شركة الصحة القابضة
Health Holding Company
North Business Unit

Model of Care
Chronic Care

Diabetes - Continuing Care

This clinical sub-pathway is part of the system level Diabetes pathway and it focuses on the continuing care of diabetes. This pathway provides information about the regular monitoring of patients with type 1 and 2 diabetes.

COVID-19 note

Clinics are advised to follow the KSA Diabetes Society's guidelines for managing diabetic patients at the PHC during the COVID pandemic. Good glycaemic control with HbA1c below 7.0% (53 mmol/mol) is usually associated with better immune function and may reduce risk of severe illness with COVID-19. Use Wasfati app to prescribe patients' medication for up to 3 months after which the patient will need to schedule an appointment.

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Assessment

1. Take a history, looking particularly at:
   - Diet and physical activity
   - Cardiovascular risk factors e.g. smoking
   - Medication review and compliance
   - Hypoglycaemia
   - Psychosocial and other medical problems
   - Any previous admissions for diabetes related incidents

2. Examination:
   - Measure blood pressure, weight, BMI (at each visit, minimum of every year)
   - Check patient for insulin resistance (at each visit, minimum of every year)
   - Check feet (If known to be high risk, increase frequency, see Foot Disease in Diabetes pathway):

3. Investigations:
   - Arrange tests if available in primary care. If the tests are not available in primary care level, refer to the diabetic centre or central lab
   - HbA1c monitoring:
   - Lipid monitoring:
   - Creatinine and electrolytes, at least once per year
   - Urine albumin to creatinine ratio (ACR), at least once per year or as per renal screening guidelines
   - ECG is not recommended routinely by local experts because of low sensitivity and specificity for IHD in asymptomatic patients. Consider in patients with known or suspected IHD or to detect LVH in patients with hypertension
   - Chest x-ray is not recommended routinely by local experts

4. Identify any high needs and high-risk patients to enable more intensive intervention:

Management

1. Provide individualised advice about diabetes and lifestyle modification:
   - Healthy eating:
   - Increased physical activity:
   - Weight reduction:
   - If other obesity management interventions fail, consider referral for bariatric surgery if criteria are met

2. Reduce cardiovascular risk factors as cardiovascular disease is the major cause of death and disability in patients with diabetes:
   - Calculate the individual cardiovascular risk for the patient
   - Provide smoking cessation advice
   - Target blood pressure to either < 140/90 or < 130/80 if microalbuminuria, nephropathy, existing ASCVD (coronary heart diseases and cerebrovascular diseases) or 10 year ASCVD risk ≥15%
   - Target lipid values:
   - Recommend 100 mg aspirin daily if cardiovascular disease
   - Consider the use of statin, ACE inhibitor, or angiotensin-II receptor antagonist

3. Discuss current diabetes control by reviewing HbA1c:
   - Review HbA1c target. Use this chart to help determine glycaemic target:
   - If glycaemic control is inadequate, consider blood glucose testing to provide more information Glycaemic target:
   - Blood glucose testing:

Management

4 Review current medications. If inadequate glycaemic control, consider additional oral medications or starting insulin early:

- Check compliance and side-effects
- Oral medications
- Insulin

5 Screen, identify early, and treat diabetic complications:

- Foot disease in diabetes
- Renal disease screening
- Refer patient to ophthalmology centre for retinal screening

6 Other considerations.

- Managing insulin when sick
- Depression:
- Sleep disorders
- Erectile dysfunction:
- Early future planning. This may be part of an advance care plan
- Annual flu vaccination

Request

- Request diabetes physician assessment if:
  - Marked or symptomatic hyperglycaemia not responding to current therapy
  - Recurrent hypoglycaemia
  - Persistent suboptimal control, despite apparently optimised management
  - Diabetes self-management education and support
  - Erectile dysfunction requiring sildenafil
- Request ophthalmology centre assessment for:
  - Annual assessment and retinal photography
    - If retinopathy is diagnosed the patient will be referred to an ophthalmologist
- Request mental health assessment for patients with diabetes (page 101):
  - Refer patients diagnosed with depression anxiety or eating disorders to mental health professionals who are either part of the diabetes team or are in the community
  - Refer to a service offering CBT- based techniques including stress management strategies and coping skills training
- For dietary and lifestyle modifications, refer to health coach
- Request a nephrologist assessment (page 59) if:
  - A chronic, progressive loss of kidney function, if the eGFR is <30 mL/minute
  - If the ACR is persistently >60 mg/mmol
  - Or if the individual is unable to achieve BP targets or remain on renal-protective therapies due to adverse effects, such as hyperkalaemia
  - A >30% increase in serum creatinine within 3 months of starting an ACE inhibitor or RRBs

Information

For health professionals

- Ministry of Health:
  - National Reference of Clinical Guidelines For Care of Diabetic Patients in Primary Health Care (2014)
  - MOH Formulary
  - American Diabetes Association Guidelines

For patients

- Information for patients on:
  - Eating
  - Cooking
  - Healthy Foods
  - Physical Activity
  - Diabetes Self Care (all diabetic patients)
  - Diabetes Self Care (adults in hospital)
  - Healthy nutrition and diet guide (SFDA)
  - Nutrition Card (SFDA)
  - Healthy Saudi Dish (SFDA)
  - Shopping Guide
- Ministry of Health Patient Information Website:
  - Chronic Diseases: Diabetes
  - Managing Diabetes while being ill
  - Healthy Lifestyle
  - Healthy Eating
  - Physical Activity
- Ministry of Health Documents on:
  - Diabetes
  - Type 1 Diabetes
  - Type 2 Diabetes
  - Type 2 Diabetes Medication

On HealthInfo

- HealthInfo – Diabetes
- Managing Insulin When you are Sick

Acknowledgments

A special thank you to the following team members for their help and dedication in making this document a reality.

From Hail

- Dr. Khalil Alshammari
- Hind Alobaid
- Dr. Mashari Aljamaani
- Dr. Alshafei Abdel aziz Ladhin
- Faiza saleh alaboush
- Dr. Marwa Mahmoud Hosny Mahdy
- Maram Saleh Alshammari

From Jouf

- Dr. Ahmad Almuayqil
- Dr. Oussama Alsobyhy
- Lama Mohammed Albarrak
- Abdulaziz Khalaf Alfuhegy
- Alex A. Adelosy
- Asma Lotfy Sasi
- Dr. Ibrahim Ramadan
- Igbal Abdel Rahim Mukhtar
- Mohanad Abdullah Aldaly
- Naglaa Mohamed Ahmed

From Northern Borders

- Dr. Mansour Azmi
- Eng. Mejwel Alenazi
- Zeid Akshan
- Mohamed Alenazi
- Hamida Alenazi
- Dr. Ahmed Ismail
- Eshraq Aldhubyan
- Dr. Hesham Nasef
- Manal Saeed Alenezi
- Manal Saad
- Maryam Mukatel
- Dr. Mohamed Eyhab
- Omar Faleh
- Dr. Rawan Abed Alharbi
- Dr. Yasser Awad

From Qurayyat

- Dhaher Al Anazi
- Ali Monawer Alanzi
- Dr. Reda Mahmoud Alshenawy
- Majid Alanzi
- Hooria Alanazi
- Faleh za'al Alanezi
- Adel Zaki Al Sharari
- Dr. Ahmed Maashy Guribaan Alabdely
- Dr. Ali Shaban
- Fahdah Aziz Al Rowili
- Dr. Fatima Sabry Jaddahllah
- Dr. Jehan Yousif Gally
- Dr. Maha AbdulRahman
- Mona Eyada Al Enazi
- Dr.Mutaz Mustafa Abdullah
- Nada Salem Alazmi
- Wjdan Taleb Alanazi

From Tabouk

- Dr. Hayaza'a Alshehri
- Dr. Nada Saleh Albalawi
- Hayfaa Alsubhi
- Saad Alzahrani
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- Nourah Saad ALJowhri
- Eng. Salih Alhowaiti
- Waleed Abdullal Ettai


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