Diabetes Care and Management (DCM)

Intent of the annexure:

A diabetes clinic (including diabetes centre) is a specialized allopathic clinic dedicated to the prevention, assessment, diagnosis, consultation, prescription, care, education, treatment, counselling and management of diabetes and its complications. These clinics focus on delivering patient-centered, evidence-based outpatient care while adhering to national standards/guidelines such as ICMR, MoHFW, NABH, NP-NCD, and RSSDI guidelines. The clinics/centres emphasize quality improvement, patient education, and digital integration for superior healthcare outcomes and are supported by one or more trained general practitioners/specialist doctors/super-specialist doctors.

NABH has accreditation standards for Allopathic Clinics. Diabetes Clinics must adhere to the NABH Allopathic Clinic standards in addition to the Diabetes Care & Management standards mentioned here. The NABH Allopathic Clinic standards are not repeated here for simplicity. This annexure only defines the incremental requirements for providing diabetes care and management at the diabetes clinics.

Note: All Objective Elements with requirement of written guidelines/documentation have been marked with "*".

The diabetes care shall be provided in a safe and patient-centered manner. The assessment and monitoring requirements as per the patient's clinical needs and diabetes care guidelines shall be adhered to. Procedures shall be performed after informed consent of the patient or their designated representative. Nursing care shall be provided as per the established protocols to ensure consistent quality care. The diabetes care should be provided with adequate infection prevention activities. Key performance indicators shall be used to improve the quality of care of the patients undergoing diabetes care at the clinic.

ABBREVIATIONS

BMI	Body Mass Index
BP	Blood Pressure
CGM	Continuous Glucose Monitoring
CMS	Clinic Management System
DSME	Diabetes Self-Management Education
ICMR	Indian Council of Medical Research
MoHFW	Ministry of Health and Family Welfare
NGSP	National Glycohemoglobin Standardization Program
NP-NCD	National Program for Prevention and Control of Non-communicable Diseases
RSSDI	Research Society for the Study of Diabetes in India

ABBREVIATIONS

SMBG	Self-Monitoring Blood Glucose
SMS	Short Message Service
SOP	Standard Operating Procedure

SUMMARY OF STANDARDS

DCM.1	The clinic provides safe diabetes care services

	Standard	Objective Elements	Core	Commitment	Achievement	Excellence
DCM	1	15	5	6	3	1

Objective Element	DCM.1
a.	Core
b.	Achievement
c.	Core
d.	Core
e.	Core
f.	Core
g.	Commitment
h.	Commitment
i.	Commitment
j.	Commitment
k.	Commitment
l.	Achievement
m.	Commitment
n.	Achievement
o.	Excellence

Standard

DCM.1	The clinic provides safe diabetes care services

Objective Elements

CORE	a. The diabetes clinic uses point of care testing and other devices in planning clinical care. **Interpretation:** The diabetes clinic shall use point of care testing and other devices in planning clinical care. As specified in the guidelines issued by MoHFW, the clinic shall have glucose meter, monofilament, tuning fork, knee hammer, weighing machine, BP apparatus, thermometer, stethoscope, and measuring tape. In addition, the clinic could also have NGSP certified HbA1c meter, Haemoglobin meter, fundus camera, and biothesiometer (in place of monofilament, tuning fork, and knee hammer).
Achievement	b. The diabetes clinic screens individuals for pre-diabetes and undiagnosed diabetes to enable early detection and intervention* **Interpretation:** The diabetes clinic shall establish written protocols/SOPs for screening of undiagnosed diabetes and prediabetes by the clinic. The clinic may follow any of the following guidelines for screening: • ICMR Guidelines for Management of Type 2 Diabetes • Standard Treatment Guidelines Endocrinology by MoHFW • RSSDI Clinical Practice Recommendations for the Management of Type 2 Diabetes Mellitus The clinic shall screen individuals above 30 years of age. The age of individuals to screen could be reduced for individuals who present one or more of the below risk factors: • individuals with history of hypertension or on treatment for hypertension • individuals with family history of diabetes • overweight/obese (BMI ≥ 23 kg/m2) or have increased waist circumference (>90 cm males, >80 cm females) • individuals with history of dyslipidaemia • individuals with sedentary physical activity • individuals with history of gestational diabetes or microsomia • individuals with history of cardiovascular diseases • individuals with polycystic ovary syndrome and/or acanthosis nigricans • individuals presenting to healthcare settings for an unrelated illness • individuals under Antenatal care • overweight children and adolescents at the onset of puberty
CORE	c. The diabetes clinic refers patients for screening of micro-vascular and macro-vascular complications to prevent long-term adverse outcomes* **Interpretation:** The diabetes clinic shall shall establish written protocols/SOPs to recommend and refer patients for periodic screening of micro-vascular (retinopathy, nephropathy, neuropathy etc) and macro-vascular complications (cardiovascular, cerebrovascular, peripheral vascular disease etc), dental decay etc to prevent long-term adverse outcomes.

	Examples guidelines on screening of complications are given in: • ICMR Guidelines for Management of Type 1 Diabetes • ICMR Guidelines for Management of Type 2 Diabetes • RSSDI Clinical Practice Recommendations for the Management of Type 2 Diabetes Mellitus • Diabetic retinopathy screening guidelines for Physicians in India • Management of periodontal disease in patients with diabetes
CORE	d. The diabetes clinic educates patients and caregivers to prevent, recognize, and manage hypoglycaemic episodes effectively* **Interpretation:** The diabetes clinic shall prepare written protocols/SOPs and list of handouts as per national guidelines for patients and their caregivers in local language to educate them to prevent, recognize, and manage hypoglycaemic episodes. The handouts / educational material for patients and their caregivers should be distributed to patients and their caregivers. The information can be shared in oral, written, print, digital, audio, video, or other online/offline formats. Example guidelines on training and management of hypoglycaemia are given in: • ICMR Guidelines for Management of Type 1 Diabetes • ICMR Guidelines for Management of Type 2 Diabetes • ICMR Standard Treatment Workflow for Type 1 Diabetes • ICMR Standard Treatment Workflow for Type 2 Diabetes • RSSDI Clinical Practice Recommendations for the Management of Type 2 Diabetes Mellitus
CORE	e. The clinic promotes non-pharmacological management of diabetes. **Interpretation:** The diabetes clinic shall promote non-pharmacological management of diabetes through lifestyle changes over pharmacological management of diabetes, as per national guidelines. The promotion can be done by the clinic through handouts or social / electronic media as per national guidelines for patients and their caregivers in local language Non-pharmacological interventions should include • physical activity • exercise • weight loss • cessation of smoking • cessation of tobacco • moderating alcohol • stress management Example guidelines on non-pharmacological management of diabetes are given in: • ICMR Guidelines for Management of Type 1 Diabetes • ICMR Guidelines for Management of Type 2 Diabetes • Standard Treatment Guidelines Endocrinology by MoHFW • ICMR Standard Treatment Workflow for Type 1 Diabetes • ICMR Standard Treatment Workflow for Type 2 Diabetes • RSSDI Clinical Practice Recommendations for the Management of Type 2 Diabetes Mellitus

CORE	f. The diabetes clinic implements Diabetes Self-Management Education (DSME) programs * **Interpretation:** The diabetes clinic shall implement written protocols/SOPs for structured diabetes self-management education (DSME) programs as per national guidelines to improve patients and their caregivers competency in managing diabetes as per their cultural background, ethnicity, psychosocial status, medical history, family support, literacy, disability issues, financial situation, etc. The DSME programs will also empower patients and their caregivers with knowledge of Self-Monitoring Blood Glucose (SMBG), insulin and other injectable dosing, diet, and lifestyle modifications. Example guidelines on Diabetes Self-Management Education are given in: • ICMR Guidelines for Management of Type 1 Diabetes • ICMR Guidelines for Management of Type 2 Diabetes • Standard Treatment Guidelines Endocrinology by MoHFW • Standard Treatment Guidelines: The Diabetic Foot by MoHFW • ICMR Standard Treatment Workflow for Type 1 Diabetes • ICMR Standard Treatment Workflow for Type 2 Diabetes • RSSDI Clinical Practice Recommendations for the Management of Type 2 Diabetes Mellitus • RSSDI Expert Consensus for Optimal Glucose Monitoring in Diabetes Mellitus • RSSDI Guidelines for the management of hypertension in patients with diabetes mellitus The clinic shall provide patients and their caregivers education and awareness material in local language for: • adherence to treatment • lifestyle modifications • hypoglycaemia • insulin and other injectable therapies • foot care and pressure-relieving footwear • benefits of quitting tobacco chewing and smoking • abstain from alcohol consumption • sexual dysfunction due to diabetes • travelling with diabetes • fasting and diabetes • use of SMBG • use of CGM • diabetic specific nutritional counselling • meal planning and carbohydrate counting The education material could be provided in oral, written, print, digital, audio, video, or other online/offline formats.
Commitment	g. The diabetes clinic provides patient education material. **Interpretation**: The diabetes clinic should disseminate diabetes awareness and education related materials to patients and public which could be through digital channels such as SMS, instant messaging platforms, web portals, mobile apps, podcasts, videos, digital posters and pamphlets, emails, social media, digital displays, chatbots, and downloadable media via QR codes.

Commitment	h. The diabetes clinic ensures use of safe and effective insulin and other injectable medicine administration* **Interpretation:** Interpretation: The clinic shall use written protocols/SOPs for standardized initiation, titration, and dose adjustment for safe and effective insulin and other injectable medicine administration as per national guidelines. The clinic could refer following guidelines on insulin and injectable dose adjustment: • RSSDI consensus recommendations on insulin therapy in the management of diabetes • ICMR Guidelines for Management of Type 1 Diabetes • ICMR Guidelines for Management of Type 2 Diabetes • Standard Treatment Guidelines Endocrinology by MoHFW • RSSDI Clinical Practice Recommendations for the Management of Type 2 Diabetes Mellitus
Commitment	i. The diabetes clinic provides preconception counselling and ensures early screening, monitoring, and postpartum follow-up * **Interpretation:** The diabetes clinic shall use written care pathways/SOPs for preconception counselling, glycaemic monitoring, and postpartum follow-up for women living with diabetes including those with gestational diabetes to mitigate risks for both mother and child and to support safe maternal and foetal outcomes as per national guidelines. The clinic could refer following guidelines on pregnancy related counselling: • ICMR Guidelines for Management of Type 1 Diabetes • ICMR Guidelines for Management of Type 2 Diabetes • Standard Treatment Guidelines Endocrinology by MoHFW • ICMR Standard Treatment Workflow for Type 2 Diabetes • RSSDI Clinical Practice Recommendations for the Management of Type 2 Diabetes Mellitus
Commitment	j. The diabetes clinic recommends immunization for diabetic patients. **Interpretation:** The diabetes clinic shall recommend immunizations. The clinic could recommend vaccines such as influenza, pneumococcal, hepatitis vaccines, herpes, HPV, COVID-19, etc as per national guidelines. The clinic could refer following guidelines on vaccination: • Standard Treatment Guidelines Endocrinology by MoHFW • RSSDI Clinical Practice Recommendations for the Management of Type 2 Diabetes Mellitus
Commitment	k. The diabetes clinic defines, and measures diabetes care and management related Key Performance Indicators (KPIs)* **Interpretation:** The clinic shall define and measure Key Performance Indicators (KPIs). Important KPIs for diabetes care and management are given in Annexure 1.
Achievement	l. The diabetes clinic conducts clinical audits and implements improvements based on evidence-based practice*

	Interpretation: The diabetes clinic shall conduct clinical audit atleast once in two years l (or more frequent) and shall record actions taken for improvements on patient outcomes and treatment adherence. The clinical audit may be based on following aspects which include the following: • Disease based • Cost based • Community based • Based on morbidity (length of stay)
Commitment	m. All healthcare staff at the diabetes clinic undergo training for diabetes care and management* **Interpretation:** The diabetes clinic shall ensure that all its healthcare staff are trained on diabetes care and management and retain a written record of such trainings. Such trainings should include, • insulin and other injectable therapies • glucose monitoring • management of diabetes-related emergencies including hypoglycaemia • non-pharmacological management of diabetes through lifestyle changes over pharmacological management of diabetes, as per national guidelines • educating patients and their caregivers on diabetes management on the above-mentioned topics. The clinic could refer following training material for staff: • RSSDI Clinical Practice Recommendations 2022: Summary Document for Training • ICMR Standard Treatment Workflow for Type 1 Diabetes • ICMR Standard Treatment Workflow for Type 2 Diabetes • RSSDI Clinical Practice Recommendations for the Management of Type 2 Diabetes Mellitus
Achievement	n. The diabetes clinic uses Clinic Management System or Electronic Medical Record system for digitizing patient data. **Interpretation:** The diabetes clinic should capture patient data using digital tools such as Clinic Management System or Electronic Medical Record system. Diabetes being a long term and chronic condition, the patients and clinic can benefit from digitization of patient data in many ways such as: • early detection of risks and prevention of complications • tracking patients clinical conditions • clinical decision support for doctors • assessment of effectiveness of diabetes therapy for individual patients • disseminating patient education and awareness information • longitudinal trend studies • public health interventions, capacity planning, and epidemiological studies • case control studies for clinical trials and pre-market testing • research and publications
Excellence	o. The diabetes clinic employs digital platforms for remote patient monitoring to enhance access, patient engagement, treatment compliance, and monitoring.

	Interpretation: The diabetes clinic shall employ digital tools and wearables for remote patient monitoring to enhance access, patient engagement, treatment compliance, and monitoring, etc Remote patient monitoring allows doctors to track patients remotely, and patients to access care remotely, reducing geographical or time barriers. Further, patients can actively participate in their care, with real-time feedback improving their involvement. Reminders, notifications, and easier access to health data encourage adherence to prescribed treatments. Continuous or frequent tracking of vital parameters helps healthcare providers detect issues early and adjust treatments promptly. Digital tools might encompass: • Mobile apps for health tracking • Telehealth platforms • Web/application-based patient portals • Automated reminders and alerts systems Wearables might include devices such as: • Continuous Glucose Monitoring (CGM) devices • Fitness trackers • Other medical-grade sensor devices that measure vital signs or health metrics.

Annexure 1: Examples of Key Performance Indicators

Category	Indicator	Definition	Formula	Unit	Frequency of data collection /Monitoring	Target
CORE	Glycaemic Control Rate	Percentage of people living with diabetes achieving glycaemic control targets as per approved guidelines (for example, HbA1c <7%).	(Number of people with diabetes achieving glycaemic control target (e.g., HbA1c <7%) in the data collection period /Total people with diabetes under treatment at the clinic in the data collection period) * 100	%	Quarterly	Internal benchmarks can be set by clinic as per current accepted guidelines, to monitor glycaemic control in its cohort of patients on quarter-to-quarter and year-on-year basis.
CORE	Diabetes Complication Screening Rate	Percentage of people living with diabetes who undergo annual screening for neuropathy, nephropathy, retinopathy, cardiovascular complications, or foot examination.	(Number of people with diabetes screened for diabetes complications in the data collection period/Total number of people with diabetes under treatment at the clinic in the data collection period) *100	%	Annual	Internal benchmarks can be set by clinic as per current accepted guidelines to monitor rate of screening for complications associated with diabetes.
CORE	New Persons Diagnosed with Type 2 Diabetes	Number of new persons identified to be suffering from Type 2 diabetes (as per established protocols)	(Number of new persons identified to be suffering from Type 2 diabetes in the data collection period (as per established protocols) at the clinic	Number	Annual	No target

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CORE	Weight Control Rate	Percentage of people with diabetes having weight under control as per guidelines.	(Number of people with diabetes with desirable body weight (such as BMI <24 or waist-to-hip ratio < 0.9) in the data collection period /Total number of people with diabetes under treatment at the clinic in the data collection period) * 100	%	Quarterly	Internal benchmarks can be set by clinic as per current accepted guidelines, for monitoring of people with diabetes who have weight under control on a quarter-to-quarter and year-on-year basis
Commitment	Blood Pressure Control Rate	Percentage of people with diabetes having BP under control (such as BP <140/90 mmHg or as per guidelines)	(Number of people with diabetes having BP under control (such as BP <140/90 mmHg or as per guidelines) in the data collection period /Total number of people with diabetes under treatment at the clinic in the data collection period) * 100	%	Quarterly	Internal benchmarks can be set by clinic as per current accepted guidelines, which allow monitoring of people with BP control on quarter-to-quarter and year-on-year basis.

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