

CAP, ITS studies: Outcome 1.1 Drug Use								
STUDY ID	SETTING	INCOME GROUP	UNIT		IMMEDIATE	SHORT TERM	SHORT TERM	LONG TERM
						(6 months)	(12 months)	(24 months)
				ABSOLUTE LEVEL EFFECT	RELATIVE CHANGE	RELATIVE CHANGE	RELATIVE CHANGE	RELATIVE CHANGE
				(95% CI)	(95%CI)	(95%CI)	(95%CI)	(95%CI)
(Martin 1996) Five prescriptions reimbursed per month. Cough and cold drugs were taken off formulary. Benzodiazepines on prior authorisation vs. six prescriptions reimbursed per month	USA, Georgia Medicaid Multi drug users 6= prescriptions per month	Low	Total (average) monthly prescriptions per patient (all drugs)	-0.37	-5.9% (-9.4%, -2.4%)	-7.8% (-11.8%, -3.8%)	-	-
(Martin 1996) Five prescriptions reimbursed per month. Cough and cold drugs were taken off formulary. Benzodiazepines on prior authorisation vs. six prescriptions reimbursed per month	USA, Georgia Medicaid Multi drug users 6= prescriptions per month	Low	Total (average) monthly prescriptions per patient (all drugs)	0.40	26.5% (16.5%, 36.55)	12.9% (-0.5%, 26.4)	-	-
(Martin 1996) Five prescriptions reimbursed per month. Cough and cold drugs were taken off formulary. Benzodiazepines on prior authorisation vs. six prescriptions reimbursed per month	USA, Georgia Medicaid Multi drug users 6= prescriptions per month	Low	Total (average) monthly prescriptions per patient (all drugs)	-0.92	-16.5% (-17.8%, -15.3%)	-17.7% (-19.1%, -16.3%)	-	-

(Cromwell 1999) One anti-ulcer drug prescribed with only one refill. Coverage for high dose prescription treatment for acute disorders was limited to 60 days vs. no restrictions	USA, Florida Medicaid	Low	Overall number of doses reimbursed per quarter (anti-ulcers)	-377346	-42.7% (-50.1%, -35.4%);	-46.2% (-54.2%, -38.2%)	-39.6% (-49.0%, -30.3%)	-
(Donnelly 2000) Twenty days minimum re-supply cap for drugs with five or more repeats, PBS items and eye drops increased to four days vs. three day minimum re-supply cap for all drugs	Australia, Pharmaceutical benefits scheme	All	Overall dispensed prescriptions per month (all drugs)	-1150196 (-708333, -1592059)	-	-	-	-
(Soumerai 1994) Three prescriptions per month and allowable quantity of per prescription tripled per patient reimbursed vs. no restrictions	USA, New Hampshire Medicaid Multi drug users 3< prescriptions per month	Low	Average monthly (constant size) prescription number per patient (all drugs)	-	-46.0% (p<0.05)	-	-	-
(Soumerai 1994) Three prescriptions per month and allowable quantity of per prescription tripled per patient reimbursed vs. no restrictions	USA, New Hampshire Medicaid Other drug users	Low	Average monthly (constant size) prescription number per patient (all drugs)	-	-17.0% (p<0.05)	-	-	-

(Soumerai 1994) Three prescriptions per month and allowable quantity of per prescription tripled per patient reimbursed vs. no restrictions	USA, New Hampshire Medicaid Elderly	Low	Average standard monthly doses per patient (all drugs)	-	-35.0% (p<0.05)	-	-	-
(Soumerai 1994) Three prescriptions per month and allowable quantity of per prescription tripled per patient reimbursed vs. no restrictions	USA, New Hampshire Medicaid Multi drug users 3< prescriptions per month	Low	Average prescription size (all drugs)	-	13.0% (p<0.05)	-	-	-
(Soumerai 1994) Three prescriptions per month and allowable quantity of per prescription tripled per patient reimbursed vs. no restrictions	USA, New Hampshire Medicaid All patients	Low	Average monthly (constant size) prescription number per 100 recipients (all drugs)	-	-28.0% (p<0.05)	-	-	-
(Soumerai 1994) Three prescriptions per month and allowable quantity of per prescription tripled per patient reimbursed vs. no restrictions	USA, New Hampshire Medicaid All patients (n=8862)	Low	Average monthly (constant size) prescription number per 100 recipients (all drugs)	-	-38.0% (p<0.05)	-	-	-

(Soumerai 1994) Three prescriptions per month and allowable quantity of per prescription tripled per patient reimbursed vs. no restrictions	USA, New Hampshire Medicaid All patients	Low	Average monthly (constant size) prescription number per patient (all drugs)	-	-58.0% (p<0.05)	-	-	-
(Soumerai 1994) Three prescriptions per month and allowable quantity of per prescription tripled per patient reimbursed vs. no restrictions	USA, New Hampshire Medicaid Severely disabled Schizophrenics <60	Low	Average standard monthly doses per patient (all drugs)	-	-15.4% (p<0.003)	-	-	-
(Soumerai 1994) Three prescriptions per month and allowable quantity of per prescription tripled per patient reimbursed vs. no restrictions	USA, New Hampshire Medicaid Severely disabled Schizophrenics <60	Low	Average standard monthly doses per patient (all drugs)	-	-37.3% (p<0.001)	-	-	-
(Soumerai 1994) Three prescriptions per month and allowable quantity of per prescription tripled per patient reimbursed vs. no restrictions	USA, New Hampshire Medicaid Severely disabled Schizophrenics <60	Low	Average standard monthly doses per patient (all drugs)	-	-49.1% (p<0.001)	-	-	-

CAP, ITS studies: Outcome 1.2 Healthcare Utilisation

STUDY ID	SETTING	INCOME GROUP	UNIT		IMMEDIATE	SHORT TERM (6 months)	SHORT TERM (12 months)	LONG TERM (24 months)
				ABSOLUTE LEVEL	RELATIVE CHANGE	RELATIVE CHANGE	RELATIVE CHANGE	RELATIVE CHANGE

				EFFECT				
				(95% CI)	(95%CI)	(95%CI)	(95%CI)	(95%CI)
(Cromwell 1999) One anti-ulcer drug prescribed with only one refill. Coverage for high dose prescription treatment for acute disorders was limited to 60 days vs. no restrictions	USA, Florida Medicaid	Low	Rate hospitalisations per quarter (related to complicated peptic-ulcer disease)	1.426	7.4% (-17.1%, 32.0%)	7.7% (-19.9%, 35.4%)	9.3% (-24.7%, 43.3%)	-
(Cromwell 1999) One anti-ulcer drug prescribed with only one refill. Coverage for high dose prescription treatment for acute disorders was limited to 60 days vs. no restrictions	USA, Florida Medicaid	Low	Rate hospitalisations per quarter (related to Uncomplicated peptic-ulcer disease)	1.522	-10.0% (-29.6%, 9.6%)	2.8% (-19.0%, 24.7%)	15.4% (-11.1%, 49.9%)	-
(Cromwell 1999) One anti-ulcer drug prescribed with only one refill. Coverage for high dose prescription treatment for acute disorders was limited to 60 days vs. no restrictions	USA, Florida Medicaid	Low	Rate hospitalisations per quarter (related to non-ulcer peptic conditions)	5.991	15.6% (-9.9%, 41.0%)	11.8% (-16.0%, 39.9%)	0.8% (-32.3%, 33.9%)	-
(Soumerai 1994) Three prescriptions per month and allowable quantity of per prescription tripled per patient reimbursed vs. no restrictions	USA, New Hampshire Medicaid Severely disabled Schizophrenics <60	Low	Visits per patient per month (community mental health centers)	-	43.0% to 57.0% (p<0.001)	-	-	-

(Soumerai 1994) Three prescriptions per month and allowable quantity of per prescription tripled per patient reimbursed vs. no restrictions	USA, New Hampshire Medicaid Severely disabled Schizophrenics <60	Low	Days of admission to state psychiatric hospitals per patient per month (state psychiatric hospitals)	-	17.0% (p<0.001)	-	-	-
---	---	-----	--	---	--------------------	---	---	---

CAP, CBA studies: Outcome 1.3 Healthcare Utilisation

STUDY ID	SETTING	INCOME GROUP	UNIT	Intervention	Control	SHORT TERM	SHORT TERM	LONG TERM
				Pre	Pre		(12 months)	(24 months)
						RELATIVE RISKS	RELATIVE RISKS	RELATIVE RISKS
(Soumerai 1994) Three prescriptions per month and allowable quantity of per prescription tripled per patient reimbursed vs. no restrictions	USA, New Hampshire Medicaid All elderly	Low	Overall nursing home admissions	2.3%	2.1%	1.8 (1.2, 2.6)	-	-
(Soumerai 1994) Three prescriptions per month and allowable quantity of per prescription tripled per patient reimbursed vs. no restrictions	USA, New Hampshire Medicaid Multi drug users 3< prescriptions per month. Elderly	Low	Overall nursing home admissions	-	-	2.2 (1.2, 4.1)	-	-

(Soumerai 1994) Three prescriptions per month and allowable quantity of per prescription tripled per patient reimbursed vs. no restrictions	USA, New Hampshire Medicaid Multi drug users 3< prescriptions per month. Elderly	Low	Hospitalisations	-	-	1.2 (0.8, 1.6)	-	-
---	---	-----	------------------	---	---	-------------------	---	---

CAP, ITS studies: Outcome 1.4 Cost

STUDY ID	SETTING	INCOME GROUP	UNIT	ABSOLUTE LEVEL EFFECT (95% CI)	IMMEDIATE	SHORT TERM	SHORT TERM	LONG TERM
					RELATIVE CHANGE (95%CI)	RELATIVE CHANGE (95%CI)	RELATIVE CHANGE (95%CI)	RELATIVE CHANGE (95%CI)
(Cromwell 1999) One anti-ulcer drug prescribed with only one refill. Coverage for high dose prescription treatment for acute disorders was limited to 60 days vs. no restrictions	USA, Florida Medicaid	Low	Plan drug (anti-ulcers) expenditures (Dollars reimbursed per quarter)	-356440.8	-37.8% (-45.1%, -30.5%)	-40.8% (-48.5%, -33.0%)	-32.0% (-40.7%, -23.3%)	-
(Soumerai 1994) Three prescriptions per month and allowable quantity of per prescription tripled per patient reimbursed vs. no restrictions	USA, New Hampshire Medicaid All patients	Low	Plan drug (all drugs) expenditure per patient per month	-	-19.0% (p<0.05)	-	-	-

(Soumerai 1994) Three prescriptions per month and allowable quantity of per prescription tripled per patient reimbursed vs. no restrictions	USA, New Hampshire Medicaid patients	All	Low	Average (all drugs) reimbursed by plan	-	-38.0% (p<0.05)	-	-	-
(Soumerai 1994) Three prescriptions per month and allowable quantity of per prescription tripled per patient reimbursed vs. no restrictions	USA, New Hampshire Medicaid Severely disabled Schizophrenics		Low	Plan drug expenditure per patient per month	-	-23.0% (p<0.01)	-	-	-

CEILING, CBA studies: Outcome 2.1 Drug use

STUDY ID	SETTING	INCOME GROUP	UNIT	Intervention	Control	SHORT TERM	SHORT TERM	LONG TERM
				Pre	Pre	(6 months)	(12 months)	(24 months)
						RATIO OF ODDS RATIO	RATIO OF ODDS RATIO	
(Kozyrskyj 2001) Full patient payment up to an annual income based co-payment ceiling. Low income 2% and high income 3% of income vs. 40% coinsurance and fixed annual deductible payment	Canada, Manitoba Pharmacare Children with stable, mild to moderate asthma	Mixed	Overall likelihood of obtaining a prescription per patient (inhaled corticosteroids)	-	-	-	0.85 (0.74, 0.96)	0.78 (0.68, 0.88)

of 237CAD								
(Kozyrskyj 2001) Full patient payment up to an annual income based co-payment ceiling. Low income 2% and high income 3% of income vs. 40% coinsurance and fixed annual deductible payment of 237 CAD	Canada, Manitoba Pharmacare Children with stable severe asthma	Mixed	Overall likelihood of obtaining a prescription per patient (inhaled corticosteroids)	-	-	-	0.81 (0.66, 0.95)	0.82 (0.68, 0.96)

FIXED CO-PAYMENT, ITS studies: Outcome 3.1 Drug use

STUDY ID	SETTING	INCOME GROUP	UNIT		IMMEDIATE	SHORT TERM	SHORT TERM	LONG TERM
						(6 months)	(12 months)	(24 months)
				ABSOLUTE LEVEL EFFECT (95% CI)	RELATIVE CHANGE (95%CI)	RELATIVE CHANGE (95%CI)	RELATIVE CHANGE (95%CI)	RELATIVE CHANGE (95%CI)
(Reeder 1985) 0.50 USD fixed co-payment per prescription versus full drug coverage	USA, South Carolina Medicaid	Low	Monthly absolute drug claims per patient (use was defined as mean dollar expenditure per patient per month) (adrenergics)	-0.4 (p<0.05)	-	-	-	-

(Reeder 1985) 0.50 USD fixed co-payment per prescription versus full drug coverage	USA, South Carolina Medicaid	Low	Monthly absolute drug claims per patient (use was defined as mean dollar expenditure per patient per month) (analgesics)	0.1 (p>0.05)	-	-	-	-
(Reeder 1985) 0.50 USD fixed co-payment per prescription versus full drug coverage	USA, South Carolina Medicaid	Low	Monthly absolute drug claims per patient (use was defined as mean dollar expenditure per patient per month) (antihistamines)	0.0 (p<0.05)	-	-	-	-
(Reeder 1985) 0.50 USD fixed co-payment per prescription versus full drug coverage	USA, South Carolina Medicaid	Low	Monthly absolute drug claims per patient (use was defined as mean dollar expenditure per patient per month) (anti-infectives)	-0.2 (p<0.05)	-	-	-	-
(Reeder 1985) 0.50 USD fixed co-payment per prescription versus full drug coverage	USA, South Carolina Medicaid	Low	Monthly absolute drug claims per patient (use was defined as mean dollar expenditure per patient per month) (cardiovasculars)	-0.2 (p<0.05)	-	-	-	-

(Reeder 1985) 0.50 USD fixed co-payment per prescription versus full drug coverage	USA, South Carolina Medicaid	Low	Monthly absolute drug claims per patient (use was defined as mean dollar expenditure per patient per month) (cholinergics)	-0.3 (p<0.05)	-	-	-	-
(Reeder 1985) 0.50 USD fixed co-payment per prescription versus full drug coverage	USA, South Carolina Medicaid	Low	Monthly absolute drug claims per patient (use was defined as mean dollar expenditure per patient per month) (diuretics)	-0.1 (p<0.05)	-	-	-	-
(Reeder 1985) 0.50 USD fixed co-payment per prescription versus full drug coverage	USA, South Carolina Medicaid	Low	Monthly absolute drug claims per patient (use was defined as mean dollar expenditure per patient per month) (gastrointestinals)	-0.2 (p<0.05)	-	-	-	-
(Reeder 1985) 0.50 USD fixed co-payment per prescription versus full drug coverage	USA, South Carolina Medicaid	Low	Monthly absolute drug claims per patient (use was defined as mean dollar expenditure per patient per month) (psychotherapeutics)	-0.3 (p<0.05)	-	-	-	-

(Reeder 1985) 0.50 USD fixed co-payment per prescription versus full drug coverage	USA, South Carolina Medicaid	Low	Monthly absolute drug claims per patient (use was defined as mean dollar expenditure per patient per month) (sedatives/hypnotocs)	-0.1 (p>0.05)	-	-	-	-
(Reeder 1985) 0.50 USD fixed co-payment per prescription versus full drug coverage	USA, South Carolina Medicaid	Low	Monthly mean prescriptions per patient (all drugs)	-0.3 (p<0.05)	-	-	-	-
(Hux 1997) Annual income based co-payment. Low income: 2 CAD fixed co-payment per prescription High income: 100 CAD initial drug co-payment after which patients paid 6.11 CAD per prescription vs. full drug coverage	Canada, Ontario drug Benefit Program Elderly	All	Overall monthly change in number of prescriptions (all drugs)	-	-14.2%	-	-	-
(Hux 1997) Annual income based co-payment. Low income: 2 CAD fixed co-payment per prescription High income: 100 CAD initial drug co-payment after	Canada, Ontario drug Benefit Program Elderly	All	Overall monthly change in volume (all drugs)	-	-6.0%	-	-	-

which patients paid 6.11 CAD per prescription vs. full drug coverage								
(Hux 1997) Annual income based co-payment. Low income: 2 CAD fixed co-payment per prescription High income: 100 CAD initial drug co-payment after which patients paid 6.11 CAD per prescription vs. full drug coverage	Canada, Ontario drug Benefit Program Elderly	All	Overall monthly change in number of prescriptions (ACE inhibitors)	-	-15.2%	-	-	-
(Hux 1997) Annual income based co-payment. Low income: 2 CAD fixed co-payment per prescription High income: 100 CAD initial drug co-payment after which patients paid 6.11 CAD per prescription vs. full drug coverage	Canada, Ontario drug Benefit Program Elderly	All	Overall monthly change in number of prescriptions (beta blockers)	-	-14.5%	-	-	-

(Hux 1997) Annual income based co-payment. Low income: 2 CAD fixed co-payment per prescription High income: 100 CAD initial drug co-payment after which patients paid 6.11 CAD per prescription vs. full drug coverage	Canada, Ontario drug Benefit Program Elderly	All	Overall monthly change in number of prescriptions (digoxin)	-	-15.9%	-	-	-
(Hux 1997) Annual income based co-payment. Low income: 2 CAD fixed co-payment per prescription High income: 100 CAD initial drug co-payment after which patients paid 6.11 CAD per prescription vs. full drug coverage	Canada, Ontario drug Benefit Program Elderly	All	Overall monthly change in number of prescriptions (furosemide)	-	-15.7%	-	-	-
(Hux 1997) Annual income based co-payment. Low income: 2 CAD fixed co-payment per prescription High income: 100 CAD initial drug	Canada, Ontario drug Benefit Program Elderly	All	Overall monthly change in number of prescriptions (L-thyroxine)	-	-10.3%	-	-	-

co-payment after which patients paid 6.11 CAD per prescription vs. full drug coverage								
(Hux 1997) Annual income based co-payment. Low income: 2 CAD fixed co-payment per prescription High income: 100 CAD initial drug co-payment after which patients paid 6.11 CAD per prescription vs. full drug coverage	Canada, Ontario drug Benefit Program Elderly	All	Overall monthly change in number of prescriptions (oral hypoglycaemics)	-	-14.4%	-	-	-
(Hux 1997) Annual income based co-payment. Low income: 2 CAD fixed co-payment per prescription High income: 100 CAD initial drug co-payment after which patients paid 6.11 CAD per prescription vs. full drug coverage	Canada, Ontario drug Benefit Program Elderly	All	Overall monthly change in number of prescriptions (antipsychotics)	-	-12.7%	-	-	-

(Hux 1997) Annual income based co-payment. Low income: 2 CAD fixed co-payment per prescription High income: 100 CAD initial drug co-payment after which patients paid 6.11 CAD per prescription vs. full drug coverage	Canada, Ontario drug Benefit Program Elderly	All	Overall monthly change in number of prescriptions (sedatives)	-	-14.3%	-	-	-
(Hux 1997) Annual income based co-payment. Low income: 2 CAD fixed co-payment per prescription High income: 100 CAD initial drug co-payment after which patients paid 6.11 CAD per prescription vs. full drug coverage	Canada, Ontario drug Benefit Program Elderly	All	Overall monthly change in number of prescriptions (NSAIDS)	-	-24.3%	-	-	-
(Hux 1997) Annual income based co-payment. Low income: 2 CAD fixed co-payment per prescription High income: 100 CAD initial drug	Canada, Ontario drug Benefit Program Elderly	All	Overall monthly change in number of prescriptions (laxatives)	-	-18.3%	-	-	-

co-payment after which patients paid 6.11 CAD per prescription vs. full drug coverage								
(Hux 1997) Annual income based co-payment. Low income: 2 CAD fixed co-payment per prescription High income: 100 CAD initial drug co-payment after which patients paid 6.11 CAD per prescription vs. full drug coverage	Canada, Ontario drug Benefit Program Elderly	All	Overall monthly change in number of prescriptions (muscle relaxants)	-	-20.3%	-	-	-
(Hux 1997) Annual income based co-payment. Low income: 2 CAD fixed co-payment per prescription High income: 100 CAD initial drug co-payment after which patients paid 6.11 CAD per prescription vs. full drug coverage	Canada, Ontario drug Benefit Program Elderly	All	Overall monthly change in number of prescriptions (lipid-lowering drugs)	-	-11.3%	-	-	-

<p>(Hux 1997) Annual income based co-payment. Low income: 2 CAD fixed co-payment per prescription High income: 100 CAD initial drug co-payment after which patients paid 6.11 CAD per prescription vs. full drug coverage</p>	<p>Canada, Ontario drug Benefit Program Elderly</p>	<p>All</p>	<p>Overall monthly change in volume (ACE inhibitors)</p>	<p>-</p>	<p>-0.2% (p>0.05)</p>	<p>-</p>	<p>-</p>	<p>-</p>
<p>(Hux 1997) Annual income based co-payment. Low income: 2 CAD fixed co-payment per prescription High income: 100 CAD initial drug co-payment after which patients paid 6.11 CAD per prescription vs. full drug coverage</p>	<p>Canada, Ontario drug Benefit Program Elderly</p>	<p>All</p>	<p>Overall monthly change in volume (beta blockers)</p>	<p>-</p>	<p>-0.2% (p>0.05)</p>	<p>-</p>	<p>-</p>	<p>-</p>

(Hux 1997) Annual income based co-payment. Low income: 2 CAD fixed co-payment per prescription High income: 100 CAD initial drug co-payment after which patients paid 6.11 CAD per prescription vs. full drug coverage	Canada, Ontario drug Benefit Program Elderly	All	Overall monthly change in volume (digoxin)	-	-1.3% (p>0.05)	-	-	-
(Hux 1997) Annual income based co-payment. Low income: 2 CAD fixed co-payment per prescription High income: 100 CAD initial drug co-payment after which patients paid 6.11 CAD per prescription vs. full drug coverage	Canada, Ontario drug Benefit Program Elderly	All	Overall monthly change in volume (fursoemide)	-	-0.5% (p>0.05)	-	-	-
(Hux 1997) Annual income based co-payment. Low income: 2 CAD fixed co-payment per prescription High income: 100 CAD initial drug	Canada, Ontario drug Benefit Program Elderly	All	Overall monthly change in volume (L-thyroxine)	-	-0.5% (p>0.05)	-	-	-

co-payment after which patients paid 6.11 CAD per prescription vs. full drug coverage								
(Hux 1997) Annual income based co-payment. Low income: 2 CAD fixed co-payment per prescription High income: 100 CAD initial drug co-payment after which patients paid 6.11 CAD per prescription vs. full drug coverage	Canada, Ontario drug Benefit Program Elderly	All	Overall monthly change in volume (oral hypoglycaemics)	-	2.6% (p>0.05)	-	-	-
(Hux 1997) Annual income based co-payment. Low income: 2 CAD fixed co-payment per prescription High income: 100 CAD initial drug co-payment after which patients paid 6.11 CAD per prescription vs. full drug coverage	Canada, Ontario drug Benefit Program Elderly	All	Overall monthly change in volume (antipsychotics)	-	-8.7% (p<0.05)	-	-	-

(Hux 1997) Annual income based co-payment. Low income: 2 CAD fixed co-payment per prescription High income: 100 CAD initial drug co-payment after which patients paid 6.11 CAD per prescription vs. full drug coverage	Canada, Ontario drug Benefit Program Elderly	All	Overall monthly change in volume (sedatives)	-	-4.0% (p>0.05)	-	-	-
(Hux 1997) Annual income based co-payment. Low income: 2 CAD fixed co-payment per prescription High income: 100 CAD initial drug co-payment after which patients paid 6.11 CAD per prescription vs. full drug coverage	Canada, Ontario drug Benefit Program Elderly	All	Overall monthly change in volume (NSAIDs)	-	-20.0% (p<0.05)	-	-	-
(Hux 1997) Annual income based co-payment. Low income: 2 CAD fixed co-payment per prescription High income: 100 CAD initial drug	Canada, Ontario drug Benefit Program Elderly	All	Overall monthly change in volume (laxatives)	-	-10.9% (p<0.05)	-	-	-

co-payment after which patients paid 6.11 CAD per prescription vs. full drug coverage								
(Hux 1997) Annual income based co-payment. Low income: 2 CAD fixed co-payment per prescription High income: 100 CAD initial drug co-payment after which patients paid 6.11 CAD per prescription vs. full drug coverage	Canada, Ontario drug Benefit Program Elderly	All	Overall monthly change in volume (muscle relaxants)	-	-11.4% (p<0.05)	-	-	-
(Hux 1997) Annual income based co-payment. Low income: 2 CAD fixed co-payment per prescription High income: 100 CAD initial drug co-payment after which patients paid 6.11 CAD per prescription vs. full drug coverage	Canada, Ontario drug Benefit Program Elderly	All	Overall monthly change in volume (lipid-lowering drugs)	-	-1.7%	-	-	-

STUDY ID	SETTING	INCOME GROUP	UNIT	ABSOLUTE LEVEL EFFECT	IMMEDIATE	SHORT TERM	SHORT TERM	LONG TERM
					ABSOLUTE EFFECT	(6 months) ABSOLUTE EFFECT	(12 months) ABSOLUTE EFFECT	(24 months) ABSOLUTE EFFECT
(Ong 2003) 160 SEK initial fixed co-payment after which patients pay 60 SEK for additional drugs vs. 125 initial fixed co-payment and 25 SEK for additional drugs	Sweden, public health system Men	All	DDD per 1000 inhabitants per month (antidepressants)	-	-5275 (p<0.01)	-	-	-
(Ong 2003) 160 SEK initial fixed co-payment after which patients pay 60 SEK for additional drugs vs. 125 initial fixed co-payment and 25 SEK for additional drugs	Sweden, public health system Men	All	DDD per 1000 inhabitants per month (sedatives)	-	-5838 (p<0.01)	-	-	-

FIXED CO-PAYMENT, CBA studies: Outcome 3.2 Drug use

STUDY ID	SETTING	INCOME GROUP	UNIT	Intervention	Control	SHORT TERM	SHORT TERM	LONG TERM
				Pre	Pre		(12 months)	(24 months)
						DIFFERENCES OF DIFFERENCES (at 3 months)	DIFFERENCES OF DIFFERENCES [%]	DIFFERENCES OF DIFFERENCES [%]

<p>(Brian 1974) 0.50 USD fixed co-payment per each two first prescriptions per month and 1 USD per each two first provider visit vs. benefits covering the two first health services</p>	<p>USA, California Medicaid Disabled</p>	<p>Low</p>	<p>Overall change in utilisation rates (Other drugs)</p>	<p>-</p>	<p>-</p>	<p>-7.8%</p>	<p>-</p>	<p>-</p>
<p>(Brian 1974) 0.50 USD fixed co-payment per each two first prescriptions per month and 1 USD per each two first provider visit vs. benefits covering the two first health services</p>	<p>USA, California Medicaid Disabled</p>	<p>Low</p>	<p>Overall change in utilisation rates (Broad range: Drugs prescribed for conditions of all levels of seriousness which usually fit the definition of a needed drug although in some instances they are of marginal need. In these latter instances, their absence does not indicate lack of needed care)</p>	<p>-</p>	<p>-</p>	<p>-6.2%</p>	<p>-</p>	<p>-</p>

<p>(Brian 1974) 0.50 USD fixed co-payment per each two first prescriptions per month and 1 USD per each two first provider visit vs. benefits covering the two first health services</p>	<p>USA, California Medicaid Disabled</p>	<p>Low</p>	<p>Overall change in utilisation rates (critical: Drugs usually prescribed for serious conditions, normally not cured but controlled by their use. The effects of not taking these drugs are immediate, dramatic/ or especially traumatic)</p>	<p>-</p>	<p>-</p>	<p>-5.2%</p>	<p>-</p>	<p>-</p>
<p>(Brian 1974) 0.50 USD fixed co-payment per each two first prescriptions per month and 1 USD per each two first provider visit vs. benefits covering the two first health services</p>	<p>USA, California Medicaid Disabled</p>	<p>Low</p>	<p>Overall change in utilisation rates (needed, but not critical: Drugs usually prescribed for serious or almost serious conditions, and where absence would indicate lack of needed care. However, the effects of not taking these drugs would not be immediate and dramatic although the condition might deteriorate gradually)</p>	<p>-</p>	<p>-</p>	<p>-6.2%</p>	<p>-</p>	<p>-</p>

(Brian 1974) 0.50 USD fixed co-payment per each two first prescriptions per month and 1 USD per each two first provider visit vs. benefits covering the two first health services	USA, California Medicaid Disabled	Low	Overall change in utilisation rates (preventive: Drugs whose use is preventive, primarily birth control drugs)	-	-	-0.3%	-	-
(Brian 1974) 0.50 USD fixed co-payment per each two first prescriptions per month and 1 USD per each two first provider visit vs. benefits covering the two first health services	USA, California Medicaid Elderly	Low	Overall change in utilisation rates (Other drugs)	-	-	-7.6%	-	-
(Brian 1974) 0.50 USD fixed co-payment per each two first prescriptions per month and 1 USD per each two first provider visit vs. benefits covering the two first health services	USA, California Medicaid Elderly	Low	Overall change in utilisation rates (Broad range drugs)	-	-	-4.9%	-	-

(Brian 1974) 0.50 USD fixed co-payment per each two first prescriptions per month and 1 USD per each two first provider visit vs. benefits covering the two first health services	USA, California Medicaid Elderly	Low	Overall change in utilisation rates (critical drugs)	-	-	-8.7%	-	-
(Brian 1974) 0.50 USD fixed co-payment per each two first prescriptions per month and 1 USD per each two first provider visit vs. benefits covering the two first health services	USA, California Medicaid Elderly	Low	Overall change in utilisation rates (Needed, but not critical drugs)	-	-	-9.8%	-	-
(Brian 1974) 0.50 USD fixed co-payment per each two first prescriptions per month and 1 USD per each two first provider visit vs. benefits covering the two first health services	USA, California Medicaid Elderly	Low	Overall change in utilisation rates (preventive)	-	-	Only reported as: rates too small to be meaningful comparison	-	-

(Brian 1974) 0.50 USD fixed co-payment per each two first prescriptions per month and 1 USD per each two first provider visit vs. benefits covering the two first health services	USA, California Medicaid Families with dependent children	Low	Overall change in utilisation rates (Other drugs)	-	-	-8.6%	-	-
(Brian 1974) 0.50 USD fixed co-payment per each two first prescriptions per month and 1 USD per each two first provider visit vs. benefits covering the two first health services	USA, California Medicaid Families with dependent children	Low	Overall change in utilisation rates (Broad range drugs)	-	-	-11.1%	-	-
(Brian 1974) 0.50 USD fixed co-payment per each two first prescriptions per month and 1 USD per each two first provider visit vs. benefits covering the two first health services	USA, California Medicaid Families with dependent children	Low	Overall change in utilisation rates (critical drugs)	-	-	-9.0%	-	-

(Brian 1974) 0.50 USD fixed co-payment per each two first prescriptions per month and 1 USD per each two first provider visit vs. benefits covering the two first health services	USA, California Medicaid Families with dependent children	Low	Overall change in utilisation rates (Needed, but not critical drugs)	-	-	-17.0%	-	-
(Brian 1974) 0.50 USD fixed co-payment per each two first prescriptions per month and 1 USD per each two first provider visit vs. benefits covering the two first health services	USA, California Medicaid Families with dependent children	Low	Overall change in utilisation rates (preventive drugs)	-	-	-7.2%	-	-
STUDY ID	SETTING	INCOME GROUP	UNIT	Intervention Pre	Control Pre	SHORT TERM	SHORT TERM (12 months)	LONG TERM (24 months)
						ADJUSTED RELATIVE CHANGE	ADJUSTED RELATIVE CHANGE [%]	ADJUSTED RELATIVE CHANGE [%]
(Harris 1990, Intervention 1) 1.5 USD fixed co-payment per prescription vs. full drug coverage	USA, Group health non-profit staff HMO	Mixed	Yearly prescription items per patient (all drugs)	Baseline adjusted by author	-	-	-10.7% (p<0.001)	-

(Harris 1990, Intervention 1) 1.5 USD fixed co-payment per prescription vs. full drug coverage	USA, Group health non-profit staff HMO	Mixed	Yearly prescription items per patient (discretionary drugs: Analgesics, nonsteroidal anti-inflammatory agents, cough and cold products, skeletal muscle relaxants)	Baseline adjusted by author	-	-	-17.3% (p<0.001)	-
(Harris 1990, Intervention 1) 1.5 USD fixed co-payment per prescription vs. full drug coverage	USA, Group health non-profit staff HMO	Mixed	Yearly prescription items per patient (essential drugs: Antihypertensives, diabetic agents, thyroid agents)	Baseline adjusted by author	-	-	-10.5% (p>0.05)	-
(Harris 1990, Intervention 2) 3 USD fixed co-payment per prescription vs. full drug coverage	USA, Group health non-profit staff HMO	Mixed	Yearly prescription items per patient (all drugs)	Baseline adjusted by author	-	-	-10.6% (p<0.001)	-
(Harris 1990, Intervention 2) 3 USD fixed co-payment per prescription vs. full drug coverage	USA, Group health non-profit staff HMO	Mixed	Yearly prescription items per patient (discretionary drugs: Analgesics, nonsteroidal anti-inflammatory agents, cough and cold products, skeletal muscle relaxants)	-	-	-	-19.2% (p<0.001)	-

(Harris 1990, Intervention 2) 3 USD fixed co-payment per prescription vs. full drug coverage	USA, Group health non-profit staff HMO	Mixed	Yearly prescription items per patient (essential drugs: Antihypertensives, diabetic agents, thyroid agents)	-	-	-	-13.0% (p<0.001)	-
(Motheral 1999, Intervention 1) 5 USD generics, 15 USD brand, vs.5 USD generics (4 USD in baseline), 10 USD brand	USA, commercial plan	Mixed	Overall mean claims per patient (all drugs)	7.5	4.6	-21.3%	-	-
(Motheral 1999, Intervention 1) 5 USD generics, 15 USD brand, vs.5 USD generics (4 USD in baseline), 10 USD brand	USA, commercial plan	Mixed	Overall mean change fill rate per patient (generic drugs)	0.4	0.4	23.3%	-	-
(Motheral 1999, Intervention 2) 7 USD generics , 15 USD brand vs. 5 USD generics, 10 USD brand	USA, commercial plan	Mixed	Overall mean claims per patient (all drugs)	4.3	4.6	-22.5%	-	-
(Motheral 1999, Intervention 2) 7 USD generics , 15 USD brand vs. 5 USD generics, 10 USD brand	USA, commercial plan	Mixed	Overall mean change fill rate per patient (generic drugs)	0.4	0.4	30.0%	-	-

FIXED CO-PAYMENT, CBA studies: Outcome 3.3 Health

STUDY ID	SETTING	INCOME GROUP	UNIT	BASELINE Intervention Did not die	BASELINE Control Did not die	LONG TERM (24 months)
						RR
(Lingle 1987) 2 USD co-payment per prescription vs. no drug coverage	USA, New Jersey/ Pennsylvania, Medicare Elderly	Low	Overall number of patients who did not die	94%	93%	1.2 (CI, 0.95, 1.42)

FIXED CO-PAYMENT, CBA studies: Outcome 3.4 Healthcare utilisation

STUDY ID	SETTING	INCOME GROUP	UNIT	BASELINE	SHORT TERM	SHORT TERM	LONG TERM
						(12 months)	(24 months)
				ABSOLUTE DIFFERENCE BETWEEN INTERVENTION AND CONTROL	ABSOLUTE DIFFERENCE BETWEEN INTERVENTION AND CONTROL	ABSOLUTE DIFFERENCE BETWEEN INTERVENTION AND CONTROL	ABSOLUTE DIFFERENCE BETWEEN INTERVENTION AND CONTROL
(Lingle 1987) 2 USD co-payment per prescription vs. no drug coverage	USA, New Jersey/ Pennsylvania, Medicare Elderly	Low	Average utilisation per patient in plan home health care visits	0.4	-	-	(p>0.05)
(Lingle 1987) 2 USD co-payment per prescription vs. no drug coverage	USA, New Jersey/ Pennsylvania. Medicare Elderly	Low	Average utilisation per patient in plan outpatient hospital bills	-0.4	-	-	-1.1 (p<0.01)

(Lingle 1987) 2 USD co-payment per prescription vs. no drug coverage	USA, New Jersey/ Pennsylvania, Medicare Elderly	Low	Average utilisation per patient non- hospital based records	-0.8	-	-	-3.5 (p<0.01)
(Lingle 1987) 2 USD co-payment per prescription vs. no drug coverage	USA, New Jersey/ Pennsylvania, Medicare Elderly	Low	Average utilisation per patient in plan physician visits	-0.6	-	-	-1.6 (p<0.01)
(Lingle 1987) 2 USD co-payment per prescription vs. no drug coverage	USA, New Jersey/ Pennsylvania, Medicare Elderly	Low	Average utilisation per patient in plan surgeon records	-0.2	-	-	-0.3 (p<0.01)
(Lingle 1987) 2 USD co-payment per prescription vs. no drug coverage	USA, New Jersey/ Pennsylvania, Medicare Elderly	Low	Average utilisation per patient in plan supplier records	(p>0.05)	-	-	-1.0 (p<0.01)
(Lingle 1987) 2 USD co-payment per prescription vs. no drug coverage	USA, New Jersey/ Pennsylvania, Medicare Elderly	Low	Average utilisation per patient plan hospital by MD's records	(p>0.05)	-	-	0,1 (p<0.05)
(Lingle 1987) 2 USD co-payment per prescription vs. no drug coverage	USA, New Jersey/ Pennsylvania, Medicare Elderly	Low	Average utilisation per patient in plan skilled nursing facilities admissions	(p>0.05)	-	-	(p>0.05)

(Lingle 1987) 2 USD co-payment per prescription vs. no drug coverage	USA, New Jersey/ Pennsylvania, Medicare Elderly	Low	Average utilisation per patient in plan inpatient hospital admissions	(p>0.05)	-	-	(p>0.05)
---	---	-----	--	----------	---	---	----------

FIXED CO-PAYMENT, ITS studies: Outcome 3.5 Cost

STUDY ID	SETTING	INCOME GROUP	UNIT	ABSOLUTE LEVEL EFFECT (95% CI)	IMMEDIATE RELATIVE CHANGE (95%CI)	SHORT TERM	SHORT TERM	LONG TERM
						(6 months)	(12 months)	(24 months)
				RELATIVE CHANGE (95%CI)	RELATIVE CHANGE (95%CI)	RELATIVE CHANGE (95%CI)	RELATIVE CHANGE (95%CI)	RELATIVE CHANGE (95%CI)
(Reeder 1985) 0.50 USD fixed co- payment per prescription vs. full drug coverage	USA, South Carolina Medicaid	Low	Monthly mean plan drug expenditures (dollar) per patient (all drugs)	-2.0 (p<0.05)	-	-	-	-
(Sawyer 1982) 0.50 USD fixed co- payment per prescription. Restrictions on OTC drugs, only insulin covered vs. full drug coverage (including most over-the counter drugs)	USA, Maryland Medicaid	Low	Monthly overall spending aggregated (all drugs)	-	-	-	-	0.1% (-15.0%, 15.2%)

(Hux 1997) Annual income based co-payment. Low income: 2 CAD fixed co- payment per prescription High income: 100 CAD initial drug co-payment after which patients paid 6.11 CAD per prescription vs. full drug coverage	Canada, Ontario drug Benefit Program Elderly	Mixed	Overall monthly plan drug expenditures (all drugs)	-	-	-16.9%	-	-
--	---	-------	---	---	---	--------	---	---

FIXED CO-PAYMENT, CBA studies: Outcome 3.6 Cost

STUDY ID	SETTING	INCOME GROUP	UNIT	Intervention	Control	SHORT TERM	SHORT TERM	LONG TERM
				Pre	Pre		(12 months)	(24 months)
						ADJUSTED RELATIVE CHANGE	ADJUSTED RELATIVE CHANGE [%]	ADJUSTED RELATIVE CHANGE [%]
(Harris 1990, Intervention 1) 1.5 USD fixed co-payment per prescription vs. full drug coverage	USA, Group health non-profit staff HMO	Mixed	Yearly average drug cost per patient (all drugs)	Baseline adjusted by author	-	-	-6.7% (p<0001)	-
(Harris 1990, Intervention 1) 1.5 USD fixed co-payment per prescription vs. full drug coverage	USA, Group health non-profit staff HMO	Mixed	Plan drug expenditure per prescription (all drugs)	Baseline adjusted by author	-	-	4.4% (p<0.01)	-

(Harris 1990, Intervention 2) 3 USD fixed co-payment per prescription vs. full drug coverage	USA, Group health non-profit staff HMO	Mixed	Yearly average drug cost per patient (all drugs)	Baseline adjusted by author	-	-	-5.2% (p<0.01)	-
(Harris 1990, Intervention 2) 3 USD fixed co-payment per prescription vs. full drug coverage	USA, Group health non-profit staff HMO	Mixed	Yearly average drug cost per patient (all drugs)	Baseline adjusted by author	-	-	10.3% (p<0.01)	-
STUDY ID	SETTING	INCOME GROUP	UNIT	BASELINE	SHORT TERM	SHORT TERM	LONG TERM	
						(12 months)	(24 months)	
				ABSOLUTE DIFFERENCE BETWEEN INTERVENTION AND CONTROL	ABSOLUTE DIFFERENCE BETWEEN INTERVENTION AND CONTROL	ABSOLUTE DIFFERENCE BETWEEN INTERVENTION AND CONTROL	ABSOLUTE DIFFERENCE BETWEEN INTERVENTION AND CONTROL	
(Lingle 1987) 2 USD co-payment per prescription vs. no drug coverage	USA, New Jersey/Pennsylvania, Medicare Elderly	Low	Average utilisation per patient in plan Home health care reimbursements	6.7	-	-	(p>0.05)	
(Lingle 1987) 2 USD co-payment per prescription vs. no drug coverage	USA, New Jersey/Pennsylvania, Medicare Elderly	Low	Average utilisation per patient in plan outpatient hospital reimbursements	(p>0.05)	-	-	(p>0.05)	
(Lingle 1987) 2 USD co-payment per prescription vs. no drug coverage	USA, New Jersey/Pennsylvania, Medicare Elderly	Low	Average utilisation per patient in plan non-hospital based reimbursements	(p>0.05)	-	-	(p>0.05)	

(Lingle 1987) 2 USD co-payment per prescription vs. no drug coverage	USA, New Jersey/ Pennsylvania, Medicare Elderly	Low	Average utilisation per patient in plan physician reimbursements	(p>0.05)	-	-	(p>0.05)	
(Lingle 1987) 2 USD co-payment per prescription vs. no drug coverage	USA, New Jersey/ Pennsylvania, Medicare Elderly	Low	Average utilisation per patient in plan surgeon reimbursements	16.4	-	-	20.8 (p<0.05)	
(Lingle 1987) 2 USD co-payment per prescription vs. no drug coverage	USA, New Jersey/ Pennsylvania, Medicare Elderly	Low	Average utilisation per patient in plan supplier reimbursements	(p>0.05)	-	-	-54.1 (p<0.01)	
(Lingle 1987) 2 USD co-payment per prescription vs. no drug coverage	USA, New Jersey/ Pennsylvania, Medicare Elderly	Low	Average utilisation per patient in plan hospital by MD's reimbursements	(p>0.05)	-	-	2.5 (p<0.05)	
(Lingle 1987) 2 USD co-payment per prescription vs. no drug coverage	USA, New Jersey/ Pennsylvania, Medicare Elderly	Low	Average utilisation per patient in plan skilled nursing facilities admission reimbursements	(p>0.05)	-	-	(p>0.05)	
(Lingle 1987) 2 USD co-payment per prescription vs. no drug coverage	USA, New Jersey/ Pennsylvania, Medicare Elderly	Low	Average utilisation per patient in inpatient hospital admission reimbursements	(p>0.05)	-	-	-238.5 (p<0.01)	

(Lingle 1987) 2 USD co-payment per prescription vs. no drug coverage	USA, New Jersey/ Pennsylvania, Medicare Elderly	Low	Average utilisation per patient in plan all services reimbursements	(p>0.05)	-	-	(p>0.05)	
STUDY ID	SETTING	INCOME GROUP	UNIT	Intervention	Control	SHORT TERM	SHORT TERM	LONG TERM
				Pre	Pre		(12 months)	(24 months)
						ADJUSTED RELATIVE CHANGE	ADJUSTED RELATIVE CHANGE [%]	ADJUSTED RELATIVE CHANGE [%]
(Motheral 1999, Intervention 1) 5 USD generics, 15 USD brand, vs. 5 USD generics (4 USD in baseline), 10 USD brand	USA, commercial plan	General	Overall mean plan cost per patient	268.9	125.0	-33.3%	-	-
(Motheral 1999, Intervention 1) 5 USD generics, 15 USD brand, vs. 5 USD generics (4 USD in baseline), 10 USD brand	USA, commercial plan	General	Overall mean patient co-payment per patient	52.5	33.6	39.8%	-	-
(Motheral 1999, Intervention 1) 5 USD generics, 15 USD brand, vs. 5 USD generics (4 USD in baseline), 10 USD brand	USA, commercial plan	General	Overall mean ingredient cost per patient (all drugs)	321.4	158.6	-19.4%	-	-

(Motheral 1999, Intervention 1) 5 USD generics, 15 USD brand, vs. 5 USD generics (4 USD in baseline), 10 USD brand	USA, commercial plan	General	Overall mean cost per claim per patient (all drugs)	39.4	32.6	-3.5%	-	-
(Motheral 1999, Intervention 2) 7 USD generics, 15 USD brand vs. 5 USD generics, 10 USD brand	USA, commercial plan	General	Overall mean plan cost per patient	129.4	125	-28.8%	-	-
(Motheral 1999, Intervention 2) 7 USD generics, 15 USD brand vs. 5 USD generics, 10 USD brand	USA, commercial plan	General	Overall mean patient co-payment per patient	27.9	33.6	32.2%	-	-
(Motheral 1999, Intervention 2) 7 USD generics, 15 USD brand vs. 5 USD generics, 10 USD brand	USA, commercial plan	General	Overall mean ingredient cost per patient (all drugs)	157.3	158.6	-17.3%	-	-
(Motheral 1999, Intervention 2) 7 USD generics, 15 USD brand vs. 5 USD generics, 10 USD brand	USA, commercial plan	General	Overall mean cost per claim (all drugs)	33.8	32.6	-4.7%	-	-

FIXED CO-PAYMENT WITH CAP, CBA studies: Outcome 4.1 Drug use

STUDY ID	SETTING	INCOME GROUP	UNIT	Intervention	Control	SHORT TERM	SHORT TERM	LONG TERM
				Pre	Pre		(12 months)	(24 months)
						ADJUSTED RELATIVE CHANGE	ADJUSTED RELATIVE CHANGE [%]	ADJUSTED RELATIVE CHANGE [%]
(Harris 1990, Intervention 3) 3 USD fixed co-payment per prescription with max 30 day supply, no coverage for over-the-counter drugs and 5 USD for all outpatients visits vs. full drug coverage	USA, Group health non-profit staff HMO	Mixed	Prescription items per patient (essential: Antihypertensives, diabetic agents, thyroid agents)	Baseline adjusted by author	-	-	-4.0% (p>0.05)	-
(Harris 1990, Intervention 3) 3 USD fixed co-payment per prescription with max 30 day supply, no coverage for over-the-counter drugs and 5 USD for all outpatients visits vs. full drug coverage	USA, Group health non-profit staff HMO	Mixed	Prescription items per patient (discretionary: Analgesics, nonsteroidal anti-inflammatory agents, cough and cold products, skeletal muscle relaxants)	Baseline adjusted by author	-	-	-19.0% (p<0.001)	-

(Harris 1990, Intervention 3) 3 USD fixed co-payment per prescription with max 30 day supply, no coverage for over-the-counter drugs and 5 USD for all outpatients visits vs. full drug coverage	USA, Group health non-profit staff HMO	Mixed	Prescription items per patient (all drugs)	Baseline adjusted by author	-	-	-12.0% (p<0.001)	-
(Harris 1990, Intervention 3) 3 USD fixed co-payment per prescription with max 30 day supply, no coverage for over-the-counter drugs and 5 USD for all outpatients visits vs. full drug coverage	USA, Group health non-profit staff HMO	Mixed	Over-the-counter drug items per patient	Baseline adjusted by author	-	-	-25.3%	-

FIXED CO-PAYMENT WITH CAP, CBA studies: Outcome 4.2 Cost

STUDY ID	SETTING	INCOME GROUP	UNIT	Intervention	Control	SHORT TERM	SHORT TERM	LONG TERM
				Pre	Pre		(12 months)	(24 months)
						ADJUSTED RELATIVE CHANGE	ADJUSTED RELATIVE CHANGE [%]	ADJUSTED RELATIVE CHANGE [%]

(Harris 1990, Intervention 3) 3 USD fixed co-payment per prescription with max 30 day supply, no coverage for over-the-counter drugs and 5 USD for all outpatients visits vs. full drug coverage	USA, Group health non-profit staff HMO	Mixed	Yearly average drug cost per patient (all drugs)	Baseline adjusted by author	-	-	-9.0% (p<0.001)	-
(Harris 1990, Intervention 3) 3 USD fixed co-payment per prescription with max 30 day supply, no coverage for over-the-counter drugs and 5 USD for all outpatients visits vs. full drug coverage	USA, Group health non-profit staff HMO	Mixed	Plan drug expenditures per prescription (all drugs)	Baseline adjusted by author	-	-	8.0% (p<0.01)	-

FIXED CO-PAYMENT WITH CEILING, ITS studies: Outcome 4.3 Drug use

STUDY ID	SETTING	INCOME GROUP	UNIT		IMMEDIATE	SHORT TERM	SHORT TERM	LONG TERM
						(6 months)	(12 months)	(24 months)
				ABSOLUTE LEVEL EFFECT	RELATIVE CHANGE	RELATIVE CHANGE	RELATIVE CHANGE	RELATIVE CHANGE
				(95% CI)	(95%CI)	(95%CI)	(95%CI)	(95%CI)

<p>(McManus 1996, Intervention 1) Community: 15 AUD fixed co-payment per prescription vs. 11 AUD fixed co-payment per prescription Elderly and social security: 2.5 AUD fixed co-payment per prescription with ceiling at a "certain level" per year after which drugs are free or available at reduced cost vs. full drug coverage</p>	<p>Australia, pharmaceutical benefits scheme, universal prescription drug insurance plan Community</p>	<p>All</p>	<p>Absolute number prescriptions dispensed (essential drugs)</p>	<p>-816000 (-1116133, -516373)</p>	<p>-22.0%</p>	<p>-</p>	<p>-</p>	<p>-</p>
<p>(McManus 1996, Intervention 1) Community: 15 AUD fixed co-payment per prescription vs. 11 AUD fixed co-payment per prescription Elderly and social security: 2.5 AUD fixed co-payment per prescription with ceiling at a "certain level" per year after which drugs are free or available at reduced cost vs. full drug coverage</p>	<p>Australia, pharmaceutical benefits scheme, universal prescription drug insurance plan Community</p>	<p>All</p>	<p>Absolute number prescriptions dispensed (discretionary drugs)</p>	<p>-758500 (-901189, -615813)</p>	<p>-27.0%</p>	<p>-</p>	<p>-</p>	<p>-</p>

(McManus 1996, Intervention 2) 2.50 AUD fixed co-payment with ceiling at a "certain level" per year after which drugs are free or available at reduced cost vs. full drug coverage	Australia, pharmaceutical benefits scheme, universal prescription drug insurance plan Repatriation patients	Low	Absolute number prescriptions dispensed (essential drugs)	-29500 (-45812, -13287)	-23.0%	-	-	-
(McManus 1996, Intervention 2) 2.50 AUD fixed co-payment with ceiling at a "certain level" per year after which drugs are free or available at reduced cost vs. full drug coverage	Australia, pharmaceutical benefits scheme, universal prescription drug insurance plan Repatriation patients	Low	Absolute number prescriptions dispensed (discretionary drugs)	-32500 (-44442, -20510)	-24.0%	-	-	-

FIXED CO-PAYMENT WITH CEILING, CBA studies: Outcome 4.4 Drug use

STUDY ID	SETTING	INCOME GROUP	UNIT	Intervention	Control	SHORT TERM	SHORT TERM	LONG TERM
				Pre	Pre		(12 months)	(24 months)
						ADJUSTED RELATIVE CHANGE	ADJUSTED RELATIVE CHANGE [%]	ADJUSTED RELATIVE CHANGE [%]

(Poirer 1998) 2 CAD fixed co-payment per prescription up to an annual 100 CAD co-payment ceiling vs. full drug coverage	Canada, Quebec, Quebec drug program (RAMQ) Elderly	High	Ratio of refills per person (during 12 months post and during six months post at the end of the 12 month post period) (antihypertensives)	0.91	0.81	-3.7% (p<0.05)	-	-
(Poirer 1998) 2 CAD fixed co-payment per prescription up to an annual 100 CAD co-payment ceiling vs. full drug coverage	Canada, Quebec, Quebec drug program (RAMQ) Elderly	High	Ratio of refills per person (during 12 months post and during six months post at the end of the 12 month post period) (benzodiazepines)	0.68	0.78	-1.3% (p<0.05)	-	-
(Poirer 1998) 2 CAD fixed co-payment per prescription up to an annual 100 CAD co-payment ceiling vs. full drug coverage	Canada, Quebec, Quebec drug program (RAMQ) Elderly	Low	Ratio of refills per person (during 12 months post and during six months post at the end of the 12 month post period) (antihypertensives)	0.89	0.88	-2.3% (p<0.05)	-	-
(Poirer 1998) 2 CAD fixed co-payment per prescription up to an annual 100 CAD co-payment ceiling vs. full drug coverage	Canada, Quebec, Quebec drug program (RAMQ) Elderly	Low	Ratio of refills per person (during 12 months post and during six months post at the end of the 12 month post period) (benzodiazepines)	0.77	0.85	-1.2% (p<0.05)	-	-

COINSURANCE WITH CEILING, ITS/ RM studies: Outcome 5.1 Drug use

STUDY ID	SETTING	INCOME GROUP	UNIT	ABSOLUTE LEVEL EFFECT (95% CI)	IMMEDIATE	SHORT TERM	SHORT TERM	LONG TERM
					RELATIVE CHANGE (95%CI)	(6 months) RELATIVE CHANGE (95%CI)	(12 months) RELATIVE CHANGE (95%CI)	(24 months) RELATIVE CHANGE (95%CI)
(Blais 2002, Intervention 1) 25% coinsurance up to an annual income based 200, 500 or 750 CAD co-payment ceiling vs. 2 CAD fixed co-payment per prescription up to a CAD 100 deductible	Canada, Quebec-RAMQ. Elderly	Mixed (but not very low income)	Overall number of dispensed prescriptions per month (anti-hypertensives)	-15118.11 (-10708.66, -19527.56)	-16.9% (-12.0%, -21.9%)	-	-	-
(Blais 2002, Intervention 1) 25% coinsurance up to an annual income based 200, 500 or 750 CAD co-payment ceiling vs. 2 CAD fixed co-payment per prescription up to a CAD 100 deductible	Canada, Quebec-RAMQ. Elderly	Mixed (but not very low income)	Overall number of dispensed prescriptions per month (anti-coagulants)	-3064.516 (-2258.065, -3870.968)	-17.2% (-12.7%, -21.7%)	-	-	-

(Blais 2002, Intervention 1) 25% coinsurance up to an annual income based 200, 500 or 750 CAD co-payment ceiling vs. 2 CAD fixed co-payment per prescription up to a CAD 100 deductible	Canada, Quebec-RAMQ. Elderly	Mixed (but not very low income)	Overall number of dispensed prescriptions per month (benzodiazepines)	-2181.818 (-1600, -2763.636)	-23.4% (-17.1%, -29.6%)	-	-	-
(Blais 2002, Intervention 1) 25% coinsurance up to an annual income based 200, 500 or 750 CAD co-payment ceiling vs. 2 CAD fixed co-payment per prescription up to a CAD 100 deductible	Canada, Quebec-RAMQ. Elderly	Mixed (but not very low income)	Overall number of dispensed prescriptions per month (nitrates)	-3100 (-2400, -3800)	-22.6% (-17.5%, -27.7%)	-	-	-
(Tamblyn 2001, Intervention 1) 25% coinsurance up to an annual income based 200, 500 or 750 CAD co-payment ceiling vs. 2 CAD fixed co-payment per prescription up to a CAD 100 deductible	Canada, Quebec-RAMQ. Elderly	Mixed (but not very low income)	Number of drugs per day per person (essential: Insulin, anticoagulants, ACE inhibitors, lipid-reducing drugs, antihypertensives, furosemide, B-blockers, antiarrhythmics, aspirin, antiviral drugs, thyroid drugs, neuroleptics, antidepressants,	-0.12358 (-0.097561, -0.149593)	-6.9% (-5.5%, -8.4%)	-	-	-

			anticonvulsants, antiparkinsonian drugs, prednisone, B-agonists, inhaled steroids, chioroquines, primaquines, cyclosporine)					
(Tamblyn 2001, Intervention 1) 25% coinsurance up to an annual income based 200, 500 or 750 CAD co-payment ceiling vs. 2 CAD fixed co-payment per prescription up to a CAD 100 deductible	Canada, Quebec-RAMQ. Elderly	Mixed (but not very low income)	Number of drugs per day per person (less essential: Dipryridamole, probenecide, meperidine, benzodiazepines (exluding clonazepam and clobazam)	-0.0918 (-0.085246, -0.098361)	-14.0% (-13.0%, -15.0%)	-	-	-
(Blais 2002, Intervention 2) 25% coinsurance up to an annual 200 CAD co-payment ceiling vs. full drug coverage	Canada, Quebec-RAMQ. Welfare/ low income elderly	Low	Overall number of dispensed prescriptions per month (anti-convulsants)	-4086.124 (-2277.512, -5894.737)	-16.2% (-9.0%, -23.4%)	-	-	-

(Blais 2002, Intervention 2) 25% coinsurance up to an annual 200 CAD co-payment ceiling vs. full drug coverage	Canada, Quebec-RAMQ. Welfare/ low income elderly	Low	Overall number of dispensed prescriptions per month (inhaled corticosteroids)	-3211.268 (-2704.225, -3718.31)	-55.6% (-49.8%, -64.4%)	-	-	-
(Blais 2002, Intervention 2) 25% coinsurance up to an annual 200 CAD co-payment ceiling vs. full drug coverage	Canada, Quebec-RAMQ. Welfare/ low income elderly	Low	Overall number of dispensed prescriptions per month (neuroleptics)	-3650.794 (-2328.042, -4973.545)	-15.5% (-9.9%, -21.8%)	-	-	-

<p>(Tamblyn 2001, Intervention 2) 25% coinsurance up to an annual 200 CAD co-payment ceiling vs. full drug coverage</p>	<p>Canada, Quebec-RAMQ. Welfare/ low income elderly</p>	<p>Low</p>	<p>Number of drugs per day per person (essential: Insulin, anticoagulants, ACE inhibitors, lipid-reducing drugs, antihypertensives, furosemide, B-blockers, antiarrhythmics, aspirin, antiviral drugs, thyroid drugs, neuroleptics, antidepressants, anticonvulsants, antiparkinsonian drugs, prednisone, B-agonists, inhaled steroids, chloroquines, primaquines, cyclosporine)</p>	<p>-0.24065 (-0.097561, -0.149593)</p>	<p>-17.7% (-14.8%, -20.5%)</p>	<p>-</p>	<p>-</p>	<p>-</p>
<p>(Tamblyn 2001, Intervention 2) 25% coinsurance up to an annual 200 CAD co-payment ceiling vs. full drug coverage</p>	<p>Canada, Quebec-RAMQ. Welfare/ low income elderly</p>	<p>Low</p>	<p>Number of drugs per day per person (Less essential: Dipryridamole, probenecide, meperidine, benzodiazepines (excluding clonazepam and clobazam))</p>	<p>-0.12459 (-0.12459, -0.111475)</p>	<p>-19.4% (-17.4%, -21.4%)</p>	<p>-</p>	<p>-</p>	<p>-</p>

COINSURANCE WITH CEILING, RCT studies: Outcome 5.2 Drug use

STUDY ID	SETTING	INCOME GROUP	UNIT	Intervention	Control	SHORT TERM	SHORT TERM	LONG TERM
				Pre	Pre		(12 months)	(24 months)
						ADJUSTED RELATIVE CHANGE	RELATIVE CHANGE [%]	RELATIVE CHANGE [%]
(Newhouse 1993) 25% coinsurance on drugs and inpatient/outpatient services up to an annual family income based co-payment ceiling of 5, 10 or 15%, or max 1000 USD vs. full drug and services coverage	USA, Dayton, Seattle, Massachusetts, South Carolina. The RAND health insurance experiment	Mixed	Annual number over- the- counter drugs purchased per patient SURVEY DATA	-	-	-	-	-15.5% (p>0.05)
(Newhouse 1993) 25% coinsurance on drugs and inpatient/outpatient services up to an annual family income based co-payment ceiling of 5, 10 or 15%, or max 1000 USD vs. full drug and services coverage	USA, Dayton, Seattle, Massachusetts, South Carolina. The RAND health insurance experiment	Mixed	Annual number prescription drugs purchased per patient CLAIMS DATA	-	-	-	-	-18.4% (p<0.05)
(Newhouse 1993) 50% coinsurance on drugs and inpatient/outpatient services up to an annual family income based co-payment ceiling of 5, 10	USA, Dayton, Seattle, Massachusetts, South Carolina. The RAND health insurance experiment	Mixed	Annual number over- the- counter drugs purchased per patient SURVEY DATA	-	-	-	-	-59.8% (p<0.05)

or 15%, or max 1000 USD vs. full drug and services coverage								
(Newhouse 1993) 50% coinsurance on drugs and inpatient/outpatient services up to an annual family income based co-payment ceiling of 5, 10 or 15%, or max 1000 USD vs. full drug and services coverage	USA, Dayton, Seattle, Massachusetts, South Carolina. The RAND health insurance experiment	Mixed	Annual number prescription drugs purchased per patient CLAIMS DATA	-	-	-	-	-23.2% (p<0.05)
(Newhouse 1993) 95% coinsurance on drugs and inpatient/outpatient services up to an annual family income based co-payment ceiling of 5, 10 or 15%, or max 1000 USD vs. full drug and services coverage	USA, Dayton, Seattle, Massachusetts, South Carolina. The RAND health insurance experiment	Mixed	Annual number over- the- counter drugs purchased per patient SURVEY DATA	-	-	-	-	-33.5% (p=0.05)
(Newhouse 1993) 95% coinsurance on drugs and inpatient/outpatient services up to an annual family income based co-payment ceiling of 5, 10 or 15%, or max 1000 USD vs. full drug and services coverage	USA, Dayton, Seattle, Massachusetts, South Carolina. The RAND health insurance experiment	Mixed	Annual number prescription drugs purchased per patient CLAIMS DATA	-	-	-	-	-33.6% (p<0.05)

(Newhouse 1993) 95% coinsurance on drugs and outpatient services, up to annual co-payment ceiling of 150 USD (individual) or 450 USD (family) vs. full drug and services coverage	USA, Dayton, Seattle, Massachusetts, South Carolina. The RAND health insurance experiment	Mixed	Annual number over- the- counter drugs purchased per patient SURVEY DATA	-	-	-	-	-5.9% (p>0.05)
(Newhouse 1993) 95% coinsurance on drugs and outpatient services, up to annual co-payment ceiling of 150 USD (individual) or 450 USD (family) vs. full drug and services coverage	USA, Dayton, Seattle, Massachusetts, South Carolina. The RAND health insurance experiment	Mixed	Annual number prescription drugs purchased per patient CLAIMS DATA	-	-	-	-	-18.6% (p<0.05)

COINSURANCE WITH CEILING, RCT studies: Outcome 5.3 Cost

STUDY ID	SETTING	INCOME GROUP	UNIT	Intervention	Control	SHORT TERM	SHORT TERM	LONG TERM
				Pre	Pre		(12 months)	(24 months)
						ADJUSTED RELATIVE CHANGE	RELATIVE CHANGE [%]	RELATIVE CHANGE [%]
(Newhouse 1993) 25% coinsurance on drugs and inpatient/outpatient services up to an annual family income based co-payment ceiling of 5, 10 or 15%, or max 1000 USD vs. full drug and services coverage	USA, Dayton, Seattle, Massachusetts, South Carolina. The RAND health insurance experiment	Mixed	Annual mean over-the-counter drug expenditure per patient by plan SURVEY DATA	-	-	-	-	-26.8% (p>0.05)

(Newhouse 1993) 25% coinsurance on drugs and inpatient/outpatient services up to an annual family income based co-payment ceiling of 5, 10 or 15%, or max 1000 USD vs. full drug and services coverage	USA, Dayton, Seattle, Massachusetts, South Carolina. The RAND health insurance experiment	Mixed	Annual mean prescription drug expenditure per patient by plan CLAIMS DATA	-	-	-	-	-8.3% (p>0.05)
(Newhouse 1993) 50% coinsurance on drugs and inpatient/outpatient services up to an annual family income based co-payment ceiling of 5, 10 or 15%, or max 1000 USD vs. full drug and services coverage	USA, Dayton, Seattle, Massachusetts, South Carolina. The RAND health insurance experiment	Mixed	Annual mean over-the-counter drug expenditure per patient by plan SURVEY DATA	-	-	-	-	-58.9% (p<0.05)
(Newhouse 1993) 50% coinsurance on drugs and inpatient/outpatient services up to an annual family income based co-payment ceiling of 5, 10 or 15%, or max 1000 USD vs. full drug and services coverage	USA, Dayton, Seattle, Massachusetts, South Carolina. The RAND health insurance experiment	Mixed	Annual mean prescription drug expenditure per patient by plan CLAIMS DATA	-	-	-	-	-33.6% (p<0.05)

(Newhouse 1993) 95% coinsurance on drugs and inpatient/outpatient services up to an annual family income based co-payment ceiling of 5, 10 or 15%, or max 1000 USD vs. full drug and services coverage	USA, Dayton, Seattle, Massachusetts, South Carolina. The RAND health insurance experiment	Mixed	Annual mean over-the-counter drug expenditure per patient by plan SURVEY DATA	-	-	-	-	-35.0% (p>0.05)
(Newhouse 1993) 95% coinsurance on drugs and inpatient/outpatient services up to an annual family income based co-payment ceiling of 5, 10 or 15%, or max 1000 USD vs. full drug and services coverage	USA, Dayton, Seattle, Massachusetts, South Carolina. The RAND health insurance experiment	Mixed	Annual mean prescription drug expenditure per patient by plan CLAIMS DATA	-	-	-	-	-37.6% (p<0.05)
(Newhouse 1993) 95% coinsurance on drugs and outpatient services, up to annual co-payment ceiling of 150 USD (individual) or 450 USD (family) vs. full drug and services coverage	USA, Dayton, Seattle, Massachusetts, South Carolina. The RAND health insurance experiment	Mixed	Annual mean over-the-counter drug expenditure per patient by plan SURVEY DATA	-	-	-	-	-6.1% (p>0.05)
(Newhouse 1993) 95% coinsurance on drugs and outpatient services, up to annual co-payment ceiling of 150 USD (individual) or 450 USD (family) vs. full drug and services coverage	USA, Dayton, Seattle, Massachusetts, South Carolina. The RAND health insurance experiment	Mixed	Annual mean prescription drug expenditure per patient by plan CLAIMS DATA	-	-	-	-	-16.3% (p>0.05)

FIXED CO-PAYMENT AND COINSURANCE WITH CEILING, ITS studies: Outcome 6.1 Drug use

STUDY ID	SETTING	INCOME GROUP	UNIT	ABSOLUTE LEVEL EFFECT (95% CI)	IMMEDIATE	SHORT TERM	SHORT TERM	LONG TERM
					RELATIVE CHANGE (95%CI)	(4 months) RELATIVE CHANGE (95%CI)	(12 months) RELATIVE CHANGE (95%CI)	(24 months) RELATIVE CHANGE (95%CI)
(Ong 2003) 400 SEK fixed co-payment after which patients pay a proportion of the additional cost up to an annual ceiling of 1300 SEK vs. 160 initial fixed co-payment after which patients pay 60 SEK for additional drugs	Sweden, public health system Men	All	DDD per 1000 inhabitants per month (antidepressants)	-	-4393 (p<0.01)	-	-	-
(Ong 2003) 400 SEK fixed co-payment after which patients pay a proportion of the additional cost up to an annual ceiling of 1300 SEK vs. 160 initial fixed co-payment after which patients pay 60 SEK for additional drugs	Sweden, public health system Men	All	DDD per 1000 inhabitants per month (anxiolytics)	-	-1600 (p<0.01)	-	-	-

(Ong 2003) 400 SEK fixed co-payment after which patients pay a proportion of the additional cost up to an annual ceiling of 1300 SEK vs. 160 initial fixed co-payment after which patients pay 60 SEK for additional drugs	Sweden, public health system Men	All	DDD per 1000 inhabitants per month (sedatives)	-	-3415 (p<0.01)	-	-	-
(Ong 2003) 400 SEK fixed co-payment after which patients pay a proportion of the additional cost up to an annual ceiling of 1300 SEK vs. 160 initial fixed co-payment after which patients pay 60 SEK for additional drugs	Sweden, public health system Women	All	DDD per 1000 inhabitants per month (antidepressants)	-	-21129 (p<0.01)	4460 (p<0.01)	-	-

(Ong 2003) 400 SEK fixed co-payment after which patients pay a proportion of the additional cost up to an annual ceiling of 1300 SEK vs. 160 initial fixed co-payment after which patients pay 60 SEK for additional drugs	Sweden, public health system Women	All	DDD per 1000 inhabitants per month (anxiolytics)	-	-3548 (p<0.01)	-	-	-
(Ong 2003) 400 SEK fixed co-payment after which patients pay a proportion of the additional cost up to an annual ceiling of 1300 SEK vs. 160 initial fixed co-payment after which patients pay 60 SEK for additional drugs	Sweden, public health system Women	All	DDD per 1000 inhabitants per month (sedatives)	-	-11304 (p<0.01)	-	-	-

TIER CO-PAYMENT, CBA studies: Outcome 7.1 Drug use

STUDY ID	SETTING	INCOME GROUP	UNIT	Intervention	Control	SHORT TERM	SHORT TERM	LONG TERM
				Pre	Pre		(12 months)	(24 months)

						DIFFERENCES OF DIFFERENCES	DIFFERENCES OF DIFFERENCES [%]	DIFFERENCES OF DIFFERENCES [%]
(Huskamp 2005, Intervention 1) 1-tier to a 3-tier and an increase of 1 USD for 1-tier drugs vs. 2-tier	USA, employer plan contracting a large health insurer	Mixed	Change in probability of use in intervention group minus change in control group (ACE inhibitors available all tiers)	-	-	-	-24.0% (p<0.01)	-
(Huskamp 2005, Intervention 1) 1-tier to a 3-tier and an increase of 1 USD for 1-tier drugs vs. 2-tier	USA, employer plan contracting a large health insurer	Mixed	Change in probability of use in intervention group minus change in control group (PPIs (available in tier 2 and 3))	-	-	-	-34.0% (p<0.01)	-
(Huskamp 2005, Intervention 1) 1-tier to a 3-tier and an increase of \$1 for 1-tier drugs vs. 2-tier	USA employer plan contracting a large health insurer	Mixed	Change in probability of use in intervention group minus change in control group (statins (available all tiers))	-	-	-	-24.0% (p<0.01)	-

(Huskamp 2005, Intervention 1) 1-tier to a 3-tier and an increase of 1 USD for 1-tier drugs vs. 2-tier	USA, employer plan contracting a large health insurer Children	Mixed	Change in probability of use in intervention group minus change in control group (ADHD available all tiers)	-	-	-	-17.0% (p<0.001)	-
(Huskamp 2005, Intervention 2) 2- tier to 3-tier vs. 2-tier	USA employer plan contracting a large health insurer	Mixed	Change in probability of use in intervention group minus change in control group (ACE inhibitors available all tiers)	-	-	-	-5.0% (p=0.26)	-
(Huskamp 2005, Intervention 2) 2- tier to 3-tier vs. 2-tier	USA employer plan contracting a large health insurer	Mixed	Change in probability of use in intervention group minus change in control group (PPIs available in tier 2 and 3)	-	-	-	-5.0% (p=0.32)	-
(Huskamp 2005, Intervention 2) 2- tier to 3-tier vs. 2-tier	USA employer plan contracting a large health insurer	Mixed	Change in probability of use in intervention group minus change in control group (statins	-	-	-	-2.0% (p=0.69)	-

			available all tiers)					
STUDY ID	SETTING	INCOME GROUP	UNIT	Intervention	Control	SHORT TERM	SHORT TERM	LONG TERM
				Pre	Pre		(12 months)	(24 months)
						ADJUSTED RELATIVE CHANGE	ADJUSTED RELATIVE CHANGE [%]	ADJUSTED RELATIVE CHANGE [%]
(Motheral 2001) 2-tier to 3-tier and increase of 1 USD for 1-tier drugs vs. 2-tier	USA, Midwestern, preferred provider organisation (PPO)	Mixed	Mean annual prescription claims per patient (all drugs)	8.2	8.4	-	-5.4% (P<0.001)	-
(Motheral 2001) 2-tier to 3-tier and increase of 1 USD for 1-tier drugs vs. 2-tier	USA, Midwestern, preferred provider organisation (PPO)	Mixed	Mean annual prescription claims per patient (generic drugs/ 1-tier)	3.2	3.3	-	-2.2% (P>0.05)	-
(Motheral 2001) 2-tier to 3-tier and increase of 1 USD for 1-tier drugs vs. 2-tier	USA, Midwestern, preferred provider organisation (PPO)	Mixed	Mean annual prescription claims per patient (preferred brand drugs/ 2-tier)	3.5	3.5	-	-3.8% (P<0.003)	-
(Motheral 2001) 2-tier to 3-tier and increase of 1 USD for 1-tier drugs vs. 2-tier	USA, Midwestern, preferred provider organisation (PPO)	Mixed	Mean annual prescription claims per patient (non-preferred brand drugs/3-tier)	0.8	0.8	-	-21.8% (P<0.001)	-

(Motheral 2001) 2-tier to 3-tier and increase of 1 USD for 1-tier drugs vs. 2-tier	USA, Midwestern, preferred provider organisation (PPO)	Mixed	Mean annual prescription claims per patient (drugs not classified in any tiers)	0.7	0.7	-	-11.6% (p<0.004)	-
(Motheral 2001) 2-tier to 3-tier and increase of 1 USD for 1-tier drugs vs. 2-tier	USA, Midwestern, preferred provider organisation (PPO)	Mixed	Mean annual prescription claims per patient (all drugs)	8.5	8.6	-	-	-4.2% (p>0.05)
(Motheral 2001) 2-tier to 3-tier and increase of 1 USD for 1-tier drugs vs. 2-tier	USA, Midwestern, preferred provider organisation (PPO)	Mixed	Mean annual prescription claims per patient (generic drugs/ 1-tier)	3.4	3.4	-	-	-2.7% (p>0.05)
(Motheral 2001) 2-tier to 3-tier and increase of 1 USD for 1-tier drugs vs. 2-tier	USA, Midwestern, preferred provider organisation (PPO)	Mixed	Mean annual prescription claims per patient (preferred brand drugs/ 2-tier)	3.5	3.6	-	-	0.6% (p>0.05)
(Motheral 2001) 2-tier to 3-tier and increase of 1 USD for 1-tier drugs vs. 2-tier	USA, Midwestern, preferred provider organisation (PPO)	Mixed	Mean annual prescription claims per patient (non- preferred brand drugs/3-tier)	0.8	0.8	-	-	-23.8% (P<0.01)
(Motheral 2001) 2-tier to 3-tier and increase of 1 USD for 1-tier drugs vs. 2-tier	USA, Midwestern, preferred provider organisation (PPO)	Mixed	Mean annual prescription claims per patient (drugs not classified in any tiers)	0.8	0.8	-	-	-10.4% (p<0.05)

TIER CO-PAYMENT, CRM studies: Outcome 7.2 Healthcare utilisation

STUDY ID	SETTING	INCOME GROUP	UNIT		IMMEDIATE	SHORT TERM	SHORT TERM	LONG TERM
						(6 months)	(12 months)	(24 months)
				ABSOLUTE LEVEL CHANGE	RELATIVE CHANGE	RELATIVE CHANGE	RELATIVE CHANGE	RELATIVE CHANGE
				(95% CI)	(95%CI)	(95%CI)	(95%CI)	(95%CI)
(Motheral 2001) 2-tier to 3-tier and increase of 1 USD for 1-tier drugs vs. 2-tier	USA, Midwestern, preferred provider organisation (PPO)	Mixed	Mean monthly emergency room visits per patient	0.0011 (p>0.05)	8.7%	-	-	-
(Motheral 2001) 2-tier to 3-tier and increase of 1 USD for 1-tier drugs vs. 2-tier	USA, Midwestern, preferred provider organisation (PPO)	Mixed	Mean monthly hospitalisations per patient	0.0007 (p>0.05)	26.9%	-	-	-
(Motheral 2001) 2-tier to 3-tier and increase of 1 USD for 1-tier drugs vs. 2-tier	USA, Midwestern, preferred provider organisation (PPO)	Mixed	Mean monthly physician visits per patient	0.0010 (p>0.05)	0.4%	-	-	-

TIER CO-PAYMENT, CBA studies: Outcome 7.3 Healthcare utilisation

STUDY ID	SETTING	INCOME GROUP	UNIT	Intervention	Control	SHORT TERM	SHORT TERM	LONG TERM
				Pre	Pre		(12 months)	(24 months)
						ADJUSTED RELATIVE CHANGE	ADJUSTED RELATIVE CHANGE [%]	ADJUSTED RELATIVE CHANGE [%]

(Motheral 2001) 2-tier to 3-tier and increase of 1 USD for 1-tier drugs vs. 2-tier	USA, Midwestern, preferred provider organisation (PPO)	Mixed	Mean annual emergency room visits per patient	0.2	0.2	-	-	-6.0% (p>0.05)
(Motheral 2001) 2-tier to 3-tier and increase of 1 USD for 1-tier drugs vs. 2-tier	USA, Midwestern, preferred provider organisation (PPO)	Mixed	Mean annual hospitalisations per patient	0.1	0.0	-	-	33.0% (p>0.05)
(Motheral 2001) 2-tier to 3-tier and increase of 1 USD for 1-tier drugs vs. 2-tier	USA, Midwestern, preferred provider organisation (PPO)	Mixed	Mean annual physician visits per patient	3.3	3.4	-	-	2.0% (p>0.05)

TIER CO-PAYMENT, CRM studies: Outcome 7.4 Cost

STUDY ID	SETTING	INCOME GROUP	UNIT	ABSOLUTE LEVEL EFFECT (95% CI)	IMMEDIATE	SHORT TERM	SHORT TERM	LONG TERM
					RELATIVE CHANGE (95%CI)	(6 months) RELATIVE CHANGE (95%CI)	(12 months) RELATIVE CHANGE (95%CI)	(24 months) RELATIVE CHANGE (95%CI)
(Motheral 2001) 2-tier to 3-tier and increase of 1 USD for 1-tier drugs vs. 2-tier	USA, Midwestern, preferred provider organisation (PPO)	Mixed	Mean monthly claim expenditures per patient (all drugs)	-3.2 (p<0.001)	-12.2%	-	-	-
(Motheral 2001) 2-tier to 3-tier and increase of 1 USD for 1-tier drugs vs. 2-tier	USA, Midwestern, preferred provider organisation (PPO)	Mixed	Mean monthly plan net expenditures per patient	-4.8 (p<0.001)	-25.5%	-	-	-

(Motheral 2001) 2-tier to 3-tier and increase of 1 USD for 1-tier drugs vs. 2-tier	USA, Midwestern, preferred provider organisation (PPO)	Mixed	Mean monthly patient co- payments per patient (all drugs)	1.6 (p<0.001)	22.8%	-	-	-
--	---	-------	---	------------------	-------	---	---	---

TIER CO-PAYMENT, CBA studies: Outcome 7.5 Cost

STUDY ID	SETTING	INCOME GROUP	UNIT	Intervention	Control	SHORT TERM	SHORT TERM	LONG TERM
				Pre	Pre		(12 months)	(24 months)
						DIFFERENCES OF DIFFERENCES	DIFFERENCES OF DIFFERENCES [%]	DIFFERENCES OF DIFFERENCES [%]
(Huskamp 2005, Intervention 1) 1-tier to a 3-tier and an increase of 1 USD for 1-tier drugs vs. 2-tier same as retail)	USA, employer plan contracting a large health insurer	Mixed	Change in plan spending in intervention group minus change in control group (ACE inhibitors available all tiers)		-	-	-58.2% (p<0.001)	-
(Huskamp 2005, Intervention 1) 1-tier to a 3-tier and an increase of 1 USD for 1-tier drugs vs. 2-tier	USA, employer plan contracting a large health insurer	Mixed	Change in plan spending in intervention group minus change in control group (PPIs available in tier 2 and 3)	-	-	-	-15.3% (p<0.001)	-

(Huskamp 2005, Intervention 1) 1-tier to a 3-tier and an increase of 1 USD for 1-tier drugs vs. 2-tier	USA, employer plan contracting a large health insurer	Mixed	Change in plan spending in intervention group minus change in control group (statins available all tiers)	-	-	-	-13.7% (p<0.001)	-
(Huskamp 2005, Intervention 1) 1-tier to a 3-tier and an increase of 1 USD for 1-tier drugs vs. 2-tier	USA, employer plan contracting a large health insurer	Mixed	Change in spending by patient in intervention group minus change in control group (ACE inhibitors available all tiers)	-	-	-	141.8% (p<0.001)	-
(Huskamp 2005, Intervention 1) 1-tier to a 3-tier and an increase of 1 USD for 1-tier drugs vs. 2-tier	USA, employer plan contracting a large health insurer	Mixed	Change in spending by patient in intervention group minus change in control group (PPIs available in tier 2 and 3)	-	-	-	148.0% (p<0.001)	-
(Huskamp 2005, Intervention 1) 1-tier to a 3-tier and an increase of 1 USD for 1-tier drugs vs. 2-tier	USA, employer plan contracting a large health insurer	Mixed	Change in spending by patient in intervention group minus change in control group	-	-	-	117.9% (p<0.001)	-

(Huskamp 2005, Intervention 1) 1-tier to a 3-tier and an increase of 1 USD for 1-tier drugs vs. 2-tier	USA, employer plan contracting a large health insurer	Mixed	Change in overall spending in intervention group minus change in control group (ACE inhibitors available all tiers)	-	-	-	-0.3% (p=0.59)	-
(Huskamp 2005, Intervention 1) 1-tier to a 3-tier and an increase of 1 USD for 1-tier drugs vs. 2-tier	USA, employer plan contracting a large health insurer	Mixed	Change in overall spending in intervention group minus change in control group (PPIs available in tier 2 and 3)	-	-	-	-3.2% (p<0.001)	-
(Huskamp 2005, Intervention 1) 1-tier to a 3-tier and an increase of 1 USD for 1-tier drugs vs. 2-tier	USA, employer plan contracting a large health insurer	Mixed	Change in overall spending in intervention group minus change in control group (statins available all tiers)	-	-	-	-0.7% (p=0.301)	-
(Huskamp 2005, Intervention 1) 1-tier to a 3-tier and an increase of 1 USD for 1-tier drugs vs. 2-tier	USA, employer plan contracting a large health insurer Children	Mixed	Change in probability of overall spending relative to comparison (ADHD drugs available all tiers)	-	-	-	-3.0% (p=0.23)	-

(Huskamp 2005, Intervention 1) 1-tier to a 3-tier and an increase of 1 USD for 1-tier drugs vs. 2-tier	USA, employer plan contracting a large health insurer Children	Mixed	Change in probability of plan spending relative to comparison (ADHD drugs available all tiers)	-	-	-	-43.0% (p<0.001)	-
(Huskamp 2005, Intervention 1) 1-tier to a 3-tier and an increase of 1 USD for 1-tier drugs vs. 2-tier	USA, employer plan contracting a large health insurer Children	Mixed	Change in probability of spending by patient relative to comparison (ADHD drugs available all tiers)	-	-	-	46.0% (p<0.001)	-
(Huskamp 2005, Intervention 2) 2- tier to 3-tier vs. 2-tier	USA, employer plan contracting a large health insurer	Mixed	Change in plan spending in intervention group minus change in control group (ACE inhibitors available all tiers)	-	-	-	-5.6% (p<0.001)	-
(Huskamp 2005, Intervention 2) 2- tier to 3-tier vs. 2-tier	USA, employer plan contracting a large health insurer	Mixed	Change in plan spending in intervention group minus change in control group (PPIs available in tier 2 and 3)	-	-	-	-2.3% (p<0.02)	-

(Huskamp 2005, Intervention 2) 2- tier to 3-tier vs. 2- tier	USA, employer plan contracting a large health insurer	Mixed	Change in plan spending in intervention group minus change in control group (statins available all tiers)	-	-	-	1.9% (p<0.07)	-
(Huskamp 2005, Intervention 2) 2- tier to 3-tier vs. 2- tier	USA, employer plan contracting a large health insurer	Mixed	Change in spending by patient in intervention group minus change in control group (ACE inhibitors available all tiers)	-	-	-	7.5% (p<0.001)	-
(Huskamp 2005, Intervention 2) 2- tier to 3-tier vs. 2- tier	USA, employer plan contracting a large health insurer	Mixed	Change in spending by patient in intervention group minus change in control group (PPIs available in tier 2 and 3)	-	-	-	4.9% (p<0.001)	-

(Huskamp 2005, Intervention 2) 2- tier to 3-tier vs. 2- tier	USA, employer plan contracting a large health insurer	Mixed	Change in spending by patient in intervention group minus change in control group (statins available all tiers)	-	-	-	0.3% (p=0.075)	-
(Huskamp 2005, Intervention 2) 2- tier to 3-tier vs. 2- tier	USA, employer plan contracting a large health insurer	Mixed	Change in overall spending in intervention group minus change in control group (ACE inhibitors available all tiers)	-	-	-	3.1% (p<0.001)	-
(Huskamp 2005, Intervention 2) 2- tier to 3-tier vs. 2- tier	USA, employer plan contracting a large health insurer	Mixed	Change in overall spending in intervention group minus change in control group (PPIs available in tier 2 and 3)	-	-	-	-0.4% (p=0.66)	-
(Huskamp 2005, Intervention 2) 2- tier to 3-tier vs. 2- tier	USA, employer plan contracting a large health insurer	Mixed	Change in overall spending in intervention group minus change in control group (statins available all tiers)	-	-	-	2.0% (p<0.03)	-

STUDY ID	SETTING	INCOME GROUP	UNIT	Intervention	Control	SHORT TERM	SHORT TERM	LONG TERM
				Pre	Pre		(12 months)	(24 months)
						ADJUSTED RELATIVE CHANGE	ADJUSTED RELATIVE CHANGE [%]	ADJUSTED RELATIVE CHANGE [%]
(Motheral 2001) 2-tier to 3-tier and increase of 1 USD for 1-tier drugs vs. 2-tier	USA, Midwestern, preferred provider organisation (PPO)	Mixed	Overall annual mean drug expenditures (all drugs)	268.0	287.0	-	-	-5.6%
(Motheral 2001) 2-tier to 3-tier and increase of 1 USD for 1-tier drugs vs. 2-tier	USA, Midwestern, preferred provider organisation (PPO)	Mixed	Annual mean patient drug expenditures (all drugs)	77.0	80.0	-	-	34.0% (p<0.001)
(Motheral 2001) 2-tier to 3-tier and increase of 1 USD for 1-tier drugs vs. 2-tier	USA, Midwestern, preferred provider organisation (PPO)	Mixed	Annual mean plan drug expenditures (all drugs)	193.0	208.0	-	-	-18.4% (p<0.001)