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APPENDICES

Appendix A

Characteristics of care by diabetes care group

Organisation	Managed care	Protocolized care	Usual care
Senior leader	X		
Systematic quality check on different levels	X	X	
Incentives for improving quality of care	X	X	
Facilitating care coordination	X		
Delivery system change			
Defined roles and tasks among team members	X	X	X
Planned interaction to support evidence-based care	X		
Clinical case management service for complex patients	X		
Regular follow-up	X	X	X
Patient tailored education and information	X	X	
Decision support			
Evidence based guidelines	X	X	X
Patient empowerment and self-management support	X		
Proven education methods	X		
Specialist expertise	X	X	
Clinical information system			
Timely reminders providers and patients	X	X	X
Care planning	X	X	
Systematic monitoring patient outcomes	X	X	
Systematic monitoring providers process outcomes	X		
Self-management support			
Discussing care plan with patient	X	X	
Goal setting, cognitive behaviour change strategies	X		
Community			
Encourage patients to participate in community programs	X		

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Appendix B**Costs prices used for valuing resources or absenteeism (2008)**

Costs	€
Direct health care costs	
Primary care physician (per visit)	21.89
Diabetes nurse (per visit)	13.25
Dietician (per visit)	15.25
Podiatrist (per visit)	53.55
Pedicure (per visit)	22.50
Physical therapist (per visit)	24.65
Home care (per hour)	33.27
Specialists (internal medicine, ophthalmology, cardiology, neurology, nephrology, other) (per visit)	60.68
Psychologist (per visit)	83.01
Specialist in mental health care (per visit)	51.86
Blood sample (per sample)	23.20
Urine sample (per sample)	15.44
Hospitalization (per day)	365.18
Costs Diabetes Care System (per three months)	83.13
Direct non-health care costs (per hour)	
Alternative therapists (acupuncturist, homeopath, chiropractors, other) (per visit)	39.63 to 50.25
Indirect costs (per hour)	
Absenteeism paid work (per hour)	37.91
Absenteeism unpaid work (per hour)	8.99
Unable to perform usual activities (per hour)	8.99

Hakkaart-van Roijen, L., Tan, S. S., and Bouwmans, C. A. M. Handleiding voor kostenonderzoek, methoden en standaard kostprijzen voor economische evaluaties in de gezondheidszorg. College voor zorgverzekeringen. Geactualiseerde versie. 2010. [Dutch manual for costing in economic evaluations]. 2012

Appendix C

Transition rates, estimated for each one-year time step for each of the severity stages distinguished from literature and empirical data

Table 1: Transition rates between stages of the diabetic foot

From \ To	Uncomplicated	Neuropathy	Abscess	Healed	Amputation
Uncomplicated	1 - 0.0047 - (0.039* (HbA _{1c} /10) ^{5.3})	0.0399* (HbA _{1c} /10) ^{5.3}	-	0.0047	-
Neuropathy	-	0.9851	0.0026	0.0123	-
Abscess	-	-	0.0407	0.2853	0.6740
Healed	-	-	0.0179	0.9821	-
Amputation	-	-	-	-	1

Table 2: Transition rates between stages of nephropathy

From \ To	Uncomplicated	Microalbuminuria	Macroalbuminuria	ESRD
Uncomplicated	1 - (0.0267 * (HbA _{1c} /10) ^{3.25})	0.0267 * (HbA _{1c} /10) ^{3.25}	-	-
Microalbuminuria	-	1 - (0.1572* (HbA _{1c} /10) ^{7.95})	0.1572* (HbA _{1c} /10) ^{7.95}	-
Macroalbuminuria	-	-	-	-
Diabetes: 1-11			0.9958	0.0042
duration 12-20			0.9615	0.0385
(years) 21+			0.926	0.074
ESRD	-	-	-	1

ESRD=end stage renal disease



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Table 3: Transition rates between stages of retinopathy

From	To	Uncomplicated	BDR	PDR	Macular edema	Blindness
Uncomplicated						
Diabetes duration: (years)	1-4	1-(0.073*(HbA _{1c} /10) ^{10.1})	0.073*(HbA _{1c} /10) ^{10.1}	-	-	-
	5-9	1-(0.129*(HbA _{1c} /10) ^{10.1})	0.129*(HbA _{1c} /10) ^{10.1}	-	-	-
	10-14	1-(0.116*(HbA _{1c} /10) ^{10.1})	0.116*(HbA _{1c} /10) ^{10.1}	-	-	-
	15+	1-(0.113*(HbA _{1c} /10) ^{10.1})	0.113*(HbA _{1c} /10) ^{10.1}	-	-	-
BDR						
Diabetes duration: (years)	1-4	-	1-0.0025*(HbA _{1c} /10) ^{6.33}	0.0025*(HbA _{1c} /10) ^{6.33}	0.047*(HbA _{1c} /10) ^{1.2}	-
	5-9	-	0.047*(HbA _{1c} /10) ^{1.2}	0.009*(HbA _{1c} /10) ^{6.33}	0.095*(HbA _{1c} /10) ^{1.2}	-
	10-14	-	-	0.095*(HbA _{1c} /10) ^{6.33}	0.092*(HbA _{1c} /10) ^{1.2}	-
	15+	-	-	0.026*(HbA _{1c} /10) ^{6.33}	0.08*(HbA _{1c} /10) ^{1.2}	-
PDR						
treated		-	-	0.9852	-	0.0148
untreated		-	-	0.912	-	0.088
Macular edema						
treated		-	-	-	0.967	0.033
untreated		-	-	-	0.95	0.05
Blindness						
		-	-	-	-	1

BDR= Background diabetic retinopathy, PDR= Proliferative diabetic retinopathy

Table 4: Variance of probabilities used for the probabilistic sensitivity analyses (PSA).

Transition	Coefficients of variance	Reference
Diabetic foot		
Uncomplicated → neuropathy	0.14	(1)
Neuropathy → abscess	0.12	(2,3)
Abscess → amputation	0.24	(1,2,4)
Uncomplicated → healed	0.24	(2,5)
Neuropathy → healed	0.33	(2,4,6)
Healed → abscess	0.04	(2,3)
Abscess → healed	0.13	(2,4)
Retinopathy		
Uncomplicated → background retinopathy	0.28	(7)
Background retinopathy → proliferative retinopathy	0.34	(7)
Background retinopathy → macular edema	0.34	(8)
proliferative retinopathy → blindness	0.06	(9)
macular edema → blindness	0.06	(9)
Nephropathy		
Uncomplicated → microalbuminuria	0.20	(10)
Microalbuminuria → macroalbuminuria	0.25	(11)
Macroalbuminuria → End Stage Renal Disease	0.25	(12)

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