The Elderly Client with Diabetes

A Toolkit for Assessment and Action when previous self-management skills are failing

Coordinated and Written by: Lisa Herlehy, RN

Certified Diabetes Educator

RNAO

THE OTTAWA HOSPITAL
L'HÔPITAL D'OTTAWA

uOttawa

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Planning for Care when Previous Self-Management Skills are Failing.

A Toolkit for Assessment and Action

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The Elderly Client with Diabetes

Putting a name to what's "Different"

Assessment- Is it diabetes, illness and/or delirium, dementia or depression?

Watch for Caution Flags

- Changes in glycemic control: lows, highs and erratic blood glucose
- Frequent ER/GP visits or telephone calls
- Medication mix ups
- Family concerns
- Falls and 'accidents' (burns, scrapes, driving tickets)
- All things 'lost' – appetite, weight, objects, words
- Sleeping more/sleeping less
- Changes in mood, personality or appearance
- Changes in relationships/decreased social interaction
- Communication clarity, looking to others to answer

Ask yourself what might have precipitated these?

- Change in medications
- Change in visual acuity/auditory perception
- Recent trauma, loss in the family, change in living situation
- Change in in renal/hepatic function
- Change in alcohol intake
- New medical diagnosis/surgery, unstable medical condition (p. 10)
- Pain

What do I do now? (see page 11)

- Hypoglycemia/hyperglycemia or acute illness does not seem to be the immediate problem
- You still need to rule out delirium, dementia and depression
- Use CAM, Dementia Quick Screen and SIGECAPS or similar screening tools to assess cognition (pp. 10-13)

Diabetes and My Elderly Client

Assessing and treating dysglycemia

	Hyperglycemia	Hypoglycemia
Definition	A pattern of fasting blood glucose (FBG) ≥ 7 mmol/l or random blood glucose (RBG) ≥ 11.1 mmol/l 2 hours after eating.	BG level < 4 mmol/l at any time
Signs and symptoms	Classic signs are not always so obvious in the elderly who may have less polydipsia/polyuria/ polyphagia (the classic 'P's of diabetes). Watch for recurrent infections, fatigue, weight change, blurred vision, dehydration, glycosuria/ketones and TEST blood glucose! Very high blood glucose interferes with memory and problem solving.	Classic early signs of anxiety, hunger, nausea, tingling, palpitations, trembling and sweating are not always obvious in the elderly. Watch for unsteadiness, poor coordination, blurred/double vision, slurred speech, irritability (more on hypoglycemia on page 9).
Consider causes	Change in diet/exercise, illness, stress, depression, medication non-adherence, worsening diabetes. Diabetes is a naturally progressive condition.	Tight glycemic control, cognitive impairment, complex medication regimens, progressive hepatic/renal impairment, increased physical activity, poor nutrition, recent hospitalization, sedatives, sulfonylureas (particularly glyburide) or insulin
Consider treatment	Encourage fluids, increase glucose checks when sick, provide contact numbers and specific instructions when to call health care provider, consider medication adjustment	Check blood glucose if able, when in doubt *treat immediately* with 15 grams of carbohydrate, wait 15 minutes and retest if able. Prevention is always the best treatment. Consider the cause and address it. Review treatment, signs and symptoms with client and family.

Did you know?

- Beta blockers can mask the symptoms of hypoglycemia
- Hypoglycemia "unawareness" increases with both duration of diabetes and age
- In the elderly glycemic targets should be set with safety, complication risk, quality of life and patient preferences in mind

Self-Management Tips

Consider the meter

- large display/bold numbers
- easy to hold
- auto feed strips with no coding

Ma**ke it easy!** – Promote self-management through simple insulin/medication and blood glucose monitoring routine, frequent contact (health status can deteriorate rapidly), and use adaptive devices such as medication dosing units.

Make it effective! – Consider principals of adult learning when teaching new skills and involve family members. Use open ended questions to assess understanding. Consider literacy, attitudes, patient priorities, ethnicity, level of disability and health beliefs when teaching your patient. Make sure they actually want to learn and re-evaluate on another day - short term memory can be impaired.

Consider the Insulin

- make it as simple as possible and avoid sliding scale
- pre-filled syringes/disposable pens
- use a magnifying glass
- involve family/caregivers
- refer to community care as needed

Consider oral medications

- bring all pills to all appointments and discuss what they are for
- use alarms, memory tricks, dosettes
- involve family/caregivers
- consider combination pills
- refer to a pharmacist
- refer to community care as needed

Make it comprehensive! - Help prevent complications by encouraging your client to stay fit and engaged. Include social supports: Church, family and friends. Know your community resources! – Senior's centres, foot care clinics, exercise programs. Support systems play a vital role in self-management.

Did you know?

- There are many devices for blood glucose testing and medication delivery designed with vision/dexterity and memory concerns in mind
- A simpler routine for the elderly leads to more success with self management
- When caring for older persons living with diabetes it is not possible to separate health from social services

Preventing Complications

My Assessment Counts

According to the International Diabetes Federation at initial assessment all older people with diabetes should have a:

- ☑ Basic assessment of walking and activities of daily living abilities including the use of walking aids and special footwear, and a history taken enquiring about falls.
- ☑ History taken of any recent memory problems.
- ☑ Nutritional evaluation using a recognized assessment tool (including finances, ability, dentition, habits and preferences, changes in hunger and thirst)
- ☑ Cardiovascular risk assessment and review/ discussion of modifiable risk factors including smoking cessation.

Make sure to have documented at least annually...

- ✦ weight and height
- ✦ blood pressure
- ✦ falls risk assessment
- ✦ assessment for foot and eye problems
- ✦ eGFR and urine albumin and lipid profile

Postural Hypotension

Postural hypotension increases with

- deconditioning
- dehydration
- drugs
- dysfunctional heart
- autonomic dysfunction
- diabetes

Don't forget to measure...

Practice Point!

- Executive function involves the ability to think abstractly and to plan, initiate, sequence, monitor and stop complex behaviour. Hyper and hypoglycemia, aging and cognitive impairment all play a role.
- Remember that things can change quickly for your elderly patient - be alert for subtle changes

My Client is Living with Diabetes and Dementia. Now what?

Tips for rethinking diabetes self-management...

- Advocate for appropriate glycemic targets, consider safest medication and safest way to administer
  - insulin change/safer method medication delivery
  - CCAC support/home assessment
  - discuss relocation
  - involve family
  - more frequent contact
- Work with your patient's strengths and retained abilities
- Advocate for appropriate referrals to local agencies
  - Alzheimer's society
  - Regional geriatric program
  - Falls prevention program
  - Community geriatric psychiatry
- Think safety, prevention complications and quality of life - It is still possible to consider patient preferences
- Support the caregivers
- Remind patients to remove shoes and socks at every visit - Ensure has plan for foot care

Did you know?

- To effectively self-manage diabetes intact cognition is required. Even with mild cognitive impairment your patient may rapidly loose control of his/her diabetes. This is called the *Dementia Domino Effect*.

Confusion Assessment Method, Dementia Quick Screen, SIGECAPs

What are they, really?

Screening tools designed for quick and easy use to provide you with enough information to know that further assessment is warranted. Diagnosis for any condition requires referral and a comprehensive medical review.

1. Confusion Assessment Method (CAM) Instrument – A Screening Tool for Delirium

✦*delirium – acute confusional state lasting hours to a few weeks*

Consider possible causes: Hydration, infection, changes in pain, chronic illness, alcohol, drug toxicity, elimination, new disease, psychosocial causes, changes in environment (Bugs, drugs, disease)

Remember

- Delirium occurs for a variety of reasons but most often associated with dementia. It can be a medical emergency

2. Dementia Quick Screen – A Screening Tool for Cognitive Impairment

✦ *mild cognitive impairment (MCI) - a condition of cognitive deterioration that is more pronounced than expected for age, but clearly not as severe as in dementia*

Remember

- Early and continuous education and counselling increases coping skills to tackle challenges throughout the progression of dementia

3. SIGECAPS – A Screening Tool for Depression

✦ *depression - a medical illness in which a person has persistent feelings of sadness, often with discouragement and lack of self worth*

Remember

- Depression in the elderly is common, but is often not recognized or treated. It is associated with poor glycemic control, increased diabetes complications, impaired ability to manage diabetes and poorer quality of life. Suicide is 5/x more likely in people over the age of 60 than in younger populations

Did you know?

The use of simple screening tools

- allows you to quantify and articulate your concerns to better advocate for your patient
- helps direct care
- provides you with a baseline assessment

Assessing for Unstable Medical Illness

Unstable illness should not be overlooked

CONSIDER:

- Remember your cardiac and stroke assessment and that signs and symptoms may differ in the elderly
- Signs and symptoms of infection such as fever and pain may not be present for your elderly patient
- Observe for signs and symptoms of trauma resulting from falls, injury or abuse
- Don't forget to ask about constipation

IF THERE ARE CONCERNS:

- Refer for urgent care if necessary
- Discuss with your physician or nurse practitioner

Did you know?

- Both aging and diabetes increase the risk for silent MI
- The best strategy to prevent illness is to identify risk factors and correct as many as possible

More on Hypoglycemia from the Canadian Diabetes Association

Hypoglycemia is defined by:

1. the development of autonomic or neuroglycopenic symptoms (Table 1)
2. a low plasma glucose (PG) level (<4.0 mmol/L for patients treated with insulin or an insulin secretagogue)
3. symptoms responding to the administration of carbohydrate (see "Treatment" below).The severity of hypoglycemia is defined by clinical manifestations (Table 2)

Table 1. Symptoms of hypoglycemia	
Neurogenic (autonomic)*	**Neuroglycopenic**
Trembling	Difficulty concentrating
Palpitations	Confusion
Sweating	Weakness
Anxiety	Drowsiness
Hunger	Vision changes
Nausea	Difficulty speaking
Tingling	Headache
	Dizziness

Table 2. Severity of hypoglycemia	
Mild	Autonomic symptoms are present.The individual is able to self-treat.
Moderate	Autonomic and neuroglycopenic symptoms are present.The individual is able to self-treat.
Severe	Individual requires assistance of another person. Unconsciousness may occur. PG is typically <2.8 mmol/L.

Treatment: Examples of 15g of carbohydrate for the treatment of mild to moderate hypoglycemia

- 15g of glucose in the form of glucose tablets
- 15 mL (3 teaspoons) or 3 packets of table sugar dissolved in water
- 175 mL (3/4 cup) of juice or regular soft drink
- 6 Life Savers (1=2.5 g of carbohydrate)
- 15 mL (1 tablespoon) of honey

*Remember

- Autonomic neuropathy increases with age and diabetes - your older client may be unaware of hypoglycemia until it is moderate. And he/she may have difficulty sequencing the treatment thus putting him/her at greater risk for severe hypoglycemia

Confusion Assessment Method (CAM) Instrument – A Screening Tool for Delirium

Name: _____ Practitioner: _____

DOB: _____ Date: _____

	Confusion Assessment Method Instrument (CAM)	
	The diagnosis of delirium by CAMI requires the presence of features 1 and 2 + either 3 or 4 Indicate number of categories observed. 1 ___ 2 ___ 3___ 4 ___	
Must have *both*	1. Abrupt onset/ fluctuating course	___ Is there evidence of an acute change in mental status from my patient's usual behaviour?
		___ Does the (abnormal) behaviour fluctuate during the day. Does it come and go? Become more/less serve?
	2. Inattention	**Does my patient:**
		___ have difficulty focusing attention?
		___ become easily distracted?
		___ have difficulty following a conversation?
Must have *either* or *both*	3. Disorganized thinking	**Is my patient's thinking:**
		___ disorganized
		___ incoherent
		Does my patient have:
		___ rambling speech
		___ illogical flow of ideas
		___ unpredictable topic changes
	4. Altered level of consciousness (alert is normal)	**I would rate my patients level of consciousness as:**
		___ vigilant (hyper alert), oversensitive to stimuli, easily startled
		___ lethargic (drowsy but easily roused)
		___ stuporous (difficult to arouse)
		___ comatose (impossible to arouse)

Score:

Comments/Plan of Care:_____

_____

Dementia Quick Screen – A Screening Tool for Cognitive Impairment

Name: _____ Practitioner: _____

DOB: _____ Date: _____

1. **Three-Word Recall**

   Ask your patient to repeat and remember three words that you will ask them to recall in a couple of minutes. (example: yellow, table, house)

   Score ____ Normal (recalls 2 or 3 words), Abnormal (recalls 0 or 1 word)

2. **Animal Name Generation**

   Ask the patient to name as many animals as he/she can think of in one minute.

   _____

   _____

   Score ____ Normal (>12), Abnormal (<12)

3. **Clock drawing**

   Ask your patient to draw a clock including all the numbers and the hands drawn so the time shows 10 minutes past 11.

   Normal = correct number/hand placement or only minor spacing problems

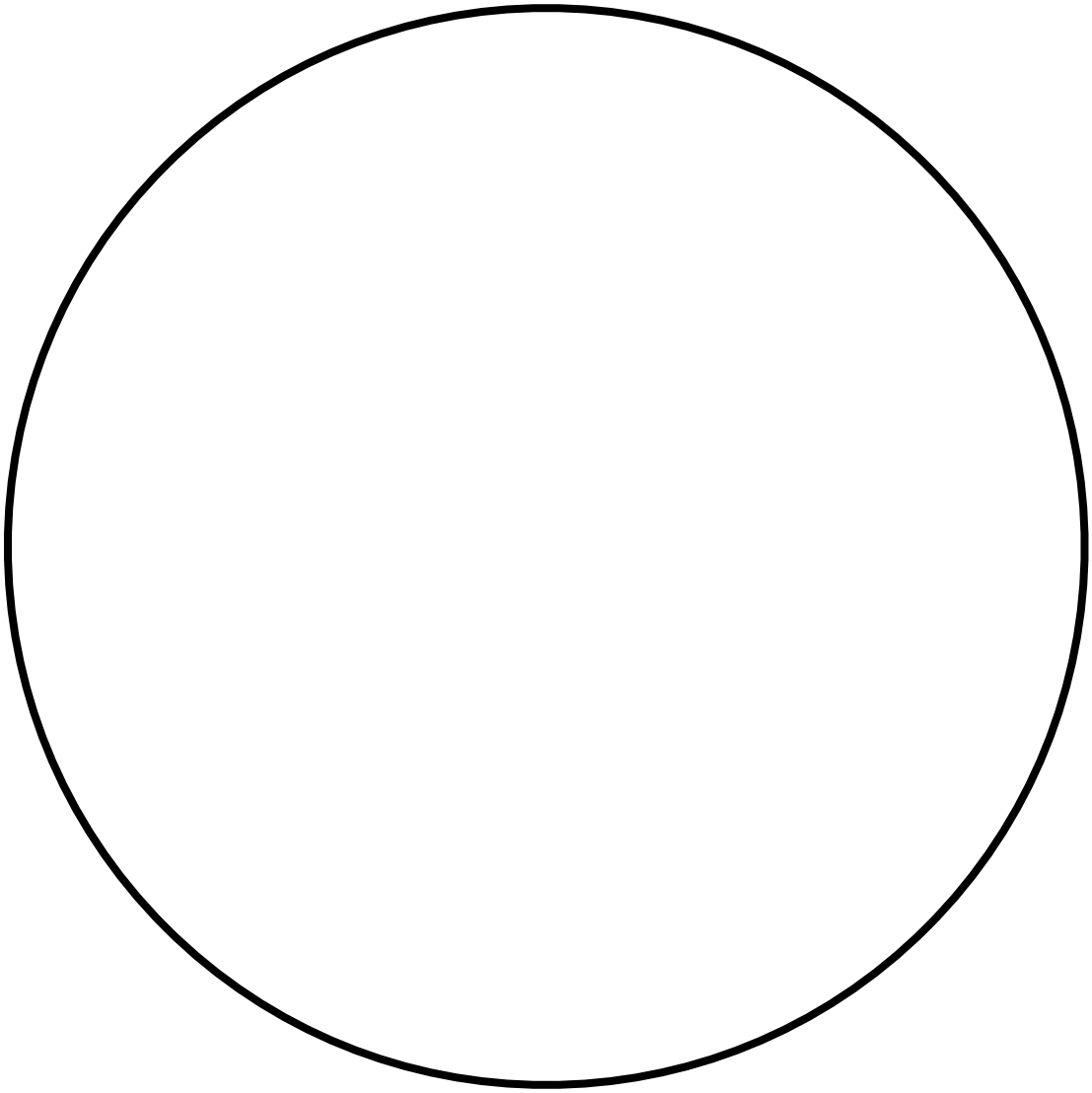
   Abnormal = Incorrect number/hand placement

If any results are abnormal: Possible cognitive impairment: refer for further cognitive evaluation.

Notes/Care Plan: _____

_____

Clock Drawing



SIGECAPS – A Screening Tool for Depression

Name: _____ Practitioner: _____

DOB: _____ Date: _____

Must have depressed mood (or loss of interest) and at least 4 other symptoms, most of the time, most days, for at least 2 weeks.

S	sleep disturbance (insomnia, hypersomnia)
I	interest reduced (reduced pleasure or enjoyment)
G	guilt and self-blame
E	energy loss and fatigue
C	concentration problems
A	appetite changes (low appetite/weight loss or increased appetite/weight gain)
P	psychomotor changes (retardation, agitation)
S	suicidal thoughts

Suspect depression? – ASSESS SUICIDE RISK

1. Have you been feeling so sad lately that you were thinking about death or dying?
2. Have you had thoughts that life is not worth living?
3. Have you been thinking about harming yourself? If there is no plan, activate social support network and have patient follow with his/her GP

No Plan?

Activate social support network and refer for further assessment.

Note: You might also use the Geriatric Depression Scale (GDS). Use the Cornell Scale for Depression when your patient is already diagnosed with dementia.

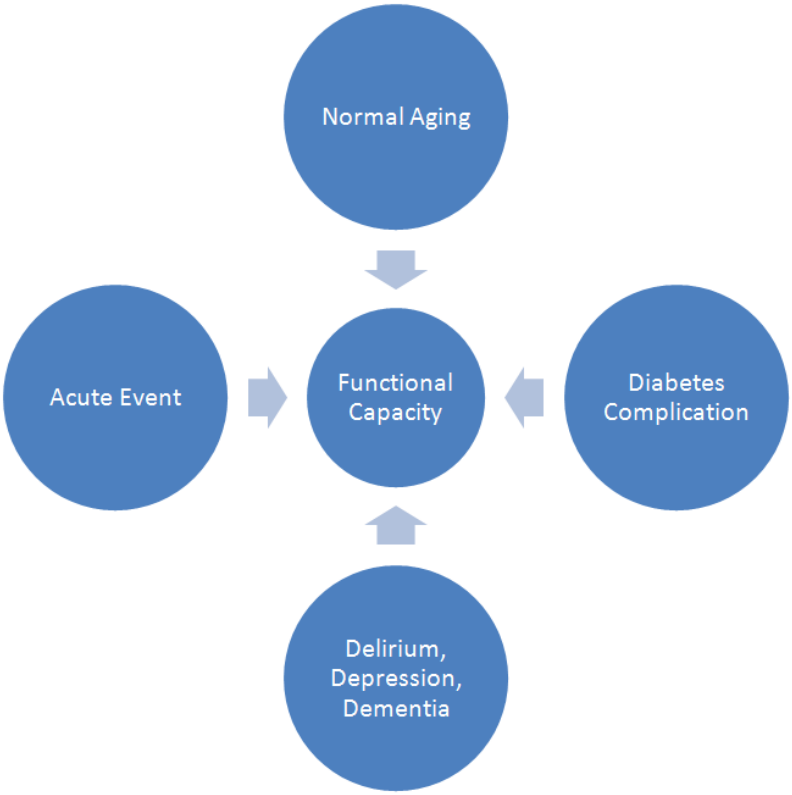
Notes/Plan of Care: _____

_____

_____

My elderly patient is 'different from his/her usual self…'

What might be the problem?



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