Index

ability to pay 13, 325, 334, 365–7, 373, 429, 433, 440
Abler, D. 112–13
Aboagye, A.Q.Q. 62
abortion and replacement decisions 150
Abuja Goals Fund 422, 423
access costs 342–4
mammographic screening 367–9
Acharya, A.K. 283, 284–5, 287, 291
activity-based costing (ABC) 62, 83–6
acute appendicitis 44–5, 225, 226
acute orbital cellulites 227
addiction theory 346–8
adult circumcision 416–17, 418
advanced colorectal 222, 236
Affordable Care Act (2010), US 387
Africa
antiretroviral drugs 434–5
MCF country estimates 125–7, 128
tax administration costs 145
age
in context of efficiency and equity 290–91
and equity 289–90
and price of QALY 333–4
relation with earnings 330
and VSL 329–32
age weights 284–6, 287–9, 291, 304, 332
aging population, MCF in context of 132–5
ageism 289–91, 302
Aid to Families with Dependent Children (AFDC) 237
AIDS/HIV, see HIV/AIDS
air quality regulations 336–7
alcohol
Chinese consumption 112–13
social cost 101–3
as substitute/complement for marijuana 95–8, 107
unavoidable costs 39, 56–7
alcohol treatment programs 164–5, 174–6, 207, 234–5
alcohol-impaired driving 91–3
Aldy, J.E. 328, 330–32, 336–7, 351
Algeria, social discount rate 203
‘all other things are held constant’ assumption 150, 365
allergy 324–5
alternatives evaluation 4–5, 27
altruism 376–7
Alzheimer’s 222, 236
ambulance helicopter services 376
American Cancer Society 3–4, 21, 23
Americans with Disabilities Act (1990) 227
anesthesia costs/charges 85
Andhra Pradesh, HIV-prevention interventions 50–53
angina pectoris 76
antenatal care, education effects 110–11
antepartum anti-D 219
anti-hypertensive therapy 232
antiretroviral drugs (ARVs) 262–5, 422, 423
Africa 434–5
elderly people in US 436–8
appendectomy 227
Argentina, social discount rate 203
Arnesen, T. 283, 286–7
arrhythmias 76, 208–10
Arrow, K.J. 300
arthritis 217, 222, 236, 257–8
aspirin 6, 8, 41, 63, 65, 160
asthma 76
asthma inhalers 222, 236
Atif, M. 84
Au Eong, K.G. 266
Auriol, E. 125–7, 128, 145, 399
Australia
lifetime costs of HIV study 54–6
MCF 130
mobile mammographic screening 367–9
price of QALYS 325–6
social discount rate 203
waiting time rationing 355
Austria, MCF/social discount rate 130, 203
autoimmune haemolytic anaemia 227
Auvert, B. 165–7
average cost per unit (AC) 33, 34, 36, 51–3, 55, 59, 66–7, 69, 73–4, 79, 86
use of per diem 63–4
versus marginal cost 61
average cost-effectiveness ratio 152, 191–3
Axnick, N.W. 104

463
Baicker, K. 135–6, 137
Baird, S. 130
Ballard, C.L. 123–4, 125, 134, 138, 145–6, 174
Bangladesh, social discount rate 202
barium-enema procedure 21
Basu, K. 110
Bayoumi, A.M. 273–4, 278, 415
Beaver Dam Health Outcomes Study 322
Beck, J.R. 262
beer quantity–frequency (Q–F) index 164–5, 175–6
before-and-after comparisons 24–6
Belgium MCF 130
benefits components 313–14
as cost savings 416–19
human capital measures 315–16
measurement 5, 6–7, 314–15
benefits weights
disaggregating benefits by income group 380–81
empirical estimates 381–2
estimates derived from economic theory 382–5
Benin, MCF/social discount rate 128, 202
Benoxaprophen 160–61
beta interferon 222, 236
better ear pure tone average (BEPTA) hearing loss 274–5
Binagwaho, A. 416–17, 418, 423
Birch, S. 19–20
birth facilities education effects 110–11
weighted benefits 384
birth weights, in neonatal intensive care 230–31
Black, L.K. 4
Bleichrodt, H. 266–7, 268–70
blindness 324–5
Body Mass Index (BMI) 205–6
Bolivia, social discount rate 202
Bombardier, C. 267
Boston, costs of psychiatric care 140–41
Botswana, MCF/social discount rate 128, 203
Boyle, M.H. 26–7, 230–31, 274
Brazil Bolsa program 397
social discount rate 203
breast cancer reference requirements for treatment 44–5
screening 232, 242, 367–9
Briggs, A.H. 193, 195–9, 211, 262, 265
bronchitis 76
Brooklyn, drug treatment programs 344
Brown, G.C. 271–2
Brown, K. 21
Browning, E.K. 399
Browning, J.M. 399
Buchanan, H.M. 89, 228
budget constraints 7, 135–6, 196, 209–10, 218, 243–4, 288–9, 293
variable 229
burden of disease 4, 39, 57–8, 234–5, 283–4, 288–9, 304–5, 388, 434–6
Bureau of Labor Statistics (BLS), US 328–9
Burkina Faso MCF/social discount rate 128, 202
Skilled Care Initiative 196–9
Burrows, C. 21
Burundi, MCF/social discount rate 128, 202
Bush, J.W. 217, 218–19, 244, 322–3, 326
Caesarean section 76
Cairns, J.A. 210–11
California, case management programs 141–3
calorie consumption 205–6
Cameroon, MCF/social discount rate 130, 202
Canada health care evaluation practice 14–16
MCF/social discount rate 130, 204
neonatal intensive care 26–7
Canning D. 435
Cantril’s ladder 308
capability approach and CBA 299–300
and CUA 295–9
instrument for older people 297–9
main ingredients and rationale 294–5
and QALYs 310, 438
and utility of restraints 305–7, 308
CAPD 232
Cape Verde, MCF 128
capital costs 35–6, 37, 63–4
capital projects 16, 26–7, 401, 403
Carribean, HIV/AIDS 412
Cartwright, W.S. 361, 362
case management programs ‘clinical team’ program 141, 142–3, 391
and distributional weights 389–91
‘intensive broker’ program 141–3, 391
and MCF 141–3
Program for Assertive Community Treatment 141, 142–3, 391
case management programs 141–3 and MCF 139–43
comparison programs 233, 242
compensation tests 385–6 and economic efficiency 340–41
compensation, WTA 348–52
competitive markets and costs 64–6, 76–9
complements 95–8, 106–7, 112–13
compliance effects, worksite treatment 19–20
conditional cash transfer (CCT) programs 379, 389, 398, 405, 421–2
evaluating in SSA 400
evaluating targeting 399–400
Kenya 397–400
Sub-Saharan Africa 400
condoms 53–4, 161
social marketing (CSM) programs 426–8
confidence interval (CI) 181, 189–93, 201, 207–11, 230, 251
Bonferroni method 194
exact method 194–5
rectangular method 193–4
Congo Democratic Republic, MCF, social discount rate 128, 202
Congo Republic, MCF 128
conjoint analysis (CA) 341, 342, 365–7, 410
Conley, B.C. 317, 319–20
consistency of choice 184, 186, 188
constant returns to scale 19–20, 37, 73, 78–9, 86, 151
constitutional decision–making contexts 227–9
corresponding validity 252, 276, 278, 415
counterfactual sovereignty 13, 16, 27, 89, 250, 328, 329, 340, 377
full or zero acceptance 345
as information problem 103
partial acceptance in CBA 346–8
violating 358–63
consumer surplus 75, 93, 101–3, 114, 299, 324–5, 426–8
in presence of addiction 346–8
continuous ambulatory peritoneal dialysis 219
control groups 25, 156, 157, 160, 168, 189–91
controlled clinical trials 4–5, 83, 150, 208, 365
see also randomised controlled trials (RCTs)
Cook, J. 17–18
Cookson, R. 295, 296, 299, 374
Copenhagen Consensus Centre, RethinkHIV project 420–24, 435
expert economist panel outcomes 421–2
coronary bypass 78, 219, 241–2
cost allocation 62–3
cost centers 85
cost minimization (CM)
applications 44–56
and CBA 40–41
as CBA 41–2
and CEA 42–3
and cost standardization 70–73
and economic theory 33–9
fundamental weaknesses 75
method 8–9
problems 47–8, 56–8
pros and cons 46–7, 51–3, 417–19
usage 14–15
cost shifting 119, 136–41
cost standardization 70–73, 75, 81
cost–benefit analysis (CBA) 40–41
alternatives to 11–12
applications 14–26, 326–36
and capability approach 299–300
CEA as 9–10
converting CUA into 320–26
efficiency costs and benefits 13
equal weights problem 378–9
method 6–7
methods for converting CEA into 161–5, 169
role of MCF 115–17
social perspective 12
usage 14–15, 132
and utility values 250
versus CUA 227–9
see also equity
cost-effectiveness acceptability curves (CEAC)
195–9, 220–21
cost-effectiveness analysis (CEA)
applications 165–76
as approach to evaluation 149
basic principles 151–6
as CBA 9–10
and CM 42–3
costs to include 149–50
discounting 181–8
discounting of benefits 184–6
effects to include 150–51
estimating effects using RCTs 156–61
general comparability to CUA 218
hypertension programs 19–20
and MCF variance by project 131–2
method 7–8
methods for converting into CBA 161–5, 169
problems 43, 176–7
and public–private partnerships 132
social perspective 12–13
uncertainty and sampling error 188–99
usage 14–15, 131
versus CUA 217–18
cost-effectiveness model 151–3
hypothetical example 152
hypothetical example with competing choices 153
cost-effectiveness ratios
calculating and interpreting 153–6
calculating confidence intervals 193–5
delayed programs 186–7
estimate of cut-off ratio for hypothetical serious disease 170–72
MCF as cut-off ratio 163–4
sampling error 191–3
utility of income as cut-off ratio 162–3
see also average cost–benefit ratio;
incremental cost–benefit ratio (ICER)
cost-effectiveness, interpretations of 176
cost-to-charge ratios (RCCs) 69–70, 75–6, 84–5
cost–utility analysis (CUA)
applications 229–43
basic principles 222–7
and capability approach 295–9
converting into CBA 320–26
equity in 281–2
as generally comparable CEA 218
method 8
problems 243–4
in priority setting 225–7
QALY weights 295–9, 374–6
threshold as range of values 220–22
usage 14–15
utility values 249–50
versus CBA 227–9
versus CEA 217–18
weighted criterion 377–80
see also equity; utilities measurement
cost–utility league tables 218–19, 224
assessment 231–3, 253–4
comparative results for selected programs 218–19
importing tables from another country 243–4
Costa Rica, social discount rate 203
costs
applications 73–83
definition 31
distinguishing from charges 68–9
long and short runs 32
long run cost curves 35–7
marginal versus average 61
and markets 64–8
Index

by modality 71–2, 80–82
overhead and joint 61–3
problems 83–5
proportional relationship with outcomes 23
sampling error 188–93
versus charges 68–70
Côte d’Ivoire, MCF/social discount rate 128, 202
counterfactual outcomes 156–8
counting fingers (CF) test 271
Cox II (routine) 222, 236
Craig, B.M. 248
Cretin, S.B. 186, 187
croup syndrome 227
Cullis, J.G. 356–7
Culyer, A.J. 66
cure 98–100
versus prevention 101, 107–9
Cutler, D. 205
cytology 222, 235, 236
Dageforde, L.A. 45–8
Danish hospitals, economies of scope 74–5
data sources 15
deafness 283–4
Deaton, A. 156, 158, 159–60, 161, 169–70
dementia 305–7, 308
Demonbynes, G. 23–6
Denmark
MCF/social discount rate 130, 204
valuing a QALY 332–4
dental caps 226, 237, 292, 387
depression 436–8
developing countries, estimating VSL 430–31
Devlin, N. 220–22, 234–7, 388
diagnostic related groups (DRGs) 48, 86–7
costing and evaluating 70, 75–6
Dickey, B. 140–41
'difference in difference' (DID) estimator 25
compared to RCTs 156–8
direct cost–benefits 5, 17, 19–20
direct demand 341
direct utility approach
antiretroviral drugs 436–7
pros and cons 438
disability adjusted life year (DALY) 169, 282
criticism of 286–7
and equity 284–7
and global burden of AIDS 304–5
measuring 287–8
in measuring global burden of disease 288–9
and QALYS 283–4
and sleeping sickness treatments 302–4
use for HIV 438–9
disability classes/weights 253–4, 284, 286–8
discounting
clozapine treatment 56–7
country estimates of social discount rates 201–4
discounting benefits in CEA 184–7
hyperbolic discounting and obesity 204–6
individual discount rates in industry
employment choice 199–201
lifetime disease 53–6
rate of discount and economic theory 181–3
rate of discount and hyperbolic discounting 183–4
recommended discount rates 187–8
survey of individual discount rates 210–11
in UK studies 233
when to use 180
disseminated candidiasis 227
distribution weights
and benefits of eliminating arthritis 391–2
deriving numbers weights from PTO of
ability to walk freely 392–5
determining 381–5
disaggregating total benefits by income
group 380–81
evaluation of CCT programs for OVC
397–400
evaluation of user fees 395–7
and mental health care management
programs 389–91
numbers weights 385–8
problems 401–3
doctor valuations 249–50
Dolan, P. 259–62, 292, 376, 387
Dolders, M.G.T. 250
dominated strategies 47, 208, 224, 244
Dominican Republic, social discount rate 202
Donaldson, C. 363–5, 376, 384
Doubilet, P. 176
Dowie, J. 380
Dranove, D. 62
Drug Abuse Treatment Cost Analysis
Program (DATCAP)
costs by modality 71–2
data collection system for substance abuse
programmes 72, 80–82
drug administration 62
drug evaluations, numbers of 14–15
drug status switching 358–60
drug treatment programs 344, 360–63
external benefits 382
treatment gap 362
WTP 314–15
Drummond, M.F. 5, 16, 150, 187–8, 217–18,
231–3, 241–2, 245, 249, 251, 253
Dunn, D.L. 77
Cost–benefit analysis and health care evaluation

Eastern Europe, HIV/AIDS 412
ECG costs/charges 85

economic evaluation
components 5
definition of 4–5
need for 3–4
types 6–9
and uncertainty 180–81
economic outcomes, need for precise estimates 23
economic theory
and CM 33–9
and discount rate 181–3
distribution weights derived from 382–3
economies of scale 37, 49, 62, 73–5, 99
economies of scope 63, 73–5, 78
ectopic pregnancy 226, 227, 237, 292, 387
Ecuador, social discount rate 203
Eddy, D. M. 224–5, 237–9, 243, 292, 387
education
and CCT programs 398, 400
delivery modes 177
demand 169–70
female education and HIV 161, 424–5
and infant mortality 88
and intestinal worms 168–70
and maternal and child health 110–11
web-based delivery 177
effect mechanisms, evaluation 161
effectiveness, measurement 5, 7–8
efficiency 11
age in context of 290–91
combining with equity 379–80, 383–4
conflict with equity 291–2
costs and benefits 13
and DALYs 309
pure efficiency 220–21
and QALYs 309, 321, 388
trade-off with equity 290–94
and WTP 340–41, 372
efficiency-based compensation tests 340–41, 385–6
eflormithine 302–4
Egypt, social discount rate 202
El Salvador, social discount rate 203
Elamin, E. I. 84
elderly people
arthritis treatments 160–66
ARVs 436–8
capability instrument 297–9, 305–7, 308
disease types 288
health insurance 48, 76–7, 132, 140
noncommunicable diseases 288
nursing home versus hospital care 349, 363–5
in psychogeriatric wards 305–8
QALY weights 382
senior companion program 370
time costs 81–3
utility scores 276
VSL 331, 336–7
WTP 357–8, 354, 373
see also age and equity; ageism
elective surgery, waiting times 353–5
electro-physiology-guided drug therapy (EP) 208–10
Elixhauser, A. 14
endowment effects 350, 351–2
Environmental Protection Agency (EPA), US 328
‘Clear Skies’ initiative 336–7
Epstein, J. F. 361–2
Equatorial Guinea, MCF 128
equity
age and 289–90
age in context of efficiency and 290–91
applications 300–307, 388–400
capability approach 294–300
in CUA 281–2, 374–6
and DALYs 283–9
person trade off approach 291–4
problems 307–8, 401–3
and rationing 354–5
role of QALY weights 13, 282–3
trade-off with efficiency 290–94
weighted cost–benefit criterion 377–80
equity weights 385–8
as externality 376–7
Eritrea, MCF 128
erthropoietin treatment 232
estrogen therapy 217, 219, 252–3
ethical dilemmas 303
Ethiopia, MCF/social discount rate 128, 202
European Union, weighting system 384
five-level EQ-5D (EQ-5D-5L) 259
and NICE 262
questionnaire 258, 259
utility weights 259–62
valuation of health states 261
visual analogue scale (EQ VAS) 258–9
youth version (EQ-5D-Y) 258
evaluative management (EM) services 79
excise tax 95, 119–20
expected utility 256–7, 263, 279, 338, 349
expert opinion 15, 209, 223–4, 240–43, 296, 361–2, 421–2
explicit preferences 309, 341, 381–2
exponential discounting 183
export tax 125, 127
external benefits 314–15, 428–9
ARVs 423
complements and substitutes 98
condoms 428
drug treatment programs 314, 377, 382
education 111
immunization programs 93–5
external costs
applications 101–11
and interdependent markets 95–8
and markets 91–5
over time 98–101
problems 111–13
social costs and private costs 89
threshold values as switching values 90–91
external validity 160–61, 166–7, 178
externalities
defining 88–9
equity weights as 376–7
internalizing 93
extracorporeal shock wave lithotripsy (ESWL) 17
face-to-face education delivery 177
factor tax 125, 127
‘fair innings’ argument 290, 382
family planning 424, 428
Feeny, D. 218–19
Feigenbaum, B. 355–6
final effects 151
Fingarette, H. 174
Finkler, S.A. 68–9, 84–5
Finland, social discount rate 204
fixed budget constraints 150, 151–3, 156, 172,
178, 192, 239–40, 310, 421, 435–6, 443
and program ranking 228–9
fixed costs 32, 33–6, 48–9, 50–51, 53–4, 64
average fixed costs 34–5
fixed prices 35, 65–6, 421, 423–4, 439–40
Flynn, T.N. 297
for-profit hospitals, privatization change 138–9
Forester, T.H. 334–5
Foster, J.E. 110
France, MCF/social discount rate 130, 203
Frank, R.G. 56, 57
French, M.T. 71, 72–3, 82–3, 254
Fryback, D.G. 322
Fukui, T. 415
functional ability, numbers weights 392–5
funding sources 15
future health care spending and MCF 135–6
Gabon, MCF/social discount rate 128, 203
Gafni, A. 257
gallstone treatments 17–18
Gambia, MCF 128
Garbacz, C. 370
Garber, A.M. 162–3, 170–72, 219, 244, 318,
336, 338, 426, 441
Gardiner, J. 193, 208–10
GDP
per capita 219, 430–31, 434–5
share of health care spending 135–6
gemcitabine 222, 236
general practitioners (GPs) 232, 233, 369
Gerard, K. 243–4
Gerdttham, U.-G. 301, 382
Germany, MCF/social discount rate 130, 204
Gertler, P.J. 380–81, 395–7, 401, 402
Getzen, T.E. 23
Ghana Health Assessment Project Team 304
Ghana, MCF/social discount rate 128, 202
GI disorders 76
Glaeser, E. 205
global burden of AIDS 304–5
global burden of disease 288–9
Global Fund to Fight AIDS, TB and Malaria (GFATM) 434–6
globalization of evaluations 15–16
glycoprotein 222, 236
GNP 299
‘gold standard’ 70, 77, 158, 161, 178, 256
Gold, M.R. 150, 188, 223
government intervention 11
Gray, A.M. 193
Greece, social discount rate 203
Greggor, D.H. 21, 23
Green, C. 292
Greensboro, drug treatment programs 344
Grewal, I. 297
Grfeoer, J.C. 361–2
Grob, G.N. 139
Gruber, J. 346–8
Grutters, J.P.C. 274–7
Guatemala, social discount rate 202
Guinea Bissau, MCF 128
Guinea, MCF 128
Guinness, L. 50–53
Gyrd-Hansen, D. 332–4, 341, 433, 441
Haacker, M. 431
Hadley, J. 78, 79
Hadorn, D.C. 226
Haiti, social discount rate 202
hand motion (HM) test 271
hand-assisted laparoscopic donor nephrectomy (HALDN) 46–7
Hannum, R.J. 93, 94, 101, 103–6
Habarger, A. 383–4, 385
Hargreaves, J.R. 161
Harper, D.R. 44–5
Harris, J. 290
Hauber, A.B. 257
headaches 6–7, 8, 41, 76, 293
Heal, G.M. 184
health and safety 327–9, 350–51
health care evaluation practice, survey of
14–17
health care professions
education delivery modes 177
valuations 249–50
Health Services Commission, Oregon 226–7,
239–41
health states
applications 265–77
duration 248, 277
identifying and describing 247–8
measurement methods 255–66
measurement sources 252–5
statistical accuracy of methods 250–52
two-dimensional listing 253–4
utility values 248–50, 233
health systems, strengthening 422, 423
Health Utility Index 2 (HUI 2) 262, 274–7
healthy life year (HeaLY) 304–5
healthy-years equivalent (HYE) 257–8
hearing aids 274–7
heart failure 76
heart transplants 232
Hellinger, F.J. 55–6
helminthic diseases 303
hemodialysis 249–50, 251–2
hepatitis B 254
hernia 227
heroin, cocaine as substitute/complement for
coke 106–7
Hinman, A.R. 104
Hirth, R.A. 322–4, 332, 333, 338
HIV/AIDS
AIDS defining illnesses (ADIs) 273
antiretroviral drugs 262–5, 422–3, 434–8
benefits as cost savings 416–19
blood screening 303
CCT programs 397, 400
costs in terminal stages 55–6
country phases 411
DALYs 286
difficulty of treating without CBA 413–14
direct utility approach 436–8
and female education 161
global burden of 304–5
human capital approach 424–6
human choice element 413
individual phases 410–11
infection utilities 273–4
delayed costs 53–6
and male circumcision 161, 165–7
market demand curves 426–9
means of infection 411
mother to child transmission (MTCT) 411,
422, 423, 424
number of possible interventions 414
paradoxes 413
prevalence and incidence numbers 411–12
pricing a QALY 419–24
priority setting 420–23
problems 438–40
and QoL 277–8
revelled preference method 433–6
scaling up prevention interventions 50–53
testing 166–7, 431–2
transmission by discordant couples 431–2
utility value for QALYs 414–15
vaccine research and development 422
voluntary counselling and testing (VCT)
431–2
VSL approach 429–33
Hoch, J.S. 197–8
Hochman, H.M. 389–90
Hoffman, V. 351–2
home dialysis 232, 248–9, 251–2
Honduras, social discount rate 202
Hong Kong, social discount rate 203
horizontal equity 281–2, 284–5
Horngren, C.T. 62
Horowitz, J.K. 350
Horsman, T. 274, 275
hospital care versus nursing homes 363–5
hospital construction expenditures 401, 403
hospital costs
cirrhosis of the liver 57–8
clozapine treatments 56–7
DRG categories 75–6
estimating 73–5
gallstone treatments 18
knee arthroplasty 34–7, 48–50, 73–5
use of per diem 63–4
versus community care 139–43
see also length of stay (LOS)
hospital dialysis 219, 232, 248–9, 251–2
‘hotel costs’ 64
Hounton, S. 196–9
household income groups, MCF estimates by
135–6
Hsiao, W.C. 77–9
Hu, T.-W. 141–2, 143
Hughes, J. 365–7
human capital approach 13, 27–8, 169, 217, 219, 231, 354
HIV/AIDS 424–5
measures of benefits 315–16
and mental health 316–17
problems 336–7
pros and cons in use for HIV/AIDS 425–6
relation with WTP 317–19
using time as numeraire 320–21
human development index (HDI) 299
human development index (HDI) 299
hunger and HIV/AIDS 414
Hull, R. 64
Hurley, S. 54–6
Hyder, A.A. 304–5
hydrochlorothiazide 242
hyperbolic discounting 183–4
and obesity 204–6
‘time inconsistency problem’ 346
hypertension 19–20, 150, 153–6, 180, 219, 252, 360
hysterectomy 76
immunization programs
and consumer sovereignty 345
education effects 110–11
external benefits 93–4
HIV/AIDS 422
Japanese encephalitis 111–12
Kenya 169
meningitis 90–91
over-provision 94–5
social costs 103–6
implantable cardioverter defibrillators (ICDs) 208–10, 211
implicit markets 315
in vitro fertilization 366–7
in-kind transfers 80–81, 82, 351–2, 389–91, 444
‘incentive compatibility problem’ 12
income groups
disaggregating total benefits by 380–81
taxation by 135–6
income growth and social discount rates 201–4
income tax 124–5, 126–7, 128–9, 131–6
income weights 382, 389–91, 397
incremental cost–effectiveness ratio (ICER) 10, 14, 27, 47, 152–3, 155, 195–9, 209–10, 235–7, 276
NICE decisions ranked by 221–2
sleeping sickness 302–4
upper and lower bounds 191–5
‘independence of irrelevant alternatives’ axiom 300
India
HIV/AIDS 304–5
social discount rate 202
indifference curve 104, 302, 313–14, 318–19, 353, 436
indirect cost–benefits 5, 13, 17–18
externalities 376–7
Indonesia, social discount rate 202
inequality, societal aversion to 182–3, 212, 283, 383
infant circumcision 416–18, 423
infant mortality and education 88
informal sector 125, 127
information deficiencies 50, 90, 103–4, 114, 181, 249, 250, 315, 340, 358, 360
inguinal hernia, reference requirements for treatment 44–5
injecting drug users (IDUs) 411, 439
inpatient modalities, costs by 72, 82–3
inpatient programs, mental health 172–4, 326–7
insecticide-treated net (ITN) 24–6, 156
reselling 351–2
Institute for Health Metrics and Evaluation 288–9, 305
insurance 68–9, 76–7, 80–8, 86–7, 132, 135, 140, 226, 229, 238–40, 369, 387
intangible cost–benefits 5, 19–20, 89
adjusting market prices to measure 314–15
use of implicit markets to measure 315
use of similar markets to measure 314
integrated rural development (IRD) projects 23–6
inter-temporal choices 181–2, 201, 212
interdependent markets 106–7
effects on individuals doing purchasing 95–7
effect on individuals not doing purchasing intergenerational equity 166, 182–3, 184–5
internal consistency 251
internal validity 160, 166
interval estimates 180–81
intestinal worms programs 130, 160, 168–70
intra-generational discount rate 184
Investigating Choice Experiments for the
Preferences of Older People (ICECAP-O) 297–9, 305–7, 308
attributes to include 297
utilities of attributes 297–8
Iran, social discount rate 203
Ireland, social discount rate 203
Israel
health care priority setting bodies 240
social discount rate 203
Italy, MCF/social discount rate 130, 203
Cost–benefit analysis and health care evaluation

Jamaica
- PATH program 397
- social discount rate 203

Japan
- female life expectancy 285
- MCF/social discount rate 130, 204
- price of QALYS 325–6

Japanese encephalitis (JE) 111–12

Jari, J. 39, 57, 58
Jerrell, J.M. 141–2, 143

job risk 199–201, 327–9, 350–51

Jofre-Bonet, M. 106–7
Johannesson, M. 266–7, 268–70, 301, 376, 382
Johannesson, P.O. 301–2

joint costs 61–3, 74, 84–5
joint procedures 76
Jones, P.G. 356–7

Kahneman, D. 350
Kaplan, R.M. 217, 218–19, 224, 226, 227, 244, 246, 250, 266, 277, 322–3, 326
Keeler, E.B. 186, 187

Kenya
- bednet usage 24–6, 156
- conditional cash transfer programs 397–400
- intestinal worms program 130, 168–70
- male circumcision 161
- MCF/social discount rate 128, 202

vaccination programs 169
Khandker, S.R. 156–8
kidney dialysis 248, 249–50, 251–2
kidney transplants 16, 232, 250
Kind, P. 233, 253–4, 255, 266, 292
Klarman, H.E. 217, 314
Klevit, H.D. 226, 227
knee arthroplasty, hospital costs 34–7, 48–50, 64
knee conditions 232, 241–3, 292–4
Kneser, T.J. 350–51
Koplan, J.P. 104
Kremer, M. 168–70, 413
Kristensen, T. 74–5

Kuklys, W. 294, 295, 299
Kunshan Country, China, schistomomiasis, control 108–9
Kuwait, social discount rate 203

laboratory costs/charges 48–50, 85
laparoscope hernia 222, 236
laparoscopic cholecystectomy 17–18
laparoscopic donor nephrectomy (LDN) 46–7
labour costs 34–5, 62, 83–4
labour market choice 350–51

and individual discount rates 199–201
and VSL 327–9
Lasater, E.M. 193
law enforcement costs 326–7
law of diminishing returns 34–7, 66, 437–8
length of stay (LOS) 35, 36, 48–50

substance abuse programs 72–3
Lesotho, social discount rate 202
Libya, social discount rate 203
Lie, R.K. 161, 240
life expectancy
- cervical cancer 176
- cirrhosis of the liver 57, 58
- and estrogen use 252–3
- and monotherapy 263–5
- QALY valuation 283–90, 322–4
- rates 12, 182–3
- and social discount rates 201–4
- and speed limits 334–6

life expectancy discount rate (LEDR) 169, 182–3

lifetime costs
- diastolic blood pressure 360
- HIV 53–6
- MC interventions 416–17
- THA/osteoarthritis 241

lifetime earnings 217, 230, 319–20, 316–17, 319–20, 335
in HIV interventions 424–6, 431
relation with WTP 320
and VSL 329–32

‘like as like’ principle 285
Lin, T.H. 277–8, 414–15
Lindelow, M. 355–6
Linnerooth, J. 317–19, 336, 338
live donor kidney transplants, costs 45–8
liver cirrhosis 39, 57–8
Llewellyn-Thomas, H. 267, 277
lobectomy 78
Logan, A.G. 19, 20, 153–6, 180
logical consistency 184–6, 256
logistical regression 301–2
Lomborg, B. 420–22
long run cost curves 35–7
long run costs 32
long-term health effects 180, 188, 205
CCT programs 398–400
and discounting 180
Lopez, A.D. 283
Lorgelly, P. 310
loss aversion 350

McCollister, K.E. 80–82
McConnell, K.E. 350
Madagascar, MCF/social discount rate 128, 202
Mainardi, S. 401, 403
maintenance costs 141–3
Makai, P. 305–7, 308
Malawi
MCF/social discount rate 128, 202
Zomba program 397
Malaysia, social discount rate 203
male circumcision (ML) programs 161, 165–7, 422–3
Rwanda 416–17
males having sex with males (MSM) 411
Mali, MCF/social discount rate 128, 202
Maloney, S. 177
marginal benefits (MB) 40–43
in a dynamic context 98–100
marginal cost of public funds (MCF)
African countries estimates 125–7
applications 132–43
calculating under constant costs 120
calculating under perfectly elastic demand 121
calculating when tax rates increase 123
CEA with variance by project 131–2
as cut-off ratio 163–4
and economic theory 119–23
method for calculating 127–9
possibility of revenue neutrality 129–30
problems 143–5
role in CBA 115–17
special role in health care evaluations 117–19
US Federal estimates 123–4
US state estimates 124–5
under different scenarios 137
using household income ratios 130
variance with tax rate 125–7, 143–4
marginal costs (MC) 40–43
in a dynamic context 98–100
versus average costs 61
marginal product (MP) 315–16
marginal rate of substitution 318, 436
marginal revenue product 424
marginal tax rate (mtr) 135–7
marginal utility (MU) 64–6, 170–72, 228–9, 318, 348–50, 381–5, 387, 433
marijuana, alcohol as substitute/complement 95–8, 107
market choice 327–9, 373
market equilibrium 64–7, 88, 91–2, 101, 103–6, 428
market mechanism 11
market prices 91–2, 181, 356–7, 427
absence of 341
and ability to pay 429
adjusting 314–15
competitive markets 64–6
to measure costs 223–4
non-competitive markets 66–8
and WTP 352
market-based WTP approach 426–8
pros and cons 428–9
markets
and costs 64–8
and external costs 91–8
Markov modelling
Markov cohort simulation 263–5
Markov process 263
Martin, S. 341, 353–5
Mason, H. 323–4, 333
Massachusetts, psychiatric care 40–41
maternal health, education externalities 110–11
Mauritania, MCF/social discount rate 128, 202
Mauritius, social discount rate 203
Maynard, A. 231
Meals on Wheels programs 297
measles vaccinations 104–5
Medicaid 135, 225, 226–7, 237–41, 387
medical/surgical supply costs/charges 85
Medicare 48, 76–9, 80, 81, 132, 135, 141, 208–9
Mehrez, A. 257
melarsoprol 302–4
Meltzer, H.Y. 56
meningitis 227
meningitis vaccination 90–91
meningococcemia 227
mental health
alternative treatments 326–7
case management programs 141–3, 389–91
and human capital approach 316–17
methadone maintenance programs, costs 72–3, 82
methylphenidate 222, 236
Mexico
HIV/AIDS vaccines 439–40
Progesa program 379, 397–8, 400
social discount rate 203
Middle East, HIV/AIDS 304–5, 412
Miguel, E. 168–70
Millennium Villages Project (MVP) 23–6, 27
Miller, F.G. 161
Miller, T.R. 430–31
miscarriage management 365–7
Mishan, E.J. 95, 97, 316
mobile breast cancer screening 367–9
monopoly 62, 67–8, 86, 138
Mooney, G. 243–4
Moore, M.A. 184
Moore, M.J. 199–201, 327–9

Robert J. Brent - 9781781004593
Downloaded from PubFactory at 09/18/2023 11:48:53AM
via free access
Morgenstern, O. 256
Morimoto, T. 415
Morocco, social discount rate 202
Morrow, R.H. 304–5
Mozambique
  education externalities 110–11
  MCF 128
Mullainathan, S. 347–8
mumps vaccinations 104–5
Murray, C.J.L. 283, 284–5, 287, 291
Musgrove, P. 90–91
mutually exclusive programs 9–10, 47, 152–3, 155, 193, 363

Namibia, MCF 128
National AIDS Commission, Rwanda 416
National Alcoholism Program Information System (NAPIS) 175
National Health Service (NHS), UK 9–10, 15, 131, 240, 343, 353–5, 363–5
National Highway Safety Administration, US 91
National Institute for Health and Clinical Excellence (NICE), UK 10, 296
discount rate guidelines 188
  and EuroQol 262, 274
non-use of MCF in 130–32
public appeals process 240
technology decisions 10, 220–22, 233–7, 388
National Traumatic Occupational Fatality (NTOF) project, US 328–9
Natrass, N. 423
need, definitions of 291
neonatal intensive care 26–7, 218, 219, 230–31
Nepal, social discount rate 202
net benefit (NB) framework 195–9, 363–5
Netherlands
  hearing aid interventions 274–7
  MCF/social discount rate 130
  nursing homes 305–7, 308
Neuhauser, D. 21–3
neurosurgery 232
New York City, ARVs for elderly people 436–8
New Zealand
  health care priority setting bodies 240
  social discount rate 203
  newborns, standard versus maternal care 196–9
Newlands, D. 196–7, 199
Niger, MCF/social discount rate 128, 202
Nigeria, MCF/social discount rate 128, 202
  no light perception (NLP) test 271
  no-program alternative 152–3, 154–6, 174, 235, 242
non-communicable diseases 288–9
non-competitive markets and costs 66–8, 79
non-experimental studies 156, 161, 166
non-federal general hospitals (NFGHs), net benefits of privatization 137–9
non-health functionings 297, 301–2, 310, 371–2, 438, 441
non-Hodgkin’s lymphoma 227
non-market constraints 295
non-parametric method (NP) 301–2
non-profit sector 68–9
  net benefits of privatization change 138–9
non-small cell lung 222, 236
nondrug evaluations, numbers of 14–15
North Africa, HIV/AIDS 412
North America, HIV/AIDS 412
Norway, MCF/social discount rate 130, 304
nuclear medicine, costs/charges 85
numbers weights
  and access 387
  from PTO of ability to walk freely 392–5
  and NICE 388
numbers as third social objective 385–6
  nurse valuations 249–50
  nursing costs 19–20, 34–7, 48–9, 62, 154
  and PTOs 386–7, 392–5
nursing homes
  use of restraints 305–7, 308
  versus hospital care 363–5
nutrition 180, 186, 204–6, 288, 294–5, 300
O’Brien, B.J. 191, 193, 195–9, 211, 350
obesity 182, 204–6
Office of Management and Budget (OMB), US 315
Olsen, J.A. 300–301, 307–8, 376
Oman, social discount rate 203
open cholecystectomy 17–18
open donor nephrectomy (ODN) 46–7
operating costs/charges 34–6, 48–50, 64, 85
opportunity costs 31, 33, 44–5, 68–70, 75, 77, 163–4, 169, 223–4, 353, 355, 357–8, 416
option value 376–7
Oregon plan 225, 226–7, 237–41, 387
  criticisms 243
  expected effect on number of people covered, services covered and financial costs 238
top ten priorities 227
Organization for Economic Co-operation and Development (OECD) 285
orlistat 222, 236
‘orphan’ treatments 235
orphans and vulnerable children (OVCs) 397–400  
Oster, E. 413, 414  
outpatient modalities, costs by 71–2, 82  
outpatient treatments 16, 56, 73–4  
  Danish hospitals 74–5, 86  
time costs 81–3  
outputs, proportional relationship with costs 23  
over the counter (OTC) drugs 358–60  
overhead costs 61–3  
Overlander, J. 239–40  
pacemaker implantation 232  
Pakistan, social discount rate 202  
Panama, social discount rate 203  
Pap smear tests 176  
Papua New Guinea, social discount rate 202  
Paraguay, social discount rate 203  
paralysis, WTP per QALY 324–5  
Paretian tax 93  
Pareto efficiency 363  
Pareto improvement 340–41, 385–6  
Parkin, D. 220–22, 234–7, 388  
partial equilibrium analysis 16  
Patel, M. 80–81  
Patrick, D.L. 291  
Peabody, J.W. 286  
Penang, X-ray labour costs 83–4  
peptic ulcer, reference requirements for treatment 44–5  
per diem costs 63–4  
peritoneal dialysis 249–50, 251–2  
peritonitis 227  
person trade-off (PTO) approach 282, 287, 307–8, 375–6  
ability to walk freely 392–5  
de decomposing 292–4  
estimation of weights 300–301  
numbers effect 386–7  
rationale for 291–4  
person-service units (PSUs) 238–9  
personal characteristics 16, 150, 159, 166, 170, 285, 295, 309, 327  
pertussis vaccinations 104–5  
Peru  
social discount rate 203  
user fees 395–7, 401  
Peto, R. 160  
Petry, N.M. 106–7  
pharmacy costs/charges 48–50, 85  
phenylketonuria 227  
Philippines, social discount rate 202  
Philipson, T. 413  
physical therapy costs/charges 85  
physician services  
  share of bills counting as costs 81  
  social value 79–81  
  use of RBRVS to value 76–9  
Pigou, A.C. 88, 181  
Pisani, E. 413  
Pizer, S.D. 357–8  
PKU screening 219  
plastic surgeons, social value of services 79–81  
pneumonia 227  
pneumonia vaccines 217  
Poland, MCF 130  
poliomyelitis vaccinations 104–5  
Politi, C. 287, 288, 302–4  
Population Services International (PSI) 427  
Portugal, social discount rate 203  
Posner, R. 413  
postpartum anti-D 219  
Preblud, S.R. 104  
Prentice, J.C. 357–8  
prescription drugs 358–60  
present value approach 37–9  
prevention 98–100  
  versus cure 101, 107–9  
price change, effect on drug use 106–7  
price elasticity of demand 80, 112–14, 361, 380–81, 396  
  cross-price elasticity 106–7  
  excess burden of taxation and role of 121–2  
  own-price elasticity 106, 122  
priority setting, use of CUAs 225–7, 237–41  
private costs 89, 91–2  
private goods 344  
private sector 12, 16, 125, 131  
cash transfers 117–19, 132  
cost differences with public sector 141  
and privatization 136–9  
rates of return 182  
and user fees 395–6  
private transfers 142–3, 389–90  
privatization 119, 136–9  
probability sampling 170  
probability value (p-value) 190, 196–8, 278  
proctosigmoidoscopy 78  
production function 33–7  
Program for Assertive Community Treatment (PACT) 141  
programs, checking effectiveness of 4–5  
property tax 124–7  
Propper, C. 345, 354, 357  
prospect theory 349–50  
prostate cancer 4
prosthesis costs 48–50
psoriasis 314
psychiatric hospitals
deinstitutionalization 139–41
privatization 136–9
psychiatric patients
case management programs 141–3
community care 139–41
valuing state expenditures 172–4
psychogeriatric wards, use of restraints 305–7, 308
public financed future health care spending
and MCF 135–6
public goods 344
pure public goods 99, 341–2
public participation in decision-making 240–41
public policy domain 11
public sector 99, 125, 130–32, 340
cost differences with private sector 141
cost shifting 119, 136–41, 142–3
and deinstitutionalization 139–41
and privatization 136–9
transfer payments 117–19
public transfers 142–3, 389–90
public–private partnerships 132
pulmonary function costs/charges 85
'pure public goods' 99, 341–2
'pure' time preference rate 181, 184

'quality adjusted life year' (QALY)
and ageism 289–91
calculating 224–5
cost per QALY 217–21, 233–4
and DALYs 283–4
determining weights 282–3
equal weights 228–9, 283, 378–9
fixed price QALYS 423–4
gallstone treatments 17–18
group QALYs 387, 388, 392–5
in health profiles 269–70
and hepatitis B 254
incremental QALYs 276–7
league tables 218–19, 231–3, 243–4, 253–4
in neonatal intensive care programs 230–31
in Oregon plan 225–7, 237–41, 244
pricing 8, 10
and QoL 17, 47–8
role of weights 282
in total hip arthroplasty 241–3
unequal weights 290
US CEA Panel recommendations 223–4, 249
value by study type 323
weights as an externality 376–7
weights in CUA 228–9, 374–6
weights varying according to recipients 301–2
weights varying according to size of QALYs 300–301
and WTP 228
quality of life (QoL)
and ARVs 436–7, 438
disabled people 286–7
derelated people 297–9, 305–7, 308
health and non-health measures 438
for same disease 277–8
and vision acuity 271–2, 274–7
see also EuroQol
Quality of Well-Being Scale (QWB) 224–6, 277
calculations with and without treatment 225
quantity–frequency (Q–F) index 164–5, 175–6

Rabin, R. 258–9
radiology costs/charges 48–50, 85
randomized controlled trials (RCTs) 15, 55–6, 150, 333, 369
advantages 158–9
as alphabetization 170
compared to difference-in-difference estimator 156–8
disadvantages 159–60
inclusion and exclusion criteria 166–7
practical problems of implementing 160
role in health care evaluations 160–61
ways to estimate true effects of interventions 157
rank ordering 151–2, 225–9, 237
rating scale (RS) 249–50, 255–6, 273–4, 277–8
compared to PTO 292–4
compared to SG and TTO 248, 266–70
converting into TTO 258
overview 254–5
statistical accuracy 250–52
rationality 103, 181, 184, 201, 205, 256, 340, 358, 360
rationing
Oregon 226, 239–40
by price 362, 365, 372–3
by waiting lists 355–8
by waiting time 353–5
Ravens-Sieberer, U. 277
Read, J.L. 267, 277
'reasonable and customary charges' 76–7
Redelmeier, D.A. 273–4, 278, 415
redistribution 223, 340–41, 378–9, 384
reference case methodology 223–4, 253–4
regular care (RC), hypertension 19–20, 154–6
rehabilitation costs 48–50
related treatments, combining for evaluation 150
Index

relative value units (RVUs) 69–70, 75–6
renal dialysis 218, 241–2, 248, 249–50, 251–2
resource neutrality 117, 120, 128, 134
resource-based relative value scale (RBRVS) 76–9
and Medicare charges 78
respiratory therapy costs/charges 85
revealed preference (RV) approach 164–5, 174–6, 199–201, 234–7, 239, 341, 388, 401, 403
applied to social decision makers 433–5
HIV/AIDS 426–8
pros and cons for social decision makers 435–6
use for pricing QALYS 332–4
revenue neutrality 122, 129–30, 134
Revicki, D.A. 56–7
ribavarin 222, 236
Rice, D.P. 141
Richardson, J. 267
Ried, W. 258
rigorous evaluation, advantages/disadvantages 23–6
riluzole 222, 236
risk aversion/neutrality 160, 163, 171, 228–9, 257, 266, 273–4, 279–80, 397
road fatalities 324–6
Robinson, L.A. 315
Robinson, S. 251–2
Rodgers, J.D. 389–90
Roebuck, C. 71, 72
Roehrborn, C.G. 4
Rosen, S. 360
Rosser, R. 253–4, 255, 266, 292
rubella vaccinations 104–5
ruptured intestine 227
Rush Foundation 420
Russell, L.B. 223, 249
Rwanda
male circumcision programs 416–17
MCF/social discount rate 128, 202
Ryan, M. 365–7, 371–2
Sabik, L.M. 240
Sachs, J.D. 204
Sackett, D.L. 248, 249, 253
sales tax 31, 68, 119, 124–5, 126–7, 129, 131–2
salmonellosis 227
sampling error
and C/E acceptability curves 195–9
and C/E ratios 191–3
methods for calculating confidence intervals for C/E ratios 193–5
and statistical theory 188–90
Samuelson, P.A. 99, 344
Saudi Arabia, social discount rate 203
Scharff, R.L. 204–6
Schimmel, V.E. 75–6
schistomiasis (bilharzias) control programs 98–100, 107–9
prevention versus cure 101
schizophrenia treatment regime 56–7, 207–8
school-based treatment programs
intestinal worms 130, 160, 168–70
tuberculin testing 219
Schwartz, M. 70
sectoral evaluation comparisons 16–17
seizure 76
selection bias 55–7, 83, 158–9, 160
Sen, A. 294–5, 300, 310
Senegal, MCF, social discount rate 128, 202
senior companion program (SCP) services 370
sensitivity analyses 223–4, 231, 236, 241, 253, 274, 391
setting range 187–8
and switching value technique 111–12
septicemia 227
serious disease, cut–off ratio estimate 170–72
services, broad definitions 243
sexually transmitted infections (STIs) 50–53, 413, 422–3, 431–2
Shillcutt, S.D. 244
Shiroiwa, T. 325–6, 332, 333
short run cost curves 33–5
short run costs 32
sibutramine 222, 236
Siegel, C. 191–3, 207–8, 209
Siegel, R. 223
Sierra Leone, social discount rate 202
Singapore, social discount rate 203
Siraprapasiri, T. 111–12
skewed distributions 20, 159–60
Skinner, J.S. 135–6, 137
small projects, evaluation of 16
Smith, P. 341, 353–5
smoking 112–13, 180, 185, 222, 232, 233, 236, 346–8
Snellen classification 271
social benefits 65, 76, 304–5, 380, 389
social costs
childhood immunization 103–6
drinking and driving 101–3
and private costs 89
social decision makers, revealed preferences 433–6
social discount rate 211–12, 345, 435, 442
social security benefits 132–5
social services interventions 297–9, 310, 395
social time preference rate (STPR) 182, 184, 345, 383
South Korea, social discount rate 130, 203
price of QALYS 325–6
South/South-East Asia, HIV/AIDS 412
Spain, MCF/social discount rate 130, 203
Spearmark rank correlation coefficient 270
speed limits 334–6
Squire, L. 182, 184, 383, 384, 388–9, 396, 399, 401, 429
Sri Lanka, social discount rate 202
Stabilized Response Treatment Intervention (SRTI) 207–8
standard error 189–90, 193, 200–201, 210–12, 251
standard gamble (SG) 254–8
compared to RS and TTO 266–70, 415
compared to TTO 271–4
and prospect theory 349–50
statistical accuracy 250–52
total hip arthroplasty 241–3
Starmer, C. 256
Stason, W.B. 150, 185, 186–7, 252
stated preferences 177, 292, 438, 441
statistical theory and sampling error 188–90
step-down accounting 62–3, 84–5
Stern, S.H. 34–7, 48–50
stillwaggon, E. 414
stool guaiac protocol 3–4, 21–3
Subblebine, C. 89
stunting, education effect 110–11
Sub-Saharan Africa (SSA)
CCT programs 397, 400
HIV/AIDS 166–7, 304–5, 412, 413–14
subgroup differences 160
subsidies 69, 113, 168, 177, 360, 395, 395, 423, 426–9, 440
substance abuse treatment programs
advantages of cost standardization 71–3
client costs 80–82
substitutes 95–8, 106–7, 112–13
Sudan, MCF 128
sunk costs 61
surgical wards, opportunity costs 44–5
Swaziland, MCF 128
Sweden
alcohol study 39, 57–8
MCF/social discount rate 130, 204
switching values 102–3, 111–12, 231, 239
threshold values as 90–91
Switzerland, MCF/social discount rate 130, 204
syphilis 314
Syria, social discount rate 202
Taiwan, price of QALYS 325–6
Tamil Nadu, HIV-prevention interventions 50–53
Tanzania
condom social marketing programs 426–8
female education 424–5
MCF/social discount rate 128, 202
voluntary counselling and HIV testing 431–2
Tarride, J.-E. 14–17
taxane ovarian 222, 236
taxation
administrative costs 144–5, 378–9, 398
alcohol 93, 95–8
cigarettes 119–21
excess burden 116, 117–23, 129, 138–9, 141, 163–4, 401
by income group 135–7
incorporating into tax cost calculations 133–5
marginal excess burden 124
rates relationship with excess burden 125–7, 143–4
revenue neutrality 122, 129–30, 134
and social cost of drinking and driving 101–3
taxine breast 222, 236
Taxol 180
technological progress 186–7
technology appraisals 10, 220–22, 233–7, 388
Temin, P. 358–60, 373
temozolamide 222, 236
temporomandibular joints 226
Tengs, T. 277–8, 414–15
Thailand
social discount rate 203
vaccination programs 112
WTP per QALY 325
Thaler, R. 360
Thavorncharoensap, M. 324–5, 332
Thayer, M.A. 370
therapeutic communities, costs by 72
thiazide diuretics 360
Thompson, M.S. 391–2
thoracostomy 78
threshold value 9–10, 14
country estimates 325–6
HIV/AIDS 438–40
live donor kidney transplants 46–8
NICE program 233–7
Oregan Plan 244
as range of values 220–22
as switching values 90–91
use of price 9–10, 14, 90–91
thyroid screening 219
time costs 47, 81–2, 84, 321
rationing by 353–8
speed limits 334–6
use of wage rate to value 46, 81, 200, 335, 353–5, 368, 370–71, 424–6
time preference 266, 270, 307–8, 355, 357–8
time preference rates 181–2, 188, 201, 205, 345, 383
‘pure’ time preference rate 181, 184
compared to RS and SG 266–70
compared to SG 271–4
duration as a separate consideration 248
and EuroQol 258–62
and HYE 257–8
and prospect theory 349–50
statistical accuracy 250–52
time-consistency/inconsistency problem 183–4, 205, 346
Togo, MCF/social discount rate 128, 202
Tokelau Island, female life expectancy 285
topecetan 222, 236
topical hydrocortisone 358–60
Torrance, G.W. 218–19, 230, 248, 249, 250–51, 252, 253, 257, 267, 274, 277
total hip arthroplasty (THA) 232, 241–3
Towers, I. 257
Towse, A. 234
transfer payments
CCTs 379, 389, 397–400, 405, 421–2
in-kind transfers 80–81, 82, 351–2, 389–91, 444
and MCF 117–19, 124, 129, 132–5
private transfers 142–3, 389–90
and privatization 136–8
public transfers 142–3, 389–90
trastuzumub 222, 236
travel cost method 342–4
mobile breast cancer screening 367–9
switching drugs 358–60
treatments (procedures), advantages/
disadvantages of concentrating on 16–17
Trinidad and Tobago, social discount rate 203
Trommlerova, S.K. 24
Troms, ambulance helicopter service 376
trypanosomiasis (sleeping sickness) 302–3
Tsuchiya, A. 289–90, 291
tuberculosis (TB) 227, 285
Tullock, G. 228
Tunisia, social discount rate 203
Turkey
hospital construction 401, 403
social discount rate 203
Tversky, A. 350
two-stage evaluation process 20
Ubel, P.A. 292–4, 387
Uganda
bednet use 352
DALY losses at age of death 287–8
male circumcision 161
MCF/social discount rate 128, 202
sleeping sickness treatments 302–4
UK
health care evaluation practice 9–10, 15, 130–32
league table of interventions 231–3
MCF/social discount rate 130, 203
nursing home versus hospital care 363–5
QALY rankings compared to US 243–4
rationing 353–8
social services interventions 297–9
valuing a QALY 325–6, 333
weighting system 384
see also National Health Service (NHS);
National Institute for Health and Clinical Excellence (NICE)
uncertainty
applications 207–10
CM evaluations 211
and economic evaluation 180–81
NICE specifications 234, 388
problems 211
and sampling error 188–99
techniques for dealing with 111–12
use of SG 256

unidimensional treatments 228–9, 245
Uniform Facility Data Set (1997) 361
United Nations
Declaration of Human Rights 286
UNAIDS 50, 304, 411–12, 426
UNDP 299
Uruguay, social discount rate 203
US
antiretroviral drugs for elderly 436–8
community psychiatric care 139–41
costing and evaluating DRG categories 75–6
federal MCF estimates 123–4
hospital costs 34–7, 48–50, 64
MCF/social discount rate 130, 204
price of QALYS 325–6
privatization of non-federal general hospitals 137–9
public financing of future health care spending 135–6
QALY rankings compared to UK 243–4
state expenditures on mental health inpatient episodes 172–4
state MCF estimates 124–5
transfer payments 132–5
valuing physician services 76–81
US Department of Health and Human Services 227
user fees 68–9, 117–19, 231, 343, 367, 381
Peru 395–7, 401–2
Usher, D. 127–9, 130
utilities measurement 5, 8
analyst measurement 254–5
applications 265–77
category rating scale method 255–6
EuroQol instrument 258–62
health state duration as a separate consideration 248, 277
Markov modelling instrument 262–5
measurement stages 247–8
personal judgement by analyst 252–3
problems 277–8
reference to literature 253–4
SG method 256–7
statistical accuracy of methods 250–52
use of TTO 257–8
whose utility values to use 248–50
utility estimates survey 266
utility of income, as cut-off ratio 162–3, 170–72, 317–18
vaginal delivery 76
Vaillant, G. E. 174
value of a statistical life (VSL) 313, 316, 322–4
age-group specific 331
comparison using cross–sections with cohort analysis 331
Conley model 319–20
estimating in developing countries 430–31
Linnerooth model 317–19
older adults 329–32, 336–7
pros and cons for HIV/AIDS 432–3
use for HIV/AIDS 429–32
and worker occupation choices 327–9, 350–51
valve replacement for aortic stenosis 232
Van Der Pol, M. M. 210–11
van der Tak, H. 182, 184, 383, 384, 388–9, 396, 399, 401, 429
Van Hout, B. A. 185, 186
variable costs 32, 33–6, 48–51, 53–4
average variable costs 34–5
varicose veins 44–5
Venezuela, social discount rate 203
vertical equity 281–2, 283–4
Veteran’s Administration, US 358
Vinod, H. 7
vision acuity utilities 271–2
Visual Analogue Scale (VAS) 255
voluntary counselling and testing (VCT), HIV/AIDS 431–2
Von Neuman, T. 256
wage rate, in time valuation 46, 81, 200, 335, 353–5, 368, 370–71, 368, 424–6
Wagstaff, A. 281, 282–3
waiting lists 355–8
waiting times 353–5
Walter, S. D. 14, 193–5
Wartlers, M. 125–7, 128, 145, 399
wasting, educational effects 110–11
Weiers, R. M. 188, 357
Weight Watchers (WW) 205, 206
Weimer, D. L. 346–7
Weinstein, M. C. 150, 151–3, 155, 172, 185, 186–7, 219, 223, 226, 244, 249, 252–3
Weintraub, W. S. 84, 85
Weisbrod, B. A. 104, 317, 326–7
welfare economics 13, 27–8, 340–41
welfarism 294, 299
Western Europe, HIV/AIDS 412
White, C.C. 104
Whittington, D. 439
Wikipedia 129, 130
Wildasin, D.E. 132–5, 143–4
Willan, A.R. 193
Williams, A. 290, 374
Williams, J. 98
willingness to accept (WTA)
  difference with WTP and effectiveness of
    interventions 351–2
  difference with WTP in practice 350–51, 370
  difference with WTP in theory 348–50
willingness to pay (WTP)
  applications 334
  and ability to pay 334
  compensation tests and economic efficiency 340–41
  and consumer sovereignty 345–8
  course delivery modes 177
  different countries 325–6
  different diseases 324–5
  direct evidence of appropriateness 358–60
  distinctions with WTA 348–52
  drug treatment 314
  externalities 376–7
  HIV/AIDS vaccines 439–40
  implicit estimate of appropriateness 360
  market-based approach 426–9
  median valuations 323, 338
  positive relation to QALYs 228
  problems 370–71
  and public goods 344
  and rationing by time 352–8
  relation to income 320, 391–2
  relation with human capital approach 317–20
  risk reduction 330–32
  valuation methods 341–4
  versions of 322
  and waiting times 353–5
Wilms’ tumor 227
women
  education and HIV 161, 424–5
  unavoidable costs of alcohol 39, 57–8
worksite programs, hypertension care 19–20, 153–6, 180
World Bank 169–70, 182, 288, 383, 384
  Global Burden of Disease study 287, 288–9
  World Development Report 303
World Health Organization (WHO) 287, 416, 417
Worrall, J. 160–61
X-rays, labour costs 83–4
years of life lived with disability (YLD) 304–5
years of life lost (YLL) 304–5
Yu, X. 112–13
Yugoslavia, social discount rate 203
Zaire, social discount rate 202
Zambia, MCF/social discount rate 128, 202
zanamavir 222, 236
Zarkin, G.A. 314, 344, 376, 382
zidovudine 233, 242, 262–5
Zimbabwe, MCF/social discount rate 128, 202