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NABH DIGITAL HEALTH CMS STANDARDS: DIABETES ANNEXURE

Empowering Clinics for Digitally Enabled Chronic Care



QUALITY : SAFETY : WELLNESS

NABH Digital Health Standards for CMS Systems: Diabetes Annexure

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Jai Hind

Dr. Atul Mohan Kochhar
CEO, NABH

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INTRODUCTION

India is frequently referred to as the Diabetes Capital of the world. According to recent findings from the ICMR-INDIAB study, over 101 million individuals in India are living with diabetes, while an additional 136 million are classified as prediabetic. Given that diabetes is a systemic disease affecting nearly every organ system, this substantial disease burden has far-reaching implications for the nation's overall health landscape.

Considering the pivotal role that digital technologies play in diabetes management, it is essential that standardized tools are made accessible to all stakeholders, particularly the clinicians responsible for managing people living with diabetes in clinical settings.

This document outlines the tools and capabilities that a CMS (Clinical Management System) should provide to facilitate the delivery of high-quality healthcare services to people living with diabetes.

The Annexure on Management of Diabetes covers the diabetes specific CMS functionalities and workflows for diabetes care in India. This is an add-on specialty certification on the NABH CMS certification.

While these standards have been formulated through comprehensive internal reviews and industry consultation, NABH acknowledges that the development process is continuous. Ongoing feedback from digital health companies, clinics, and other stakeholders will be crucial in further refining and enhancing these standards.

Collectively, these efforts underscore NABH's commitment to promoting excellence and innovation in diabetes management, thereby contributing to a more integrated and effective healthcare ecosystem in India and beyond.

SUMMARY OF THE STANDARDS

Annexure	Standard	Objective Elements	Core	Commitment	Achievement	Excellence
Management of Diabetes	1	16	3	6	5	2

COMPLIANCE LEVEL

Compliance Level for NABH CMS - Diabetes Certification

Category of OE	Compliance Level	Total Number of OEs	Number of OEs to be complied with
Core	100%	3	3
Commitment	80%	6	5
Achievement	60%	5	3
Excellence	40%	2	1

ABBREVIATIONS

ABI	Ankle-Brachial Index
ACR	Albumin-Creatinine Ratio
ALT	Alanine Aminotransferase
AST	Aspartate Aminotransferase
B12	Vitamin B12
BMI	Body Mass Index
CBC	Complete Blood Count
CGM	Continuous Glucose Monitoring
CHF	Congestive Heart Failure
CMS	Clinic Management System
CVD	Cardiovascular Disease
CVS	Cardio Vascular System
DSME	Diabetes Self-Management Education
eAG	Estimated Average Glucose
ECG	Electrocardiogram
ECT	Electroconvulsive Therapy
eGFR	Estimated Glomerular Filtration Rate
eMAR	Electronic Medication Administration Record
ESRD	End-Stage Renal Disease
FBS	Fasting Blood Sugar
HbA1c	Glycosylated Haemoglobin

IDRS	Indian Diabetes Risk Score
ISO	International Organization for Standardization
KPI	Key Performance Indicator
LDL	Low-Density Lipoprotein
LFT	Liver Function Test
MASLD	Metabolic Dysfunction-Associated Steatotic Liver Disease
OGTT	Oral Glucose Tolerance Test
PPBS	Postprandial Blood Sugar
PT	Prothrombin Time
SBP	Systolic Blood Pressure
SMBG	Self-Monitoring of Blood Glucose
UHID	Unique Health Identifier
WHO	World Health Organization
WHR	Waist-to-Hip Ratio

MANAGEMENT OF DIABETES (MOD)

Intent of the chapter

The intent of this standard is to ensure that Clinic Management Systems (CMS) implemented in diabetes care clinics enable comprehensive and structured management of patient information. The CMS should capture demographic details, medical, surgical, and medication history, as well as laboratory and diagnostic results. Considering the systemic nature of diabetes, the CMS must also facilitate documentation and monitoring of parameters across multiple organ systems to support holistic care. Further, the system should provide key indicators and reports that enable clinics to evaluate and improve both clinical outcomes and operational performance.

Summary of Standards

MOD. 1.	The system captures diabetes specific clinical information and streamlines the workflow of diabetes management.
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Category	Core	Type	Assessment
Objective Element MOD.1a.	The system captures diabetes related patient history		
Interpretation	The system shall have the provision to capture the diabetes related history of the patient. The system should be able to capture four sets of requirements: 1. Clinical Information 2. Complications 3. Comorbidities 4. Treatment The details mentioned in each of the above-mentioned requirements can be entered either in a free text format or can have specific fields. Please refer to Annexure MOD - A for details.		



Core



Commitment



Achievement



Excellence

Category	Core	Type	Assessment
Objective Element MOD.1b.	The system captures diabetes related lab data of patients.		
Interpretation	The system shall have the provision to capture the following diabetes related lab data: 1. Date of laboratory investigation 2. Fasting Blood Glucose, Post Prandial Blood Glucose, HbA1C 3. Diabetes Markers - Marker for insulin resistance, Pancreatic autoantibodies, C peptide assay 4. Renal Profile: Urine microscopy (pus cells, RBC), Blood Urea, Serum creatinine, eGFR, Microalbuminuria 5. Liver Profile 6. Routine Haematology 7. Electrolyte Profile: Serum Sodium, Potassium, Chloride 8. Thyroid Profile 9. Vitamin B12 assay The system should specify the reference range for these tests and highlight and alert values which are outside the reference range. Please refer to Annexure MOD – B for sample form for capturing Lab Investigations for Management of Diabetes		

Category	Commitment	Type	Assessment
Objective Element MOD.1c.	The system captures organ systems related examination data for diabetes care and management.		
Interpretation	The system shall have the provision to capture specific data of the following organ systems 1. Eye examination (Diabetic Retinopathy): a. Visual acuity b. Intra Ocular Pressure c. Retinal examination including fundus examination after dilatation (ophthalmoscopy)		

Category	Commitment	Type	Assessment
Interpretation	d. Cataract e. Pupil Assessment 2. Foot Examination (Diabetic Neuropathy or Peripheral Vascular Disease): a. Visual Inspection b. Sensory Testing- Charcot foot c. Footwear Evaluation d. Peripheral Pulses - Right Leg (Y/N) Left Leg (Y/N) e. Sensory Neuropathy - Right Leg (Y/N) Left Leg (Y/N) f. Foot Ulcer - Right Leg (Y/N) Left Leg (Y/N) 3. Renal Function Examination (Diabetic Nephropathy): a. Any signs of Chronic Renal Failure or ESRD 4. Skin Examination: a. Ulcer b. Dry Skin c. Fungal Infection d. Healed Ulcer e. Nail Deformity f. Paronychia g. Callus h. Coral 5. Sensory assessment: a. Light touch b. Pinprick touch 6. Oral hygiene: a. Sign of ulcers b. Odour 7. Signs for metabolic disorders & diabetes: a. Oedema b. Xanthelasma c. Acanthosis Nigricans d. Double chin e. Parotoid enlargement f. Buffalo hump g. Gynecomastia 8. Cardiovascular Function Examinations (CVS): a. Heart Sounds b. Murmurs The details mentioned in each of the above-mentioned organ systems can be entered either in a free text format or can have specific fields. Please refer to sample template for capturing Cardiovascular System (CVS) findings in Annexure MOD – C		

Category	Core	Type	Assessment
Objective Element MOD.1d.	The system captures vaccination details of people living with diabetes.		
Interpretation	The system shall have the capability to capture vaccination details of the patient. Some examples of important vaccines to be included are: 1. Flu vaccine to help protect against influenza. 2. Pneumococcal vaccine to help prevent pneumonia and other infections. 3. Hepatitis B vaccine to prevent liver infection. 4. Tdap (tetanus, diphtheria, and pertussis) vaccine to help prevent tetanus, diphtheria, and whooping cough. 5. Zoster vaccine to help prevent shingles.		

Category	Excellence	Type	Assessment
Objective Element MOD.1e.	The system supports the integration of patient care data from monitoring devices.		
Interpretation	The system shall be capable of connecting and transferring data collected from various patient monitoring devices directly into the systems. This integration ensures that real-time and accurate patient data, such as vital signs, wearable sensor data, and other health metrics, are seamlessly incorporated into the patient's digital health record. This capability enhances the continuity of care, allows for more comprehensive and up-to-date patient information, reduces the risk of data entry errors, and improves the efficiency of healthcare providers in monitoring and managing patient health.		

Category	Achievement	Type	Assessment
Objective Element MOD.1f.	The system calculates clinically relevant lab parameters to support assessment and care planning of people living with diabetes.		
Interpretation	The system shall auto-calculate clinically relevant parameters using available patient data from laboratory results, demographic details and vital signs of people living with diabetes. Please refer to Annexure MOD-D for examples of such auto-calculated clinical parameters (e.g. eGFR, eAG, Insulin Sensitivity Index).		

Category	Achievement	Type	Assessment
Objective Element MOD.1g.	The system supports the calculation of diabetes specific risk scores and their inference.		
Interpretation	The system should incorporate the calculation and inference of at least one diabetes related risk score. Some of the commonly used risk scores are given below. - Indian Diabetes Risk Score: Based on age, waist circumference, physical activity, family history - FIB-4 Score: To Diagnose liver cirrhosis, requires age, aspartate aminotransferase, alanine aminotransferase, platelet. Please refer to the Annexure MOD-E for details on these risk scores		

Category	Commitment	Type	Assessment
Objective Element MOD.1h.	The system allows authorised users or predefined clinical logic to assign patient tags or labels (e.g., 'High Risk', 'Needs Retinopathy Screening') that are visible in the patient summary.		
Interpretation	The system shall allow authorised users to assign tags or labels to a patient record. Tags may be: - Manually applied by designated personnel such as clinicians, nutritionists, or diabetes educators, or - Automatically generated based on predefined clinical logic (e.g., HbA1c > 9%, IDRS ≥ 60, missed retinal screening beyond 12 months). The system shall display assigned tags prominently within the patient profile. The system shall allow clinics to configure custom tags and associated tagging rules. The tags can represent: - Clinical risk (e.g., High Risk, Complication Suspected) - Operational status (e.g., Follow-Up Due, Needs Referral) - Care plan reminders (e.g., Annual Foot Exam Pending)		

Category	Achievement	Type	Assessment
Objective Element MOD.1i.	The system captures the meal plan and dietary recommendations.		
Interpretation	The CMS shall have the provision to capture details of the suggested diet plan given to a patient.		

Category	Commitment	Type	Assessment
Objective Element MOD.1j.	The system provides access to open-source diabetes guidelines published by apex bodies/organizations.		
Interpretation	The System should include access to diabetes management guidelines. This can be provided via listing URL links to relevant websites, uploading of PDF files in the resource section, via API of third-party tools, or other methods. Some examples of such diabetes guidelines / information sources are provided in Annexure MOD-G.		

Category	Commitment	Type	Assessment
Objective Element MOD.1k.	The system provides the ability to share diabetes related patient education materials through digital channels.		
Interpretation	The system should have a provision for distribution of diabetes awareness and education related materials to patients and their care givers through digital channels based on patient's needs. Examples of such channels include 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. The System shall have capability to provide patients and their families education and awareness material in local language for: • Adherence to Treatment • Lifestyle Modifications		

Category	Commitment	Type	Assessment
Interpretation	- 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, Insulin Pumps - Diabetic Specific Nutritional Counselling - Meal Planning and Carbohydrate Counting The education material could be provided in text, infographic, audio, video formats.		

Category	Commitment	Type	Assessment
Objective Element MOD.11.	The system allows medical practitioners to upload and save diabetes related protocols and SOPs for future reference purposes.		
Interpretation	The system should allow medical practitioner to upload and save any diabetes care and management related protocols/SOPs or any other information material for future reference purposes. Such protocols/SOPs could be for: - Screening of undiagnosed diabetes and prediabetes - Screening or referral for screening for micro-vascular (retinopathy, nephropathy, neuropathy etc.) and macro-vascular complications (cardiovascular, cerebrovascular, peripheral vascular disease etc.), dental decay etc. - Providing handouts for patients and their caregivers in the local language to educate them to prevent, recognize, and manage hypoglycaemic episodes		

Category	Commitment	Type	Assessment
Interpretation	- Structured diabetes self-management education (DSME) programs in managing diabetes as per patient's cultural background, ethnicity, psychosocial status, medical history, family support, literacy, disability issues, financial situation, etc. - Standardized initiation, titration, and dose adjustment for safe and effective insulin and other injectable medicine administration - Preconception counselling, glycaemic monitoring, and postpartum follow-up for women living with diabetes including those with gestational diabetes to support safe maternal and foetal outcomes - Defining and measuring Key Performance Indicators (KPIs) - Conducting internal clinical audits and recording actions taken for improvements - Training on diabetes care and management for clinic's healthcare staff and keeping a written record of such trainings		

Category	Commitment	Type	Assessment
Objective Element MOD.1m.	The system enables individual level analysis of diabetes specific data.		
Interpretation	The system should have the capability to analyse individual patient level data. This includes the ability to prepare a time series chart (Line charts) for: - HBA1c - Fasting blood glucose - Post prandial glucose - Random Blood glucose - Height - Body Weight - Blood Pressure - Waist circumference - Hip circumference - BMI - Waist to Hip Ratio - Patient KPIs - Risk scores - Calculated tests The system should provide user the flexibility to choose the period over which this operation is to be performed.		

Category	Achievement	Type	Assessment
Objective Element MOD.1n.	The system enables population level analysis of diabetes specific patient data.		
Interpretation	The system should have the capability to analyse population level diabetes related patient data. This includes the ability to prepare charts and tabular data for: 1. Number of newly diagnosed people living with diabetes / Disease trend analysis over time (e.g. increase in diabetes incidence) 2. Risk stratification (e.g. identifying high-risk patients based on clinical and lab parameters, Number of patients with poorly controlled diabetes, % of patients with poor lipid profile) 3. Geospatial mapping (e.g. clustering of disease burden by location) 4. Cohort comparisons (e.g. treatment response across different age groups) 5. KPIs 6. Risk scores 7. Calculated tests The system should provide user the flexibility to choose the period, gender, age, geography, co-morbidities, treatment, etc for choosing the cohort over which this analysis is to be performed.		

Category	Excellence	Type	Assessment
Objective Element MOD.1o.	The system supports export of de-identified data for use in diabetes research studies		
Interpretation	The system should facilitate export of de-identified patient data for utilization in diabetes research studies in accordance with the consent provided by the patient. This system can do this by enabling download and export functionalities after removing all direct and indirect patient identifiers.		

Category	Achievement	Type	Assessment
Objective Element MOD.1p.	The system enables computation, display, and download of diabetes-related Key Performance Indicators (KPIs).		
Interpretation	The system should have the capability to compute, display as a dashboard, and download in multiple formats (such as JSON), the Diabetes specific KPIs as mentioned in Annexure MOD-F		

GLOSSARY

S.no.	Term	Definition
1	Certification	Formal recognition of compliance with set standards validated by external evaluation.
2	KPI	Key Performance Indicators are measurable and quantifiable metric used to track progress towards a specific goal or objective. These are the critical (key) quantifiable indicators of progress toward an intended result.
3	Medical practitioners	In this document medical practitioners refer to the clinical service providers like doctors.
4	Medication	Medication, for the reference in this document, includes all medicines, medical devices, implants, consumables, vaccines and other items that are regularly used in a clinic pharmacy.
5	Referral	In the medical context, a referral is the transfer of care for a patient from one clinician or clinic to another by request. It is a written order from a primary care physician arranging for a patient to see a specialist for a specific medical service.
6	Specialist	In this document, specialist refers to the medical practitioners who have a specialization in a particular area, e.g., dermatology, gynaecology etc.
7	System	In this document, system refers to the CMS or software that is deployed in the healthcare organizations.

Annexure MOD - A: Case history template for people living with Diabetes

1. Clinical Information

S. No.	Data Elements	Clinician's Response	Remarks for Vendors
A	Family and Lifestyle History		
A1	Mother – Diabetes History	☐ No ☐ Type 1 ☐ Type 2 ☐ Others, _____ ☐ Don't know	Radio Button
A2	Father – Diabetes History	☐ No ☐ Type 1 ☐ Type 2 ☐ Others, _____ ☐ Don't know	Radio Button
A3	Siblings – Male – Diabetes History	☐ No ☐ Type 1 ☐ Type 2 ☐ Others, _____ ☐ Don't know	Radio Button
A4	Siblings – Female – Diabetes History	☐ No ☐ Type 1 ☐ Type 2 ☐ Others, _____ ☐ Don't know	Radio Button

S. No.	Data Elements	Clinician's Response	Remarks for Vendors
A5	Grandparents – Maternal – Diabetes History	- o No - o Type 1 - o Type 2 - o Others, _____ - o Don't know	Radio Button
A6	Grandparents – Paternal – Diabetes History	- o No - o Type 1 - o Type 2 - o Others, _____ - o Don't know	Radio Button
A7	Social History	- o Alcohol use - o Smoking - o Tobacco chewing - o Others, _____	Check-box
A8	Dietary habits		Free Text Field
A9	Others/Remarks		Free Text Field
B	Clinical Assessment		
B1	Date of Assessment		Calendar View, Date selection
B2	Date of First Diagnosis		Calendar View, Date selection

S. No.	Data Elements	Clinician's Response	Remarks for Vendors
B3	Type of Diabetes	- o Type 1 - o Type 2 - o LADA - o MODY - o MMDM - o Gestational DM - o Drug Induced - o Chronic Pancreatitis - o Secondary Diabetes - o Not known	Radio Button
B4	Duration of Diabetes	Years____ Months____	Numeric Field
B5	Mode of Presentation at first presentation at clinic		Free text Field
B6	Laboratory values at first presentation at clinic	FPG Day 1_____ FPG Day 2_____ PPPG____	Numeric Field
B7	Date of first insulin injection/OAM		Calendar View, Date selection
B8	Hospitalisation related to Diabetes	- o Yes - o No - o Not known	
B9	Hospitalisation NOT related to Diabetes	- o Yes, Specify____ - o No - o Not known	Radio Button

S. No.	Data Elements	Clinician's Response	Remarks for Vendors
B10	Episode(s) of Hypoglycaemia	☐ Yes, Frequency____ ☐ No ☐ Not known	Radio Button
B11	Episode(s) of Diabetic Ketoacidosis	☐ Yes, Frequency____ ☐ No ☐ Not known	Radio Button
B12	Episode(s) of Sepsis	☐ Yes, Frequency____ ☐ No ☐ Not known	Radio Button
B13	Any other episodes related to Diabetes	☐ Yes, Specify ____ ☐ No ☐ Not known	Radio Button
B14	Acanthosis/Skin tags	☐ Yes, Grading __ (E.g: Burke Grading) ☐ No	Radio Button
B15	Urine Ketones	☐ Yes ☐ No	Radio Button
B16	Height in cm	_____	Numeric Field
B17	Weight in kg	_____	Numeric Field
B18	BMI	_____	Numeric Field
B19	Waist circumference in cm	_____	Numeric Field

S. No.	Data Elements	Clinician's Response	Remarks for Vendors
B20	Hip circumference in cm	_____	Numeric Field
B21	Blood Pressure – Systolic in mm Hg	_____	Numeric Field
B22	Blood Pressure – Diastolic in mm Hg	_____	Numeric Field
B23	Birth Weight (if available) in kg	_____	Numeric Field
B24	Others/Remarks		Free Text Field

2. Complication of Diabetes

S. No.	Data Elements	Clinician's Response	Remarks for Vendors
A	Complications		
A1	Date of Assessment		Calendar View, Date selection
A2	Retinopathy	o Yes, Remarks _____ o No o Not Known	Radio Button
	If Yes, Specify Treatment	o Laser Treatment o Vitreous Surgery o Intra-Vitreous Surgery o Others, _____	
A3	Nephropathy	o Yes, Remarks _____ (Grading) o No o Not Known	Radio Button

S. No.	Data Elements	Clinician's Response	Remarks for Vendors
	If Yes, Specify Treatment	- o Medications - o Dialysis - o Renal Transplant - o Others, _____	
A4	Neuropathy	- o Yes, Remarks____ (Grading) - o No - o Not Known	Radio Button
A5	Tuberculosis	- o Yes, Remarks____ - o No - o Not Known	Radio Button
A6	Sepsis	- o Yes, Remarks____ - o No - o Not Known	Radio Button
A7	Coronary Artery Disease	- o Yes, Remarks____ - o No - o Not Known	Radio Button
A8	Stroke	- o Yes, Remarks____ - o No - o Not Known	Radio Button
A9	Peripheral Vascular Disease	- o Yes, Remarks____ - o No - o Not Known	Radio Button
A10	Diabetic Foot Ulcer	- o Yes, Remarks____ - o No - o Not Known	Radio Button

S. No.	Data Elements	Clinician's Response	Remarks for Vendors
A11	Any other Complication	☐ Yes, Remarks _____ ☐ No	Radio Button
A12	Others/Remarks		Free Text Field

3. Foot examination

S. No.	Data Elements	Clinician's Response	Remarks for Vendors
A	History		
A1	History of Leg/Foot Ulcer	☐ Yes ☐ No	Radio Button
A2	History of Amputation	☐ Yes ☐ No	Radio Button
A3	History of Lower Limb Angioplasty, Stent, Bypass	☐ Yes ☐ No	Radio Button
A4	Burning or Tingling Sensation	☐ Yes ☐ No	Radio Button
A5	Pain	☐ Yes ☐ No	Radio Button
A6	Changes in Skin Colour	☐ Yes _____ ☐ No	Radio Button
A7	Loss of Lower Extremity Sensation	☐ Yes _____ ☐ No	Radio Button

S. No.	Data Elements	Clinician's Response	Remarks for Vendors
A8	Others/Remarks	_____	Free Text Field
B	Foot Care Habits		
B1	Wears footwear	☐ Yes, Indoor ☐ Yes, Outdoor ☐ Yes, Both ☐ No	Radio Button
B2			
B3	Examines feet at home regularly	☐ Yes ☐ No	Radio Button
B4	Walks in sand/mud/clay for work	☐ Yes ☐ No	Radio Button
B5	Washes feet when comes back home from outside?	☐ Yes ☐ No	Radio Button
B6	Others/Remarks	_____	Free Text Field
C	Dermatologic Exam		
C1	Discolored, ingrown, or elongated nails	☐ Yes ☐ No	
C2	Fungal infection especially in between the toes	☐ Yes ☐ No	
C3	Discolored and/or hypertrophic skin lesions, calluses, or corns	☐ Yes ☐ No	

S. No.	Data Elements	Clinician's Response	Remarks for Vendors
C4	Open cracks or heel fissures	☐ Yes ☐ No	
C5	Others/Remarks	_____	Free Text Field
D	Neurologic Exam		Add note for resource download: Download & refer the document for tests: https://rssdi.dfri.in/assets/DocumentforTest-Cs4ryWDg.pdf
D1	10 g Monofilament Test Conducted	☐ Yes ☐ No	
D2	For Right Foot	☐ Yes ☐ No	Activate if D1 is selected
D3	For Big Toe	☐ Yes ☐ No ☐ Not tested due to ulcer	Radio Button Activate if D2 is selected
D4	For Medial Metatarsal	☐ Yes ☐ No ☐ Not tested due to ulcer	Radio Button Activate if D2 is selected
D5	For Lateral Metatarsal	☐ Yes ☐ No ☐ Not tested due to ulcer	Radio Button Activate if D2 is selected
D6	For Left Foot	☐ Yes ☐ No	Activate if D1 is selected

S. No.	Data Elements	Clinician's Response	Remarks for Vendors
D7	For Big Toe	☐ Yes ☐ No ☐ Not tested due to ulcer	Radio Button Activate if D6 is selected
D8	For Medial Metatarsal	☐ Yes ☐ No ☐ Not tested due to ulcer	Radio Button Activate if D6 is selected
D9	For Lateral Metatarsal	☐ Yes ☐ No ☐ Not tested due to ulcer	Radio Button Activate if D6 is selected
D10	128Hz Tuning Fork Test Conducted	☐ Yes ☐ No	Radio Button
D11	For Right Foot	☐ Yes ☐ No	Radio Button Activate if D10 is selected
D12	For Big Toe	☐ Yes ☐ No ☐ Not tested	Radio Button Activate if D11 is selected
D13	For Medial Malleolus	☐ Yes ☐ No ☐ Not tested	Radio Button Activate if D11 is selected
D14	For Lateral Malleolus	☐ Yes ☐ No ☐ Not tested	Radio Button Activate if D11 is selected
D15	For Left Foot	☐ Yes ☐ No	Radio Button Activate if D10 is selected

S. No.	Data Elements	Clinician's Response	Remarks for Vendors
D16	For Big Toe	☐ Yes ☐ No ☐ Not tested	Radio Button Activate if D15 is selected
D17	For Medial Malleolus	☐ Yes ☐ No ☐ Not tested	Radio Button Activate if D15 is selected
D18	For Lateral Malleolus	☐ Yes ☐ No ☐ Not tested	Radio Button Activate if D15 is selected
E	Musculoskeletal Exam		
E1	Obvious deformities in the feet	☐ Yes ☐ No	Radio Button
E2	Others/Remarks	_____	Free Text Field
F	Vascular Exam		
F1	Hair loss on the lower limb	☐ Yes ☐ No	Radio Button
F2	Are the dorsalis pedis pulses palpable?	☐ Yes ☐ No	Radio Button
F3	Are the posterior tibial pulses palpable?	☐ Yes ☐ No	Radio Button

S. No.	Data Elements	Clinician's Response	Remarks for Vendors
F4	Temperature of the skin	☐ Cold ☐ Warm ☐ Normal ☐ Other, _____	Radio Button
G	Assessment of Wound		
G1	Assessment of Leg	☐ Right Leg ☐ Left Leg ☐ Both Legs ☐ Not Applicable	Radio Button
G2	Assessment of Foot	☐ Right Foot ☐ Left Foot ☐ Both Feet ☐ Not Applicable	Radio Button
G3	Image of wound on the date of assessment (if available)	☐ Yes ☐ No	Radio Button Provide option to upload image
G4	Ulcer/Wound size (cm2)	_____ cm2	Numerical Field
G5	Duration of wound (days)	_____ days	Numerical Field
G6	Others/Remarks	_____	Free Text Field
H	Infection Details		
H1	Local swelling or induration	☐ Yes ☐ No	Radio Button

S. No.	Data Elements	Clinician's Response	Remarks for Vendors
H2	Erythema around the ulcer	☐ Yes ☐ No	Radio Button
H3	Local tenderness or pain	☐ Yes ☐ No	Radio Button
H4	Warmth/swelling/redness in the foot suggestive of cellulitis	☐ Yes ☐ No	Radio Button
H5	Purulent discharge (thick, opaque to white or sanguineous secretion)	☐ Yes ☐ No	Radio Button
H6	Culture report (if available)	☐ Yes ☐ No	Radio Button Provide option to upload report
H7	Probe to Bone	☐ Yes ☐ No	Radio Button
H8	Osteomyelitis in x-ray foot	☐ Yes ☐ No	Radio Button
H9	Fever or other signs of sepsis	☐ Yes ☐ No	Radio Button
H10	Presence of arterial stenosis/occlusions (documented by DSA/arterial color doppler/ABI/MRI, if needed)	☐ Yes ☐ No	Radio Button
H11	Necrosis of soft tissue	☐ Yes ☐ No	Radio Button
H12	Gangrene	☐ Yes, Wet Gangrene ☐ Yes, Dry Gangrene ☐ No	Radio Button

S. No.	Data Elements	Clinician's Response	Remarks for Vendors
H13	Others/Remarks		Free Text Field
I	Treatment Details		
I1	Antibiotics given	☐ Yes, Oral ☐ Yes, IV ☐ No	Check box
I2.	Surgical Procedure	☐ Callus Excision ☐ Sequestectomy ☐ Incision & Drainage ☐ Wound Debridement ☐ Others, specify _____	Check Box
I3.	Amputation	☐ No ☐ Minor ☐ Major, Below Knee ☐ Major, Above Knee	Radio Button
I4.	Which dressing material was used		Free Text Field
I5	Offloading device		Free Text Field
I6.	Other Treatment	☐ Yes _____ ☐ No	Radio Button
I7.	Others/Remarks		Free Text Field

4. Comorbidities

S. No.	Data Elements	Clinician's Response	Remarks for Vendors
A	Comorbidities		
A1	Date of Assessment		Calendar View, Date selection
A2	Hypertension	☐ Yes, Remarks____ ☐ No	Radio Button
A3	Dyslipidaemia	☐ Yes, Remarks____ ☐ No	Radio Button
A4	Auto Immune Thyroid Disease	☐ Yes, Remarks____ ☐ No	Radio Button
A5	Celiac Disease	☐ Yes, Remarks____ ☐ No	Radio Button
A6	Chronic Kidney Disease	☐ Yes, Remarks____ ☐ No	Radio Button
A7	Obstructive Sleep Apnea (OSA)	☐ Yes, Remarks____ ☐ No	
A8	Non-alcoholic Fatty Liver Disease (NAFLD)	☐ Yes, Remarks____ ☐ No	
A9	Others/Remarks		Free Text Fields

5. Treatment of Diabetes

S. No.	Data Elements	Clinician's Response	Remarks for Vendors
A	Current Treatment		
A1	Date of Assessment		Calendar View, Date selection
A2	Insulin Type	☐ None ☐ Regular ☐ Intermediate Acting ☐ Pre-mixed ☐ Long-Acting Analogue ☐ Short Acting Analogue ☐ Pre-mixed Analogue ☐ Other, ____	Radio button
A3	Insulin Treatment plan	☐ Not Applicable ☐ TDS ☐ OD ☐ BD ☐ Multidose ☐ Pump ☐ Other, ____	Radio button
A4	Oral Antidiabetic Medications (OAM)	☐ None ☐ Biguanides ☐ Sulphonylureas ☐ Glitazones ☐ -Glucosidase Inhibitor ☐ Meglitinide Analogues ☐ DPP IV Inhibitor ☐ Other, ____	Check Box

S. No.	Data Elements	Clinician's Response	Remarks for Vendors
A5	Lifestyle Modification	☐ Diet ☐ Exercise ☐ Yoga ☐ Other, _____	Check Box
A6	Alternate Systems of Medicine	☐ Yes ☐ No	Radio Button If no, deactivate
A7	If yes, type of alternate system of medicine	☐ Ayurveda ☐ Unani ☐ Homeopathy ☐ Siddha ☐ Naturopathy ☐ Unknown	Check Box
A8	Treatment for Co-Morbidities	☐ Yes, Specify____ ☐ No	Radio Button
A9	Others/Remarks		Free Text Field

Reference:

- Content References:
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ICMR Young Diabetes Registry Metadata: https://data.icmr.org.in/storage/metadata/1737617391_YDR%20Metadata.pdf
- Template Reference:
NCG-KCDO EMR Requirement – Preventive Oncology Template v2.0
<https://www.kcdo.in/src/docx/ner-preventive-oncology-template-2.0.pdf>

Annexure MOD-B: Lab Investigations template for Management of Diabetes

1. Laboratory Investigations

S. No.	Data Elements	Clinician's Response	Remarks for Vendors
A	Diabetes Investigations		
A1	Date of Investigation		Calendar View, Date selection
A2	Plasma Glucose - Fasting		Numeric Field
A3	Plasma Glucose - Post Prandial		Numeric Field
A4	2 hr Post Load Plasma Glucose		Numeric Field
A5	HbA1c (Glycosylated Haemoglobin)		Numeric Field
A6	C-peptide – Fasting		Numeric Field
A7	C-peptide – Stimulated		Numeric Field
A8	Insulin – Fasting		Numeric Field
A9	Insulin – Post Prandial		Numeric Field
A10	Immunological Markers	☐ Yes, specify ____ ☐ No	Radio Button
A11	Genetic Markers	☐ Yes, specify ____ ☐ No	Radio Button
A12	Others/Remarks		Free Text Field

S. No.	Data Elements	Clinician's Response	Remarks for Vendors
B	Routine Haematology		
B1	Date of investigation		Calendar View, Date selection
B2	Haemoglobin (Hb)		Numeric Field
B3	Total Leukocyte Count (TLC / WBC Count)		Numeric Field
B4	Differential Leukocyte Count (DLC)	Neutrophils, ____ Lymphocytes, ____ Monocytes, ____ Eosinophils, ____ Basophils, ____	Numeric Field
B5	Red Blood Cell (RBC) Count		Numeric Field
B6	Haematocrit / Packed Cell Volume (PCV)		Numeric Field
B7	Mean Corpuscular Volume (MCV)		Numeric Field
B8	Mean Corpuscular Haemoglobin (MCH)		Numeric Field
B9	Mean Corpuscular Haemoglobin Concentration (MCHC)		Numeric Field
B10	Red Cell Distribution Width (RDW)		Numeric Field

S. No.	Data Elements	Clinician's Response	Remarks for Vendors
B11	Platelet Count		Numeric Field
B12	Mean Platelet Volume (MPV)		Numeric Field
B13	Platelet Distribution Width (PDW)		Numeric Field
B14	RBC morphology		Free Text Field
B15	WBC morphology		Free Text Field
B16	Platelet morphology		Free Text Field
B17	Presence of any abnormal cells	☐ Yes, specify ____ ☐ No	Free Text Field
B18	ESR (Erythrocyte Sedimentation Rate)		Numeric Field
B19	Others/Remarks		Free Text Field

S. No.	Data Elements	Clinician's Response	Remarks for Vendors
C	Thyroid Profile		
C1	Date of investigation		Calendar View, Date selection
C2	Total T3		Numeric Field

S. No.	Data Elements	Clinician's Response	Remarks for Vendors
C3	Free T3		Numeric Field
C4	Total T4		Numeric Field
C5	Free T4		Numeric Field
C6	Thyroid Stimulating Hormone		Numeric Field
C7	TPO Antibodies		Numeric Field
C8	Others/Remarks		Free Text Field

S. No.	Data Elements	Clinician's Response	Remarks for Vendors
D	Lipid Profile		
D1	Date of investigation		Calendar View, Date selection
D2	Total Cholesterol		Numeric Field
D3	Triglyceride		Numeric Field
D4	HDL		Numeric Field
D5	LDL		Numeric Field
D6	VLDL		Numeric Field

S. No.	Data Elements	Clinician's Response	Remarks for Vendors
D7	HDL/LDL Ratio		Numeric Field
D8	Others/Remarks		Free Text Field

S. No.	Data Elements	Clinician's Response	Remarks for Vendors
E	Liver Function Tests		
E1	Date of investigation		Calendar View, Date selection
E2	SGOT		Numeric Field
E3	SGPT		Numeric Field
E4	Alkaline Phosphatase		Numeric Field
E5	Total Bilirubin		Numeric Field
E6	Total Protein		Numeric Field
E7	Albumin Globulin Ratio		Numeric Field
E8	Others/Remarks		Free Text Field

S. No.	Data Elements	Clinician's Response	Remarks for Vendors
F	Renal Function Tests		
F1	Date of investigation		Calendar View, Date selection
F2	Plasma Urea		Numeric Field
F3	Plasma Creatinine		Numeric Field
F4	Plasma Uric Acid		Numeric Field
F5	Plasma Potassium		Numeric Field
F6	Plasma Sodium		Numeric Field
F7	Plasma Calcium		Numeric Field
F8	Plasma Phosphate		Numeric Field
F9	Urine Albumin		Numeric Field
F10	Urine Creatinine		Numeric Field
F11	Urine Albumin Creatinine Ratio		Numeric Field
F12	Others/Remarks		Free Text Field

S. No.	Data Elements	Clinician's Response	Remarks for Vendors
G	Urine Analysis		
G1	Date of investigation		Calendar View, Date selection

S. No.	Data Elements	Clinician's Response	Remarks for Vendors
G2	Epithelial Cells		Numeric Field
G3	Glucose		Numeric Field
G4	Pus Cells		Numeric Field
G5	Protein		Numeric Field
G6	Bacteria		Numeric Field
G7	Crystals		Numeric Field
G8	Red blood cells		Numeric Field
G9	Others/Remarks		Free Text Field

S. No.	Data Elements	Clinician's Response	Remarks for Vendors
H	Vitamin Profile		
H1	Date of investigation		Calendar View, Date selection
H2	Vit B12 Assay		Numeric Field
H3	Vit D, 25-Hydroxy		Numeric Field
H4	Others/Remarks		Free Text Field

S. No.	Data Elements	Clinician's Response	Remarks for Vendors
I	Electrolyte Profile		
I1	Date of investigation		Calendar View, Date selection
I2	Sodium		Numeric Field
I3	Potassium		Numeric Field
I4	Chloride		Numeric Field
I5	Calcium		Numeric Field
I6	Others/Remarks		Free Text Field

Annexure MOD-C: Organ System Examination Template (CVS)

Note: Specific details to be filled in using either Free Text Box or Discrete Radio Button Option

Section 1 (General Information)	Details
Patient Information	Name, Age, Gender, MRN, Date of Visit
Chief Complaint	Primary symptom(s) related to the organ system
History of Present Illness (HPI)	Onset, duration, severity, associated symptoms, aggravating/relieving factors
Past Medical History	Relevant chronic conditions (e.g., diabetes, hypertension, surgeries)
Family History	Genetic or familial diseases related to the organ system
Social History	Smoking, alcohol, occupation, lifestyle factors
Medications	Current medications, dosage, compliance
Allergies	Drug/food/environmental allergies
Section 2 (CVS Findings)	Findings
Heart Rate	___bpm
Blood Pressure	___mmHg
Jugular Venous Pressure	Normal / Elevated
Heart Sounds	S1/S2, murmurs, gallops
Peripheral Pulses	Present / Absent / Diminished
Edema	None / Pitting / Non-pitting

Section 3 (General Information)	Details
ECG Findings	Normal / Abnormal (specify)
Echocardiogram	EF %, chamber size, valve status
Section 4 (Specific Tests ordered)	Result
CBC	
Lipid Profile	
HbA1c	
Troponin / BNP	
Imaging (e.g., CXR, Echo)	

Annexure MOD-D: Auto-Calculated Lab Parameters for Diabetes Clinics

No.	Calculated Test	Definition	Inputs needed	Formula	Unit	CMS Guide
1	Estimated Average Glucose (eAG) Mandatory	Calculates the estimated average blood glucose level based on HbA1c	HbA1c (%)	$eAG = (28.7 \times HbA1c) - 46.7$	mg/dL	The system shall allow structured capture of the input data required for calculation of the output. The system shall calculate the output value automatically based on available input data. The system shall display the calculated lab test value along with its corresponding reference range and highlight abnormal values. The system shall retain previous values with dates to support longitudinal tracking.
2	Estimated Glomerular Filtration Rate (eGFR) Mandatory	Estimate of glomerular filtration rate Additional Sources: https://www.kidney.org/professionals/gfr_calculator	- Serum creatinine - Scr (mg/dL) - Age (years) Sex	For men: $eGFR = 142 \times \min(Scr/0.9, 1)^{-0.302} \times \max(Scr/0.9, 1)^{-1.2} \times 0.9938Age$ For women: $eGFR = 142 \times \min(Scr/0.7, 1)^{-0.241} \times \max(Scr/0.7, 1)^{-1.2} \times 0.9938Age \times 1.012$	mL/min/1.73 m ²	The system shall allow structured capture of the input data required for calculation of the output. The system shall calculate the output value automatically based on available input data. The system shall display the calculated lab test value along with its corresponding reference range and highlight abnormal values. The system shall retain previous values with dates to support longitudinal tracking.

No.	Calculated Test	Definition	Inputs needed	Formula	Unit	CMS Guide
3	Insulin Sensitivity Index (ISI) Optional	Calculates insulin sensitivity using fasting plasma insulin and fasting plasma glucose levels.	- Fasting Insulin (μU/mL) - Fasting Plasma Glucose (mg/dL)	$ISI = 10,000 / [\sqrt{(\text{Fasting Plasma Glucose} \times \text{Fasting Insulin})}]$	No unit	The system shall allow structured capture of the input data required for calculation of the output. The system shall calculate the output value automatically based on available input data. The system shall display the calculated lab test value along with its corresponding reference range and highlight abnormal values. The system shall retain previous values with dates to support longitudinal tracking.
4	Triglyceride–Glucose Index (TyG Index) Optional	Calculates a surrogate marker of insulin resistance using fasting triglycerides and fasting plasma glucose.	- Fasting Triglycerides (mg/dL) - Fasting Plasma Glucose (mg/dL)	$TyG \text{ Index} = \ln [(\text{Fasting Triglycerides} \times \text{Fasting Plasma Glucose}) / 2]$	No unit	The system shall allow structured capture of the input data required for calculation of the output. The system shall calculate the output value automatically based on available input data. The system shall display the calculated lab test value along with its corresponding reference range and highlight abnormal values. The system shall retain previous values with dates to support longitudinal tracking.

No.	Calculated Test	Definition	Inputs needed	Formula	Unit	CMS Guide
5	Homeostatic Model Assessment of Insulin Resistance (HOMA-IR) Optional	Calculates insulin resistance using fasting insulin and fasting plasma glucose levels.	- Fasting Plasma Glucose (mg/dL) - Fasting Insulin (μU/mL)	$\text{HOMA-IR} = \frac{\text{Fasting Insulin} \times \text{Fasting Plasma Glucose}}{405}$	No unit	The system shall allow structured capture of the input data required for calculation of the output. The system shall calculate the output value automatically based on available input data. The system shall display the calculated lab test value along with its corresponding reference range and highlight abnormal values. The system shall retain previous values with dates to support longitudinal tracking.
6	Homeostatic Model Assessment of Beta-cell Function (HOMA- β) Optional	Calculates pancreatic beta-cell function using fasting plasma insulin and fasting plasma glucose levels	- Fasting Insulin (μU/mL) - Fasting Plasma Glucose (mg/dL)	$\text{HOMA-}\beta = \frac{360 \times \text{Fasting Insulin}}{(\text{Fasting Plasma Glucose} - 63)}$	%	The system shall allow structured capture of the input data required for calculation of the output. The system shall calculate the output value automatically based on available input data. The system shall display the calculated lab test value along with its corresponding reference range and highlight abnormal values. The system shall retain previous values with dates to support longitudinal tracking.

Annexure MOD-E: Risk Assessment Tools for Diabetes Clinics

Note: The system should incorporate the calculation and inference of at least one diabetes related risk score.

No.	Score	Definition	Inputs needed	Formula	Risk Classification	CMS Guide
1	Indian Diabetes Risk Score (IDRS)	Assesses risk of developing type 2 diabetes	Score each input parameter as per the scale provided in parentheses: - Age Score: < 35 years (0) 35 – 49 years (20) ≥50 years (30) - Waist Score: For men: <90 cm (0) 90 – 99 cm (10) ≥ 100 cm (20) For women: < 80 cm (0) 80 – 89 cm (10) ≥ 90 cm (20) - Activity Score: Vigorous/Moderate (0) Mild (10) Sedentary (30)	IDRS = Age Score + Waist Score + Activity Score + Family History Score	< 30: Low Risk 30 – 50: Moderate Risk ≥ 60: High Risk	The system shall allow structured capture of the input data required for calculation of the risk score. The system can provide dropdown menus or radio buttons to avoid manual entry errors, where applicable. The system shall calculate the risk score automatically based on available input data. The system shall display the calculated risk score along with its corresponding risk category (e.g., 30-Low Risk / 40-Moderate Risk / 70-High Risk) and highlight abnormal/high-risk values. The system shall retain previous values with dates to support longitudinal tracking.

No.	Score	Definition	Inputs needed	Formula	Risk Classification	CMS Guide
1			Family History Score: No parents with diabetes (0) One parent with diabetes (10) Both parents with diabetes (20)			
2	Fibrosis-4 (FIB-4) Score	Assesses the amount of liver fibrosis in patients with metabolic dysfunction-associated steatotic liver disease (MASLD)	- Age (years) - Aspartate Aminotransferase - AST (U/L) - Alanine Aminotransferase – ALT (U/L) - Platelet count (10⁹/L) If platelet count is entered in lakh/mm ³ , it should be converted before calculation: 1 lakh/mm ³ = 100 × 10 ⁹ /L	$\text{FIB-4} = \frac{[\text{Age (year)} \times \text{AST (U/L)}]}{[\text{Platelet (10}^9\text{/L)} \times \sqrt{\text{ALT (U/L)}}]}$	< 1.30: Low Risk 1.30 – 2.67: Intermediate Risk > 2.67: High Risk	The system shall allow structured capture of the input data required for calculation of the risk score. The system shall calculate the risk score automatically based on available input data. The system shall display the calculated risk score along with its corresponding risk category (e.g., 1.2-Low Risk/ 2.5-Intermediate Risk / 3-High Risk) and highlight abnormal/high-risk values. The system shall retain previous values with dates to support longitudinal tracking.

Annexure MOD-F: Diabetes Clinic Key Performance Indicators

Note for Targets: Internal targets for KPIs can be set by the clinic as per ICMR or RSSDI guidelines, to monitor the specific KPI in its cohort of patients under treatment on year-on-year basis

No.	KPI	Definition	Inclusion criteria	Exclusion criteria	Formula	Unit	Duration of Reporting	Corresponding OE	CMS Guide
1	Glycaemic Control Rate Mandatory	Percentage of people living with diabetes achieving glycaemic control targets as per approved guidelines (for example, HbA1c <7%).	All patients with diabetes consulted in the data collection period	Non-diabetes patients consulted in the data collection period or Patients who visited less than 2 times in a year or Patient who is newly registered within the last three months	$\frac{\text{(Number of people living with diabetes achieving glycaemic control target (e.g., HbA1c <7\%) in the data collection period)}}{\text{Total people with diabetes under treatment at the clinic in the data collection period}} \times 100$	Percentage	Quarter	MOD 1p	The system shall allow structured capture of the data required for calculation of the indicator. Wherever data capture through system is limited, there should be a provision for entering the manually /electronically collected data. The system shall retain previous values with dates to support longitudinal tracking.

No.	KPI	Definition	Inclusion criteria	Exclusion criteria	Formula	Unit	Duration of Reporting	Corresponding OE	CMS Guide
2	Diabetes Complication Screening Rate Mandatory	Percentage of people living with diabetes who undergo annual screening for neuropathy, nephropathy, retinopathy, cardiovascular complications, or foot examination.	All patients with diabetes consulted in the data collection period	Non-diabetes patients consulted in the data collection period	(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) x 100	Percentage	Year	MOD 1p	The system shall allow structured capture of the data required for calculation of the indicator. Wherever data capture through system is limited, there should be a provision for entering the manually /electronically collected data. The system shall retain previous values with dates to support longitudinal tracking.
3	New Persons Diagnosed with Type 2 Diabetes Mandatory	Number of new persons identified to be suffering from Type 2 diabetes (as per established protocols)	Patients newly identified to be suffering from Type 2 diabetes in the calendar year	Patients not having Type 2 diabetes or Patients already diagnosed with Type2 diabetes earlier	In the current calendar year, number of new persons identified to be suffering from Type 2 diabetes (as per established protocols) at the clinic	Number	Year	MOD 1p	The system shall allow structured capture of the data required for calculation of the indicator. Wherever data capture through system is limited, there should be a provision for entering the manually /electronically collected data. The system shall retain previous values with dates to support longitudinal tracking.

No.	KPI	Definition	Inclusion criteria	Exclusion criteria	Formula	Unit	Duration of Reporting	Corresponding OE	CMS Guide
4	Weight Control Rate Mandatory	Percentage of people with diabetes having weight under control as per guidelines.	All patients with diabetes consulted in the data collection period	Non-diabetes patients consulted in the data collection period or Patients who visited less than 2 times in a year or Patient who is newly registered within the last three months	(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) x 100	Percentage	Quarter	MOD 1p	The system shall allow structured capture of the data required for calculation of the indicator. Wherever data capture through system is limited, there should be a provision for entering the manually /electronically collected data. The system shall retain previous values with dates to support longitudinal tracking.
5	Blood Pressure Control Rate Optional	Percentage of people with diabetes having BP under control (such as BP <140/90 mmHg or as per guidelines)	All patients with diabetes consulted in the data collection period	Non-diabetes patients consulted in the data collection period or	(Number of people with diabetes having BP under control (such as BP <140/90 mmHg or as per guidelines) in the data	Percentage	Quarter	MOD 1p	The system shall allow structured capture of the data required for calculation of the indicator. Wherever data capture through

No.	KPI	Definition	Inclusion criteria	Exclusion criteria	Formula	Unit	Duration of Reporting	Corresponding OE	CMS Guide
5				Patients who visited less than 2 times in a year or Patient who is newly registered within the last three months	$\frac{\text{collection period} / \text{Total number of people with diabetes under treatment at the clinic in the data collection period}}{100}$				system is limited, there should be a provision for entering the manually /electronically collected data. The system shall retain previous values with dates to support longitudinal tracking.
6	Abdominal Obesity Rate Optional	Percentage of people with diabetes having waist circumference ≤ 90 cm (for men) and ≤ 80 cm (for women) (as per ICMR or RSSDI Guidelines).	All patients with diabetes consulted in the data collection period	Non-diabetes patients consulted in the data collection period	$\frac{(\text{Number of people with diabetes with waist circumference of } \leq 90 \text{ cm (for men) and } \leq 80 \text{ cm (for women) in the data collection period} / \text{Total number of people with diabetes under regular treatment at the clinic during the data collection period}) * 100}{100}$	Percentage	Annual	MOD 1p	The system shall allow structured capture of the data required for calculation of the indicator. Wherever data capture through system is limited, there should be a provision for entering the manually /electronically collected data. The system shall retain previous values with dates to support longitudinal tracking.

No.	KPI	Definition	Inclusion criteria	Exclusion criteria	Formula	Unit	Duration of Reporting	Corresponding OE	CMS Guide
7	Foot Exam Rate Optional	Percentage of people living with diabetes who undergo annual diabetic foot exam (as per ICMR or RSSDI guidelines)	All patients with diabetes consulted in the data collection period	Non-diabetes patients consulted in the data collection period	(Number of people with diabetes who underwent diabetic foot exam in the data collection period/ Total number of people with diabetes under regular treatment at the clinic during the data collection period) * 100	Percentage	Annual	MOD 1p	The system shall allow structured capture of the data required for calculation of the indicator. Wherever data capture through system is limited, there should be a provision for entering the manually /electronically collected data. The system shall retain previous values with dates to support longitudinal tracking.
8	LDL- Cholesterol Control Rate Optional	Percentage of people with diabetes achieving LDL- Cholesterol <100 mg/dL (as per ICMR or RSSDI Guidelines)	All patients with diabetes consulted in the data collection period	Non-diabetes patients consulted in the data collection period or Patients who visited less than 2 times in a year	(Number of people living with diabetes with LDL- Cholesterol levels < 100 mg/dL in the data collection period/ Total number of people with diabetes under regular treatment at the clinic during the data collection period) *100	Percentage	Annual	MOD 1p	The system shall allow structured capture of the data required for calculation of the indicator. Wherever data capture through system is limited, there should be a provision for entering the manually /electronically collected data. The system shall retain previous values with dates to support longitudinal tracking.

No.	KPI	Definition	Inclusion criteria	Exclusion criteria	Formula	Unit	Duration of Reporting	Corresponding OE	CMS Guide
8				or Patient who is newly registered within the last three months					
9	Retinopathy Screening Rate Optional	Percentage of people living with diabetes who undergo annual screening for retinopathy (as per ICMR or RSSDI guidelines)	All patients with diabetes consulted in the data collection period	Non-diabetes patients consulted in the data collection period	(Number of people with diabetes screened for diabetic retinopathy in the data collection period/ Total number of people with diabetes under regular treatment at the clinic during the data collection period) * 100	Percentage	Annual	MOD 1p	The system shall allow structured capture of the data required for calculation of the indicator. Wherever data capture through system is limited, there should be a provision for entering the manually /electronically collected data. The system shall retain previous values with dates to support longitudinal tracking.

No.	KPI	Definition	Inclusion criteria	Exclusion criteria	Formula	Unit	Duration of Reporting	Corresponding OE	CMS Guide
10	Nephropathy Screening Rate Optional	Percentage of people living with diabetes who undergo annual screening for nephropathy (as per ICMR or RSSDI guidelines)	All patients with diabetes consulted in the data collection period	Non-diabetes patients consulted in the data collection period	(Number of people with diabetes screened for diabetic nephropathy in the data collection period/ Total number of people with diabetes under regular treatment at the clinic during the data collection period) * 100	Percentage	Annual	MOD 1p	The system shall allow structured capture of the data required for calculation of the indicator. Wherever data capture through system is limited, there should be a provision for entering the manually /electronically collected data. The system shall retain previous values with dates to support longitudinal tracking.
11	Neuropathy Screening Rate Optional	Percentage of people living with diabetes who undergo annual screening for neuropathy (as per ICMR or RSSDI guidelines)	All patients with diabetes consulted in the data collection period	Non-diabetes patients consulted in the data collection period	(Number of people with diabetes screened for diabetic neuropathy in the data collection period/ Total number of people with diabetes under regular treatment at the clinic during the data collection period) * 100	Percentage	Annual	MOD 1p	The system shall allow structured capture of the data required for calculation of the indicator. Wherever data capture through system is limited, there should be a provision for entering the manually /electronically collected data. The system shall retain previous values with dates to support longitudinal tracking.

No.	KPI	Definition	Inclusion criteria	Exclusion criteria	Formula	Unit	Duration of Reporting	Corresponding OE	CMS Guide
12	Cardiovascular Disease Screening Rate Optional	Percentage of people living with diabetes who undergo annual screening for cardiovascular disease (as per ICMR or RSSDI guidelines)	All patients with diabetes consulted in the data collection period	Non-diabetes patients consulted in the data collection period	(Number of people with diabetes screened for cardiovascular disease in the data collection period/ Total number of people with diabetes under regular treatment at the clinic during the data collection period) * 100	Percentage	Annual	MOD 1p	The system shall allow structured capture of the data required for calculation of the indicator. Wherever data capture through system is limited, there should be a provision for entering the manually /electronically collected data. The system shall retain previous values with dates to support longitudinal tracking.
13	Peripheral Vascular Disease Screening Rate Optional	Percentage of people living with diabetes who undergo annual screening for peripheral vascular disease (as per ICMR or RSSDI guidelines)	All patients with diabetes consulted in the data collection period	Non-diabetes patients consulted in the data collection period	(Number of people with diabetes screened for peripheral vascular disease in the data collection period/ Total number of people with diabetes under regular treatment at the clinic during the data collection period) * 100	Percentage	Annual	MOD 1p	The system shall allow structured capture of the data required for calculation of the indicator. Wherever data capture through system is limited, there should be a provision for entering the manually /electronically collected data. The system shall retain previous values with dates to support longitudinal tracking.

Annexure MOD-G: Open-Source Diabetes Guidelines

1. Type 1 and Type 2 Diabetes in Adults, Data Collection Reference Guide, by International Consortium for Health Outcomes Measurement, Version 1.0.0 revised on February 28, 2019, https://connect.ichom.org/wp-content/uploads/2021/06/14-Diabetes-reference-guide-V4.0_2021.pdf
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6. RSSDI Expert Consensus for Optimal Glucose Monitoring in Diabetes Mellitus in India and Recommendations for Clinical Practice, International Journal of Clinical Metabolism and Diabetes, 1–14, 2024, <https://doi.org/10.1177/30502071241293567>
7. Diabetic retinopathy screening guidelines for Physicians in India: position statement by the Research Society for the Study of Diabetes in India (RSSDI) and the Vitreoretinal Society of India (VRSI)-2023, International Journal of Diabetes in Developing Countries, Volume 44, pages 32–39, (2024), <https://doi.org/10.1007/s13410-023-01296-z>
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