

Supplementary Tables

Table S1 - Key clinical data sets included in the CRFs and potential targets for patients with T2DM.

Clinical data	Nature and targets
Glycemic Control (Extent including any hypoglycemic episodes)	<ul style="list-style-type: none"> HbA1c target of 7.0% (53 mmol/mol) up to 7.9% among people with T2DM will reduce the risk of macrovascular and microvascular disease; a target of 6.5% to 6.03% (48 mmol/mol) is more appropriate at diagnosis [30,54, 66-70]. Alternatively, FPG levels ≥ 126 mg/dL down to 104mg/dl for early diagnosis [67,68]. PPG target <10.0mol/l, with clinical studies showing targeting PPG can further improve glycemic control [50,69]
BMI [50,71]	<ul style="list-style-type: none"> Calculated as weight in Kg/ height in m² A lower BMI cut-off value was used to define obesity for Asian population: Normal range: 18.50 – 22.99; Overweight: ≥ 23.00; Obese: ≥ 27.50 This difference from the American population reflects differences in body fat and musculature, with Asian patients tending to have more body fat, especially abdominal fat. Consequently, for a given BMI, Asian people tend to have higher weight related disease risks at lower BMIs than their Americans counterparts – leading to lower BMI cut-off levels
Medicines prescribed for glycemic control [50,51, 71, 72]	<ul style="list-style-type: none"> Oral treatments including Sulphonylureas (Gliclazide, Glimepiride) and Metformin, DPPiv I, Glinides, Voglibose and SGLT2i Injectable: Insulins including regular, intermediate, pre-mixed insulins and long-acting insulin analogues as well as GLP1 RA
Blood Pressure [50, 71, 73-75]	<ul style="list-style-type: none"> BP targets in guidelines vary between $< 130/80$mmHg and $<140/90$ mmHg; however, a target $<140/90$ mmHg predominates Data on the range of different medicines and classes will be collected including diuretics, beta-blockers, calcium channel blockers as well as medicines acting on the angiotensin system including angiotensin receptor blockers Typically, medicines acting on the angiotensin system are also prescribed to reduce diabetic nephropathy
Lipid profiles [50, 69, 71, 76-78]	<p>Targets in Bangladesh with lipid lowering medicines known to decrease subsequent cardiovascular events in patients with T2DM included:</p> <ul style="list-style-type: none"> Total Cholesterol (TC) < 200mg/dl High density lipoprotein (HDL) > 40 mg/dl in males and > 50 mg/dl in females Low density lipoprotein (LDL) < 100mg/dl Triglyceride (TG) < 150 mg/dl Alternatively: TC <4.5 mmol/l, LDL-C <1.8 mmol/l, HDL-C <1.0 for males and <1.3 mmol/l for female and triglycerides <1.7 mmol/l
Serum creatinine and urinary albumin [73, 74, 79-83]	<ul style="list-style-type: none"> Urinary albumin: creatinine ratio (ACR): 3-30 mg/mmol OR 30-300mg/g in a spot urine sample (preferably early morning) Albuminuria (present when UACR > 30 mg/g) - marker for chronic kidney disease Macroalbuminuria if albumin is present in routine and microscopic examination of urine
Microvascular complications [24, 50, 84, 85]	Includes retinopathy, nephropathy and neuropathy with a diagnosis typically based on clinical experience
Macrovascular complications [24, 75, 84, 86-88]	<ul style="list-style-type: none"> Includes cardiovascular and cerebrovascular disease as well as peripheral arterial disease and diabetic foot ulcerations Anticoagulants are typically prescribed along with lipid lowering therapies to reduce CV events Diagnosis typically based on clinical experience

Hospitalizations [30]	<ul style="list-style-type: none"> History of hospitalizations Rationale - recorded in patients' discharge notes from the hospital
Any other co-morbidities/ complications [89, 90]	This could include asthma and chronic obstructive pulmonary disease (COPD) as well as thyroid disorders

Table S2 - Treatments prescribed to manage patients' blood sugar levels.

Diabetes Medicine	Visit-1	Visit-2	Visit-3	Visit-4	Visit-5
Metformin					
No	8 (1.2%)	5 (0.7%)	56 (7.7%)	27 (3.9%)	92 (12.6%)
Yes	40 (5.8%)	43 (6.3%)	101 (13.8%)	305 (44.3%)	595 (81.5%)
NR	640 (93.0%)	640 (93.0%)	573 (78.5%)	356 (51.7%)	43 (5.9%)
Gliclazide					
No	75 (10.3%)	76 (10.4%)	131 (17.9%)	307 (42.1%)	571 (78.2%)
Yes	15 (2.1%)	14 (1.90%)	26(3.6%)	67 (9.2%)	116 (15.9%)
NR	640 (93.0%)	640 (87.7%)	573 (78.5%)	356 (48.8%)	43 (5.9%)
Glimepiride					
No	47 (6.8%)	48 (7.0%)	111 (16.1%)	314 (45.6%)	614 (89.2%)
Yes	1 (0.1%)	0	4 (0.6%)	18 (2.6%)	31 (4.5%)
NR	640 (93.0%)	640 (7.0%)	573 (83.3%)	356 (51.7%)	43 (6.3%)
A Glinide					
No	89 (12.2%)	90 (12.3%)	152 (20.8%)	355 (48.6%)	650 (89.0%)
Yes	1 (0.10%)	0	5 (0.70%)	19 (2.60%)	37 (5.10%)
NR	640 (87.7%)	640 (87.7%)	573 (78.5%)	356 (48.8%)	43 (5.90%)
DPP4i					
No	38 (5.5%)	32 (4.7%)	72 (10.5%)	177 (25.7%)	343 (49.9%)
Yes	10 (1.5%)	16 (2.3%)	43 (6.3%)	155 (22.5%)	302 (43.9%)
NR	640 (93.0%)	640 (93.0%)	356 (51.7%)	356 (51.7%)	43 (6.3%)
Voglibose					
No	90 (12.3%)	90 (12.3%)	156 21.4%)	373 (51.1%)	680 (93.2%)
Yes	0	0	1(0.10%)	1(0.1%)	7(1.0%)
NR	640 (87.7%)	640 (87.7%)	573 (78.5%)	356 (51.7%)	43 (5.9%)
SGLT2i					
No	80 (11.0%)	74 (10.1%)	114 (15.6%)	219 (30.0%)	385 (52.7%)
Yes	10 (1.4%)	16 (2.20%)	43 (5.90%)	155 (21.2%)	302 (41.4%)
NR	640 (87.7%)	640 (7.0%)	573 (78.5%)	356 (48.8%)	43 (5.9%)
Regular use of insulin					
No	53 (7.30%)	53 (7.30%)	71 (9.7%)	162 (22.2%)	208 (28.5%)
Yes	6 (0.80%)	9 (1.2%)	26 (3.6%)	92 (12.6%)	278 (38.1%)
NR	671 (91.9%)	668 (91.5%)	633 (86.7%)	476 (65.2%)	244 (33.4%)

NB: NR = Not Recorded.

Table S3 - Details of injectable anti-diabetic medicines prescribed including insulins

	Visit-1	Visit-2	Visit-3	Visit-4	Visit-5
Rapid acting analog					
No	59 (8.1%)	62 (8.5%)	905 (13.0%)	246 (33.7%)	472 (64.7%)
Yes	1 (0.1%)	0	1 (0.1%)	8 (1.1%)	13 (1.8%)
NR	670 (91.8%)	668 (91.5%)	634 (86.8%)	476 (65.2%)	245 (33.6%)
Intermediate					
No	56 (7.7%)	57 (7.8%)	83 (11.4%)	208 (28.5%)	303 (41.5%)
Yes	4 (0.5%)	5 (0.7%)	13 (1.8%)	47 (6.4%)	182 (24.9%)
NR	670 (91.8%)	668 (91.5%)	634 (86.8%)	475 (65.1%)	245 (33.6%)
Long-acting analogs					
No	59 (8.1%)	61 (8.4%)	87 (11.9%)	216 (29.6%)	412 (56.4%)
Yes	-	1 (0.1%)	9 (1.2%)	39 (5.3%)	73 (10.0%)
NR	671 (91.9%)	668 (97.1%)	634 (86.8%)	475 (65.1%)	245 (33.6%)
Premixed 30/70					
No	49 (6.7%)	51 (7.0%)	51 (7.0%)	164 (22.5%)	347 (47.5%)
Yes	10 (1.4%)	11 (1.5%)	11 (1.5%)	92 (12.6%)	138 (18.9%)
NR	671 (91.9%)	668 (91.5%)	668 (91.5%)	474 (64.9%)	245 (33.6%)
Premix analog 30/70					
No	59 (8.1%)	62 (8.5%)	91 (12.5%)	228 (31.2%)	445 (61.0%)
Yes	-	-	5 (0.7%)	27 (3.7%)	40 (5.5%)
NR	671 (91.9%)	668 (91.5%)	634 (86.8%)	475 (65.1%)	245 (33.6%)
Premix analog 25/75					
No	17 (2.5%)	20 (2.9%)	54 (7.8%)	211 (30.7%)	440 (64.0%)
Yes	-	-	-	2 (0.3%)	3 (0.40%)
NR	671 (97.5%)	668 (97.1%)	634 (92.2%)	475 (69.0%)	245 (35.6%)
Premixed 50/50					
No	59 (8.1%)	62 (8.5%)	95 (13.0%)	252 (34.5%)	479 (65.6%)
Yes	-	-	-	3 (0.40%)	6 (0.80%)
NR	671 (91.9%)	668 (91.5%)	634 (86.8%)	475 (65.1%)	245 (33.6%)
GLP1-RA					
No	59 (8.1%)	62 (8.5%)	95 (13.0%)	247 (33.8%)	464 (63.6%)
Yes	-	-	1 (0.10%)	8 (1.1%)	19 (2.6%)
NR	671 (91.9%)	668 (91.5%)	634 (86.8%)	475 (65.1%)	247 (33.8%)

NB: NR = Not Recorded

Table S4 - Details of anti-hypertensives, anticoagulants and GTN prescribed.

	Visit-1	Visit-2	Visit-3	Visit-4	Visit-5
Angiotensin Receptor Blockers					
Losartan 25/50/100					
No	70 (9.6%)	72 (9.9%)	112 (15.3%)	251 (34.4%)	424 (58.1%)
Yes	9 (1.2%)	12 (1.6%)	21 (2.9%)	68 (9.3%)	112 (15.3%)
NR	651 (89.2%)	646 (88.5%)	597 (81.8%)	411 (56.3%)	194 (26.6%)
Olmesartan 10/20/40					
No	64 (8.8%)	67 (9.2%)	85 (11.6%)	155 (21.2%)	244 (33.3%)
Yes	14 (1.9%)	16 (2.2%)	48 (6.6%)	164 (22.5%)	292 (40.0%)
NR	652 (89.3%)	647 (88.6%)	597 (81.8%)	411 (56.3%)	194 (26.6%)
Valsartan 80/160					
No	79 (10.8%)	83 (11.4%)	133 (18.2%)	319 (43.7%)	533 (73.0%)
Yes	-	-	-	-	3 (0.40%)
NR	651 (89.2%)	647 (88.6%)	597 (81.8%)	411 (56.3%)	194 (26.6%)
Telmisartan 40/80					
No	76 (10.4%)	81 (11.1%)	131 (17.9%)	306 (41.9%)	500 (68.5%)
Yes	3 (0.4%)	2 (0.3%)	2 (0.3%)	13 (1.8%)	36 (4.9%)
NR	651 (89.2%)	647 (88.6%)	597 (81.8%)	411 (56.3%)	194 (26.6%)
Azilsartan					
No	79 (10.8%)	83 (11.4%)	133 (18.2%)	319 (43.7%)	536 (73.4%)
Yes	-	-	-	-	-
NR	651 (89.2%)	647 (88.6%)	597 (81.8%)	411 (56.3%)	194 (26.6%)
Irbesartan					
No	79 (10.8%)	83 (11.4%)	133 (18.2%)	319 (43.7%)	536 (73.4%)
Yes	-	-	-	-	-
NR	651 (89.2%)	647 (88.6%)	597 (81.8%)	411 (56.3%)	194 (26.6%)
Angiotensin Converting Enzyme Inhibitors					
Enalapril 5/10mg					
No	79 (10.8%)	83 (11.4%)	133 (18.2%)	319 (43.7%)	536 (73.4%)
Yes	-	-	-	-	-
NR	651 (89.2%)	647 (88.6%)	597 (81.8%)	411 (56.3%)	194 (26.6%)
Lisinopril					
No	37 (5.4%)	41 (6.0%)	91 (13.2%)	277 (40.3%)	536 (73.4%)
Yes	-	-	-	-	-
NR	651 (94.6%)	647 (94.0%)	597 (86.8%)	411 (59.7%)	194 (28.2%)
Captopril					
No	79 (10.8%)	83 (11.4%)	133 (18.2%)	319 (43.7%)	536 (73.4%)
Yes	-	-	-	-	-
NR	651 (89.2%)	647 (88.6%)	597 (81.8%)	411 (56.3%)	194 (26.6%)
Calcium Channel Blockers					

Amlodipine 5/10					
No	67 (9.2%)	105 (14.4%)	63 (9.2%)	266 (36.4%)	443 (60.7%)
Yes	15 (2.1%)	15 (2.1%)	28 (4.1%)	53 (7.3%)	93 (12.7%)
NR	647 (88.6%)	647 (88.6%)	597 (86.8%)	411 (56.3%)	194 (26.6%)
Levamlodipine					
No	79 (10.8%)	83 (11.4%)	133 (18.2%)	319 (43.7%)	536 (73.4%)
Yes	-	-	-	-	-
NR	651 (89.2%)	647 (88.6%)	597 (81.8%)	411 (56.3%)	194 (26.6%)
Cilnidipine 5/10					
No	79 (10.8%)	81 (11.1%)	130 (17.8%)	304 (41.6%)	500 (68.5%)
Yes	-	2 (0.30%)	3 (0.40%)	15 (2.1%)	36 (4.9%)
NR	651 (89.2%)	647 (81.8%)	597 (81.8%)	411 (56.3%)	194 (26.6%)
Lercanidipine					
No	79 (10.8%)	83 (11.4%)	133 (18.1%)	318 (43.6%)	534 (73.2%)
Yes	-	-	-	11 (0.10%)	2 (0.30%)
NR	651 (89.2%)	647 (88.6%)	597 (81.8%)	411 (56.3%)	194 (26.6%)
β-blockers					
Bisoprolol 2.5/5					
No	70 (9.6%)	73 (10.0%)	109 (14.9%)	233 (31.9%)	354 (48.5%)
Yes	9 (1.2%)	10 (1.4%)	24 (3.3%)	86 (11.8%)	182 (24.9%)
NR	651 (89.2%)	647 (88.6%)	597 (81.8%)	411 (56.3%)	194 (26.6%)
Metoprolol 25/50 100					
No	78 (10.7%)	82 (11.2%)	128 (17.5%)	304 (41.6%)	510 (69.9%)
Yes	1 (0.10%)	1 (0.10%)	5 (0.7%)	15 (2.10%)	26 (3.6%)
NR	651 (89.2%)	647 (88.6%)	597 (81.8%)	411 (56.3%)	194 (26.6%)
Nebivolol					
No	77 (10.5%)	82 (11.2%)	132 (18.1%)	317 (43.4%)	533 (73.0%)
Yes	2 (0.3%)	1 (0.10%)	1 (0.1%)	2 (0.3%)	3 (0.40%)
NR	651 (89.2%)	647 (88.6%)	597 (81.8%)	411 (56.3%)	194 (26.6%)
α-blockers					
Prazosin					
No	79 (10.8%)	83 (11.4%)	132 (18.1%)	316 (43.3%)	523 (71.6%)
Yes	-	-	1 (0.1%)	3 (0.4%)	13(1.8%)
NR	651 (89.2%)	647 (88.6%)	597 (81.8%)	411 (56.3%)	194 (26.6%)
Diuretics					
Thiazide					
No	79 (10.8%)	83 (11.4%)	133 (18.2%)	318 (43.6%)	490 (71.2%)
Yes	-	-	-	1 (0.1%)	4 (0.6%)
NR	651 (89.2%)	647 (88.6%)	597 (81.8%)	411 (56.3%)	194 (28.2%)
Frusemide					

No	36 (5.2%)	40 (5.8%)	90 (13.1%)	276 (40.1%)	531 (72.7%)
Yes	1 (0.1%)	1 (0.1%)	1 (0.1%)	1 (0.1%)	5 (0.7%)
NR	651 (94.6%)	647 (94.0%)	597 (86.8%)	411 (59.7%)	194 (26.6%)
Spirolactone					
No	78 (10.7%)	82 (11.2%)	132 (18.1%)	318 (43.6%)	532 (72.9%)
Yes	1 (0.10%)	1 (0.10%)	1 (0.1%)	1 (0.10%)	4 (0.5%)
NR	651 (94.6%)	647 (88.6%)	597 (81.8%)	411 (56.3%)	194 (26.6%)
Anticoagulants					
Aspirin 75					
No	78 (10.7%)	82 (11.2%)	132 (18.1%)	318 (43.6%)	533 (73.0%)
Yes	1 (0.10%)	1 (0.10%)	1 (0.1%)	1 (0.10%)	3 (0.40%)
NR	651 (94.6%)	647 (88.6%)	597 (81.8%)	411 (56.3%)	194 (26.6%)
Clopidogrel 75					
No	74 (10.1%)	79 (10.8%)	127 (17.41%)	311 (42.6%)	520 (71.2%)
Yes	5 (0.70%)	4 (0.50%)	6 (0.8%)	8 (1.10%)	16 (2.20%)
NR	651 (89.6%)	647 (88.6%)	597(81.8%)	411 (56.3%)	194 (26.6%)
Nitroglycerine					
No	29 (4.2%)	33 (4.8%)	80 (11.6%)	265 (38.5%)	475 (69.0%)
Yes	7 (1.0%)	7 (1.0%)	10 (1.5%)	12 (1.7%)	19 (2.8%)
NR	652 (94.8%)	648 (94.3%)	598 (86.9%)	411 (59.7%)	194 (28.2%)

NB: NR = Not Recorded.

Table S5 - Details of lipid-lowering medicines prescribed.

	Visit-1	Visit-2	Visit-3	Visit-4	Visit-5
Statins (and dose)10/20/40mg					
No	55 (7.50%)	55 (7.5%)	56 (7.7%)	67 (9.2%)	76 (10.4%)
Yes	12 (1.60%)	11 (1.5%)	43 (5.9%)	158 (21.6%)	361 (49.5%)
NR	663 (90.8%)	664 (91.0%)	631 (86.4%)	505 (69.2%)	293 (40.1%)
Fibrates (and dose)145/200mg					
No	67 (9.2%)	66 (9.0%)	97 (13.3%)	214 (29.3%)	417 (57.1%)
Yes	1 (0.10%)	-	2 (0.30%)	11 (1.5%)	20 (2.70%)
NR	662 (90.7%)	664 (91.0%)	631 (86.4%)	505 (69.2%)	293 (40.1%)

NB: NR = Not Recorded

Table S6 - Details of micro- and macro-vascular complication rates among the studied patients.

	Visit-1	Visit-2	Visit-3	Visit-4	Visit-5
Microvascular Complications					
<i>Retinopathy</i>					
No	43 (6.3%)	48 (6.6%)	106 (14.5%)	345 (47.3%)	611 (83.7%)
Yes	-	-	2 (0.3%)	2 (0.3%)	26 (3.6%)
NR	687 (94.1%)	682 (93.4%)	622 (85.2%)	383 (52.5%)	93 (12.7%)
<i>Nephropathy</i>					
No	43 (6.3%)	47 (6.4%)	107 (14.7%)	328 (44.9%)	602 (82.5%)
Yes	-	1 (0.10%)	1 (0.10%)	19 (2.6%)	35 (4.80%)
NR	687 (94.1%)	640 (93.4%)	622 (85.2%)	383 (52.5%)	93 (12.7%)
<i>Neuropathy</i>					
No	43 (6.3%)	47 (6.4%)	104 (14.2%)	325 (44.5%)	553 (75.8%)
Yes	-	1 (0.10%)	4 (0.50%)	22 (3.0%)	84 (11.5%)
NR	687 (94.1%)	682 (93.4%)	622 (85.2%)	383 (52.5%)	93 (12.7%)
Macrovascular Complications					
<i>Cardiovascular disease</i>					
No	39 (5.30%)	43 (5.9%)	101 (13.8%)	323 (44.2%)	565 (77.4%)
Yes	4 (0.50%)	5 (0.7%)	7 (1.0%)	24 (3.3%)	68 (9.3%)
NR	687 (94.1%)	682 (93.4%)	622 (85.2%)	383 (52.5%)	97 (13.3%)
<i>Cerebrovascular disease (Stroke)</i>					
No	43 (5.90%)	48 (6.6%)	106 (14.5%)	335 (45.9%)	616 (84.4%)
Yes	-	-	2 (0.30%)	13 (1.80%)	21 (2.9%)
NR	687 (94.1%)	682 (93.4%)	622 (85.2%)	382 (52.3%)	93 (12.7%)
<i>Peripheral arterial disease</i>					
No	43 (5.90%)	48 (6.6%)	108 (14.8%)	347 (47.5%)	630 (86.3%)
Yes	-	-	-	1 (0.10%)	7 (1.0%)
NR	687 (94.1%)	682 (93.4%)	622 (85.2%)	382 (52.3%)	93 (12.7%)
<i>Diabetic foot</i>					
No	43 (6.3%)	48 (7.0%)	106 (14.5%)	342 (46.8%)	615 (84.2%)
Yes	-	-	2 (0.30%)	6 (0.80%)	22 (3.0%)
NR	687 (94.1%)	682 (93.4%)	622 (85.2%)	382 (52.3%)	93 (12.7%)

NB: NR = Not Recorded

Table S7. Co-morbidities seen among the studied population.

	Visit-1	Visit-2	Visit-3	Visit-4	Visit-5
Asthma					
No	43 (6.3%)	48 (7.0%)	107 (14.7%)	347 (47.5%)	625 (85.6%)
Yes	-	-	1 (0.10%)	1 (0.10%)	12 (1.6%)
NR	687 (94.1%)	682 (93.4%)	622 (85.2%)	382 (52.3%)	93 (12.7%)
COPD					
No	43 (6.3%)	48 (6.6%)	108 (14.8%)	346 (47.4%)	632 (86.6%)
Yes	-	-	-	2 (0.30%)	4 (0.50%)
NR	687 (94.1%)	682 (93.4%)	622 (85.2%)	382 (52.3%)	93 (12.7%)
Hypothyroidism					
No	42 (5.80%)	46 (6.3%)	92 (12.6%)	288 (39.5)	517 (70.8%)
Yes	1 (0.1%)	2 (0.30%)	16 (2.20%)	60 (8.20%)	120 (16.4%)
NR	687 (94.1%)	682 (93.4%)	622 (85.2%)	382 (52.3%)	93 (12.7%)
Hyperthyroidism					
No	43 (6.3%)	48 (6.6%)	107 (14.7%)	344 (47.1%)	625 (85.6%)
Yes	-	-	1 (0.10%)	4 (0.50%)	12 (1.6%)
NR	687 (94.1%)	682 (93.4%)	622 (85.2%)	382 (52.3%)	93 (12.7%)

NB: NR = Not Recorded

Table S8 - Other complications and key events.

	Visit-1	Visit-2	Visit-3	Visit-4	Visit-5
Infection (not specified)					
Yes	18 (6.7%)	3 (0.4%)	2 (0.3%)	8 (1.1%)	78 (10.7%)
No	49 (6.7%)	19 (2.6%)	77 (10.5%)	293 (40.1%)	626 (85.8)
Not recorded	663 (90.8%)	708 (97.0%)	651 (89.2%)	429 (58.8%)	26 (3.6%)
Waiting for surgery (surgery not specified)					
Yes	1 (0.1%)	3 (0.4%)	4 (0.5%)	2 (0.3%)	44 (6.0%)
No	66 (9.0%)	19 (2.6%)	75 (10.3%)	299 (41.0%)	660 (90.4%)
Not recorded	663 (90.8%)	708 (98.9%)	651 (89.2%)	429 (58.8%)	26 (3.6%)
Required Hospitalization (any medical or surgical cause)					
No	82 (11.2%)	81 (11.1%)	82 (11.2%)	87 (11.9%)	112 (15.3%)
Yes	6 (0.80%)	5 (0.7%)	9 (1.20%)	17 (2.30%)	138 (18.9%)
NR	642 (87.9%)	644 (88.2%)	639 (87.5%)	626 (85.8%)	480 (65.8%)
Other Illness including other co-morbidities					
Not recorded	663 (96.2%)	666 (96.7%)	609 (88.4%)	389 (56.5%)	2 (0.3%)

NB: NR = Not Recorded