so there is a 1st MTH at the base of the first toe, etc. Bunions/Charcot may also be considered a deformity as well as deformities related to trauma.

4 = Amputation

4. Footwear
Look at the shoes that the patient is wearing and discuss what he or she normally wears.

0 = shoes provide protection, support and fit the foot. On removal of the footwear there are no reddened areas on the foot.

1 = shoes are inappropriate do not provide protection or support for the foot.

2 = shoes are causing trauma (redness or ulceration) to the foot either through a poor fit or a poor style (eg. cowboy boots).

5. Temperature - cold
Does the foot feel colder than the other foot or is it colder than it should be considering the environment? This can be indicative of arterial disease.

0 = foot is of "normal" temperature for environment.

1 = foot is cold – compared to other foot or compared to the environment.

6. Temperature - hot
Does the foot feel hotter than the other foot or is it hotter than it should be considering the environment? This can be indicative of an infection or Charcot changes.

1 = foot is hot – compared to other foot or compared to the environment.

0 = foot is of "normal" temperature for environment.

7. Range of Motion
Move the first toe back and forth – plantar flex and dorsilflex.

0 = first toe (hallux) is easily moved

1 = hallux has some restricted movement

2 = hallux is rigid and cannot be moved

3 = hallux amputated

8. Sensation – Monofilament testing
Using the 5.07 (10g) monofilament, test the sites listed. Do not test over heavy callus.

- digits: 1st, 3rd, 5th
- MTH: 1st, 3rd, 5th
- midfoot: Medial, Lateral
- heel
- top (dorsum) of foot

And then score out of 10:

0 = 10 out of 10 sites detected

2 = 7 to 9 out of 10 sites detected

4 = 0 to 6 out of 10 sites detected

9. Sensation – Questions
Ask the following four questions:

i. Are your feet ever numb?

ii. Do they ever tingle?

iii. Do they ever burn?

iv. Do they ever feel like insects are crawling on them?

0 = answered No to all four questions.

2 = answered Yes to one or more of the four questions

10. Pedal pulses
Palpate (feel) the dorsalis pedis pulse located on the top of the foot. If unable to feel the pedal pulse feel for the posterior tibial pulse beneath the medial malleolus.

0 = pulse present

1 = pulse absent

11. Dependent Rubor
Pronounced redness of the feet when the feet are down and pallor when the feet are elevated. This can be indicative of arterial disease.

0 = no dependent rubor

1 = dependent rubor present

12. Erythema
Look for redness of the skin that does not change when the foot is elevated. This can be indicative of infection or Charcot changes.

0 = no redness of the skin

1 = redness noted

Adapted from Inlow S. A 60 Second Foot Exam for people with diabetes. Wound Care Canada. 2004;2(2):10-11.