

List of Supplementary Tables

Table S1: Treatment and consumable unit costs.....	2
Table S2: Annual treatment costs implemented into the CDM	3
Table S3: Management costs implemented within the CDM	4
Table S4: Direct costs implemented within the CDM.....	5
Table S5: Baseline utilities implemented within the CDM.....	6
Table S6: NPH Insulin costs	7
Table S7: Lancet cost.....	8
Table S8: SMBG strip cost	10

Table S1: Treatment and consumable unit costs

	Unit size	Quantity in Packet	Packet cost	Unit Cost	Source
Treatments					
- Metformin	500mg	28	£1.27	£0.05	MIMS - Metformin [1]
- Glipizide	5mg	28	£3.23	£0.12	MIMS - Glipizide [1]
- Alogliptin (12.5mg)	12.5mg	28	£26.60	£0.95	MIMS – Vipidia® [1]
- Alogliptin (25mg)	25mg	28	£26.60	£0.95	MIMS – Vipidia® [1]
- NPH Insulin	1 unit	#	#	£0.02	MIMS - Intermediate acting insulins [1]
Consumables					
- Lancets	1 lancet	#	#	£0.04	MIMS - Blood lancets [1]
- SMBG Strips	1 strip	#	#	£0.29	MIMS - Blood glucose tests [1]
- Needles	1 needle	1	£0.37	£0.037	MIMS - Needles, hypodermic [1]
<p>Abbreviations: SMBG, Self-monitoring of blood glucose; NPH, Neutral Protamine Hagedorn.</p> <p>Notes: #, Multiple prescription options available, calculated by averaging unit costs of all relevant values. Contributing treatments/consumables outlined in Table S6, Table S7 and Table S8 respectively.</p>					

Table S2: Annual treatment costs implemented into the CDM

	Daily dose/freq	Source	Daily Cost	Annual Cost	Total Cost
MET+SU					
- Metformin	2000mg	NICE (Table 81) [2]	£0.18	£66.22	£159.43
- Glipizide	5mg	ENDURE [3]*	£0.12	£42.11	
- SMBG strips	0.428	NICE (Table 65) [2]	£0.12	£44.74	
- Lancets	0.428	NICE (Table 65) [2]	£0.02	£6.37	
- Needles	0	NICE (Table 65) [2]	£0.00	£0.00	
MET+ALO (12.5mg)					
- Metformin	2000mg	NICE (Table 81) [2]	£0.18	£66.22	£412.97
- Alogliptin	12.5mg	ENDURE [3]	£0.95	£346.75	
- SMBG strips	0	NICE (Table 65) [2]	£0.00	£0.00	
- Lancets	0	NICE (Table 65) [2]	£0.00	£0.00	
- Needles	0	NICE (Table 65) [2]	£0.00	£0.00	
MET+ALO (25mg)					
- Metformin	2000mg	NICE (Table 81) [2]	£0.18	£66.22	£412.97
- Alogliptin	25mg	ENDURE [3]	£0.95	£346.75	
- SMBG strips	0	NICE (Table 65) [2]	£0.00	£0.00	
- Lancets	0	NICE (Table 65) [2]	£0.00	£0.00	
- Needles	0	NICE (Table 65) [2]	£0.00	£0.00	
MET+NPH					
- Metformin	2000mg	NICE (Table 81) [2]	£0.18	£66.22	£610.03
- NPH Insulin	47.7 units	NICE (Table 81) [2]	£0.95	£346.75	
- SMBG strips	2	NICE (Table 65) [2]	£0.00	£0.00	
- Lancets	2	NICE (Table 65) [2]	£0.00	£0.00	
- Needles	1	NICE (Table 65) [2]	£0.00	£0.00	
<p>Abbreviations: ALO, alogliptin; freq., frequency; MET, Metformin; SMBG, Self-monitoring of blood glucose; NPH, Neutral Protamine Hagedorn; SU, sulphonylurea.</p> <p>Notes: *, Assumed value based on "95.0% of patients in the glipizide group were receiving 5mg per day at the end of the study"</p>					

Table S3: Management costs implemented within the CDM

	Annual Cost (£)	Source
Management costs		
Statins	£12.36	MIMS (10mg/day Atorvastatin) [1]
Aspirin	£40.20	MIMS (300mg/day Aspirin) [1]
ACE	£10.32	MIMS (10mg/day Lisinopril) [1]
Screening for MA	£0.00	-
Screening for GRP	£0.00	-
Stopping ACEs due to SAEs	£0.00	-
Eye screening	£0.00	-
Foot screening program	£0.00	-
Non-standard ulcer treatment	£0.00	-
Anti-depression treatment	£11.76	MIMS (20mg/day Fluoxetine) [1]
Screening for depression	£0.00	-
Abbreviations: ACE, angiotensin-converting-enzyme; MA, microalbuminuria; GRP, gross proteinuria; SAE, Serious adverse events.		

Table S4: Direct costs implemented within the CDM

	Annual Cost (£) First (Subsequent)	Source
Direct costs of CVD complications		
MI*	£6,508 (£1,177)	Alva et al. [4]
Angina*	£9,964 (£1,240)	
HF*	£3,255 (£1,503)	
Stroke*	£6,942 (£1,148)	
Stroke death within 30 days*	£4,034	
PVD*	£2,874 (£2,874)	Currie et al. [5]
Direct costs of renal complications		
HD*	£26,236 (£26,236)	Kerr et al. [6]
PD*	£21,909 (£21,909)	
RT*	£38,151 (£7,986)	
Direct costs of acute events		
Major hypo*	£278.59	Farmer et al. [7]
Minor hypo*	£0.00	Assumption
Ketoacidosis event	£0.00	-
Lactic acid event	£0.00	-
Oedema onset (adverse event)	£0.00	-
Oedema follow up (adverse event)	£0.00	-
Direct costs of eye disease		
Laser treatment*	£829.00	UKPDS study group 40. [8]
Cataract operation*	£714.00	Alva et al. [4]
Following cataract operation*	£688.00	
Blindness - year of onset*	£1,382 (£462)	
Direct costs of neuropathy/foot ulcer/amputation		
Neuropathy*	£1,170 (£1,170)	Currie et al. [5]
Amputation (event based)*	£9,739	Alva et al. [4]
Amputation prosthesis (event based)*	£686	Currie et al. [5]
Gangrene treatment	£3,157	Ghatnekar et al.[9]
After healed ulcer	£0.00	Assumption
Infected ulcer	£1,810	Ghatnekar et al. [9]
Standard uninfected ulcer	£1,775	
Healed ulcer history of amputation	£0.00	Assumption
<p>Abbreviations: MI, myocardial infarction; HF, heart failure; PVD, peripheral vascular disease; HD, hemodialysis; PD, peritoneal dialysis; RT, renal transplant; hypo, hypoglycemia.</p> <p>Notes: *, Costs (where appropriate) have been inflated to 2015 prices (latest available) using the hospital and community health services (HCHS) index (2015: 293.10) [9]; Cells with a single value imply the same cost value is used for year 1 and years 2+.</p>		

Table S5: Baseline utilities implemented within the CDM

	Utility	Source
Baseline utilities		
T2 no complications	0.814	Clarke et al. [10]
MI event disutility	-0.129	
Post MI	0.736	
Angina	0.682	
HF	0.633	
Stroke event disutility	-0.181	
Post stroke	0.545	
PVD	0.570	Tengs & Wallace.[11]
MA	0.814	Assumption*
GRP	0.814	Assumption*
HD	0.604	Wasserfallen et al. [12]
PD	0.612	
RT	0.750	Tengs & Wallace. [11]
BDR	0.790	Sharma et al. [13]
PDR	0.790	
ME	0.790	
SVL	0.670	Lloyd et al. [14]
Neuropathy	0.630	
Cataract	0.620	Hopkins et al. [15]
Active ulcer	0.75	Redekop et al. [16]
Healed ulcer	0.814	Assumption*
Amputation event disutility	-0.538	Clarke et al. [10]
Post amputation	0.402	Clarke et al. [10]
Major hypo event disutility	-0.012	Currie et al. [17]
Minor hypo event disutility	-0.004	
Keto	-	Not implemented
LA	-	Not implemented
Fear of Hypoglycemic	-	Not implemented
Oedema	-	Not implemented
Post edema	0.814	Assumption*
Untreated depression	0.606	Goldney et al. [18]
Treated depression	0.814	Assumption*
<p>Abbreviations: T2, Type 2; MI, myocardial infarction; HF, heart failure; PVD, peripheral vascular disease; MA, microalbuminuria; GRP, gross proteinuria; HD, hemodialysis; PD, peritoneal dialysis; RT, renal transplant; BDR, background diabetic retinopathy; PDR, proliferative diabetic retinopathy; ME, macular edema; SVL, severe vision loss; Hypo, hypoglycemia; LA, Lactic acid.</p> <p>Notes: * No data available. Utility assumed to be equal to a type 2 diabetic with no complications. Utility values range from [0, 1]; Disutility values [-1, 0].</p>		

Table S6: NPH Insulin costs

NPH drug name	MIMS cost information [1] based on per 100 IU/ml	Cost per ml	Cost per IU/ml (÷ 100)
Humulin I	5 x 3ml KwikPen=£21.70	£1.45	£0.01
	5 x 3ml cartridge=£19.08	£1.27	£0.01
	1 x 10ml vial=£15.68.	£1.57	£0.02
Hypurin Bovine Isophane	5 x 3ml cartridge=£41.58	£2.77	£0.03
	1 x 10ml vial=£27.72	£2.77	£0.03
Hypurin Porcine Isophane	5 x 3ml cartridge=£37.80	£2.52	£0.03
	1 x 10ml vial=£25.20	£2.52	£0.03
Insulatard	5 x 3ml Penfill cartridges=£22.90	£1.53	£0.02
	5 x 3ml InnoLet pre-filled delivery device=£20.40	£1.36	£0.01
	1 x 10ml vial=£7.48.	£0.75	£0.01
Insuman Basal	1 x 5ml vial=£5.61.	£1.12	£0.01
	5 x 3ml cartridges=£17.50	£1.17	£0.01
	5 x 3ml SoloStar pre-filled pen=£19.80	£1.32	£0.01
Average cost per iu/ml (unit):			£0.02
Abbreviations: NPH, Neutral Protamine Hagedorn insulin.			

Table S7: Lancet cost

Lancet name	MIMS [1] cost information	Cost per lancet
Acti-Lance	2.0mm/17 gauge, 100=£5.49; 200=£10.41.	£0.05
	1.8mm/23 gauge, 100=£5.49; 200=£9.88.	
	1.5mm/28 gauge, 100=£5.49; 200=£9.88.	
Advocate	0.31mm/30 gauge, 100=£2.95.	£0.03
AgaMatrix Ultra-Thin	0.35mm/28 gauge, 200=£5.43.	£0.03
	0.20mm/33 gauge, 200=£7.17	
Apollo Safety Lancets	2.4mm/21 gauge, 100=£5.99.	£0.06
	2.4mm/23 gauge, 100=£5.99.	
	1.8mm/26 gauge, 100=£5.99.	
	1.8mm/28 gauge, 100=£5.99.	
BD Micro-Fine + Lancet	0.20mm/33G, 100=£3.16.	£0.05
	0.30mm/30G, 200=£6.13.	
BG Star Lancet	100=£3.65.	£0.04
CareSens Lancets	0.31mm/30 gauge, 100=£2.95.	£0.03
	0.36mm/28 gauge, 100=£2.95.	
Dario Lancets	100=£3.45.	£0.03
Fastclix	204=£9.92.	£0.05
Freestyle Lancet	200=£7.36	£0.04
Glucodex Lancets	100=£3.60	£0.04
Glucojet Lancets Plus	100=£3.73	£0.03
	200=£5.50	
GlucoRx Safety Lancets	1.6mm/30 gauge, 100=£5.50.	£0.06
	1.8mm/28 gauge, 100=£5.50.	
	1.8mm/26 gauge, 100=£5.50.	
	2.2mm/23 gauge, 100=£5.50	
Glucozen Lancets	200=£4.99	£0.02
Greenlan Lancets	100=£3.00	£0.03
	200=£6.00	
IME-DC Lancets	100=£3.00	£0.03
Medisafe Solo	0.5mm/29 gauge, 200=£10.75.	£0.05
MediTouch Lancets	100=£3.60	£0.04
Medlance Plus	2.0mm/0.8mm blade, 100=£5.39; 200=£10.25.	£0.05
	1.8mm/21 gauge, 100=£4.81; 200=£9.57.	
	2.4mm/21 gauge, 100=£4.81; 200=£9.57.	
	1.5mm/25 gauge, 100=£4.81; 200=£9.57.	
	1.2mm/30 gauge, 100=£4.81; 200=£9.57	
Mendoor Discrete Lancets	100=£3.61	£0.04
Microdot	100=£3.00; 200=£6.00	£0.04
	200=£10.75.	
	200=£10.75.	
	200=£10.75.	
	200=£10.75.	
Micolet	100=£3.90; 200=£7.44	£0.04
Multiclix	204=£9.83	£0.05
Mylife Lancets	200=£5.50	£0.04
	200=£12.00	
Omnican Lance Soft	200=£5.45	£0.03
OneTouch	200=£7.63	£0.04
	200=£7.63	
	100=£3.81	
palmdoc iCare Advanced Lancets	100=£2.85; 200=£4.45	£0.03
Safe-T-Pro Uno	200=£12.06	£0.06

Lancet name	MIMS [1] cost information	Cost per lancet
Sarstedt Safety Lancets	1.6mm/28 gauge, 200=£10.92.	£0.05
	1.6mm/21 gauge, 200=£10.92.	
	1.8mm/18 gauge, 200=£10.92.	
Softclix	200=£7.85	£0.04
	50=£1.96	
Sterilance Lite II	1.8mm/18 gauge, 100=£5.70.	£0.06
	1.8mm/21 gauge, 100=£5.70.	
	1.8mm/26 gauge, 100=£5.70.	
	1.8mm/28 gauge, 100=£5.70.	
	2.4mm/21 gauge, 100=£5.70.	
	2.4mm/26 gauge, 100=£5.70.	
SylkFeel Ultra-Thin	100=£3.65	£0.04
TRUEPlus	0.195mm/33G, 100=£2.90.	£0.03
	0.32mm/30G, 100=£2.90	
Unilet	100=£3.73; 200=£7.07.	£0.04
	100=£2.99	
	100=£3.80; 200=£7.21.	
Unistik 3	50=£3.24; 100=£6.31; 200=£12.34.	£0.06
	100=£6.31; 200=£12.34.	
	50=£3.24; 100=£6.00; 200=£12.00	
	50=£3.24; 100=£6.31; 200=£12.34	
Vitrex Soft	100=£3.00; 200=£5.70	£0.03
Average cost per lancet:		£0.04

Table S8: SMBG strip cost

SMBG strip name	MIMS [1] cost information	Cost per SMBG strip
Active glucose strips	50=£9.95	£0.20
Advocate Redi-Code+	50=£9.95	£0.20
Autosense	25=£4.50	£0.18
Aviva	50=£15.79	£0.32
Betachek G5	50=£14.19.	£0.28
Betachek Visual	50=£6.80.	£0.14
BGStar Test Strip	50=£14.73.	£0.29
Breeze 2	5 x 10=£15.00.	£0.30
CareSens N	50=£12.75	£0.26
Compact Test Strips	3 x 17=£16.22	£0.32
Contour Next	50=£15.04	£0.30
Contour Test Strips	50=£9.95.	£0.20
Contour TS	50=£9.50.	£0.20
Dario Test Strips	50=£14.95.	£0.30
Element Test Strips	50=£9.89.	£0.20
Fintest Lite	50=£7.86	£0.16
FreeStyle Lite	50=£15.80	£0.32
FreeStyle Optium	50=£15.71.	£0.31
FreeStyle Test Strip	50=£15.81.	£0.32
GlucoDock Glucose	50=£14.90.	£0.30
GlucoFlex-R	50=£6.75.	£0.14
GlucoLab Test Strips	50=£9.89.	£0.20
GlucoMen Areo	50=£9.95	£0.20
GlucoMen GM Sensors	50=£9.95	£0.20
GlucoMen LX Sensors	50=£15.59.	£0.31
GlucoMen Sensors	50=£14.69.	£0.29
GlucoMen Visio	50=£15.60	£0.31
GlucNavii	50=£8.95	£0.18
GlucRx HCT Glucose	50=£13.95	£0.28
GlucRx Nexus	50=£9.95.	£0.20
GlucRx Original	50=£9.45.	£0.19
GlucZen.auto	50=£8.99	£0.18
GluNeo	50=£9.89.	£0.20
iHealth Test Strips	50=£9.49	£0.19
IME-DC	50=£14.10.	£0.28
MediTouch	50=£14.90.	£2.98
Mendor Discreet	2 x 25=£14.75	£0.30
Microdot+	50=£9.49.	£0.19
Mobile Test Cassette	100=£32.48	£0.32
MODZ	50=£14.00	£0.28
Myglucohealth	50=£15.50.	£0.31
Mylife Pura	50=£9.50.	£0.19
Mylife Unio	50=£9.50	£0.19
Omnitest 3	50=£9.89.	£0.20
On-Call Advanced	50=£13.65	£0.27
OneTouch Ultra	50=£11.99.	£0.24
OneTouch Verio	50=£15.12.	£0.30
OneTouch Vita	50=£15.07.	£0.30
palmdoc Icare Advanced	50=£9.70	£0.19
palmdoc Icare Advanced Solo	50=£13.50	£0.27
Performa	50=£9.95	£0.20
SD Codefree	50=£6.99.	£0.14

SMBG strip name	MIMS [1] cost information	Cost per SMBG strip
Sensocard	50=£16.30.	£0.33
SuperCheck2	50=£8.49.	£0.17
SURESIGN Resure	50=£9.99.	£0.20
TEE2	50=£7.75.	£0.16
TRUEone	50=£14.99.	£0.30
TRUEresult	50=£14.99.	£0.30
TrueTrack Smart System	50=£14.99.	£0.30
TRUEyou	50=£9.92.	£0.20
WaveSense Jazz	50=£9.87	£0.20
Average cost per lancet:		£0.04
<i>Abbreviations: SMBG, Self-monitoring of blood glucose</i>		

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