Intervention Options

Players may enact one or more options from the following list of national programs or policies.

Expand insurance coverage
Increase the fraction of people with private or government-provided health insurance. You may expand coverage for the advantaged and/or the disadvantaged population.

Consequences: *Greater coverage improves access to quality office care, but as a result increases spending on visits, procedures, and medications. It also puts more demand on limited supply of primary care providers (PCPs) and increases insurance administration expenses*.

Improve quality of care
Enhance the degree to which physicians and hospitals enact best practices and make effective clinical decisions. You may improve the quality of preventive and chronic care, which includes screening to identify health concerns, as well as enhanced management of diseases, injuries, and asymptomatic disorders. Separately, you may improve the quality of urgent care for events that require emergency and perhaps intensive care.

Consequences: Better preventive and chronic care slows the progression of asymptomatic disorders into disease, and reduces the frequency of acute and urgent episodes. It also, however, increases spending on office visits and medications, and puts more demand on limited supply of PCPs. Better urgent care reduces the need for inpatient stays and reduces the fatality of urgent events. Quality urgent care also reduces the risk of disability and the subsequent need for extended care in nursing homes or home health care.

Simplify insurance
Reduce the complexity of different health plans and the associated burden on the billing function of provider offices. This may be accomplished through standardization of health insurance plans (analogous to what some states have done with auto insurance) or through a single-payer approach. Single payer goes beyond standardization by reducing overhead costs for not only providers but also insurers.

Consequences: Standardized insurance and single payer both lower PCP billing costs and thereby improve PCP income. Single payer also reduces the marketing and negotiation associated with private insurance and thereby reduces insurance overhead costs.

Expand primary care supply
Increase the number of new practicing primary care providers (PCPs) through incentives such as scholarships, subsidies, and/or guaranteed placement programs. You may offer these incentives for providers to the advantaged population, and/or for providers to the disadvantaged.

Consequences: The supply of PCPs is increased, but if this leads to a surplus, then average net income may decline.

Improve primary care efficiency
Increase the fraction of primary care providers (PCPs) whose practices or clinics are streamlined to run as efficiently as possible. This is sometimes referred to as idealized design of clinical office practices (IDCOP). The IDCOP approach comprises a number of techniques for appointment scheduling, staff utilization, and use of information technology.

Consequences: Greater efficiency could alleviate a shortage of PCPs and increase PCP average net income.

Change reimbursement rates
Amounts per visit paid by insurers to physicians or hospitals, expressed relative to their initial values (=1). The relative reimbursement rate for office visits affects payments for visits to primary care physicians and specialists. The relative reimbursement rate for hospital visits affects payments for hospital inpatient stays as well as visits to emergency and outpatient departments. You may modify these reimbursement rates up or down.

Consequences: Lowering reimbursement rates can reduce health care costs. However, it hurts the quality of preventive and chronic care and reduces PCP net income, which may lead to a decline in primary care supply. Similarly, lower reimbursement for hospital visits hurts the quality of urgent care and also may reduce elective hospital capacity, thereby impairing the effectiveness of disease and injury management in some cases.

Require gatekeeper approval for specialist services
Extend the requirement, already imposed under some health plans, that patients first go to a primary care provider and get a referral before seeing a specialist.

Consequences: A significant portion of the demand for health care visits, among the advantaged population, would be shifted from specialists to PCPs. Because specialists have higher fees than PCPs, and because they tend to order more elective outpatient procedures and hospital stays, the shift from specialists to PCPs could reduce health care costs. However, if PCPs lack spare capacity to accommodate the additional demand, then the shift could create an access problem for the advantaged, leaving some patients without preventive and chronic care who previously had received such care.

Change self-pay fraction for the insured
Raise or lower the fraction of health care costs, including self-paid premiums and out-of-pocket expenses such as co-pays and deductibles, that is paid by those who have insurance coverage, sometimes known as the "cost sharing fraction."

Consequences: Increased cost sharing reduces the affordability of quality preventive and chronic care and therefore its use.

Enable healthier behaviors
Enable a greater fraction of people to engage in healthy behaviors, including not smoking, eating a healthful diet, being physically active, avoiding drug and alcohol abuse, engaging in safer sex, washing hands, refraining from violence, and others. You may enable healthier behaviors among the advantaged and/or the disadvantaged population.

Consequences: Healthier behaviors reduce the risk of disease or injury, and also reduce the risk of developing asymptomatic disorders (such as hypertension, high cholesterol, and pre-diabetes) that may subsequently lead to symptomatic disease.

Build safer environments
Increase the fraction of people who live, work, travel, and play in places that are free from environmental hazards. You may build safer environments for the advantaged and/or the disadvantaged population.

Consequences: Safer environments reduce the risk of disease or injury. Outdoor safety also supports healthy behaviors such as physical activity.

Create pathways to advantage
Increase the fraction of people who maintain a household income above $25,000 per year by assuring, for example, better education, job training, and/or living wage policies.

Consequences: Having moved from disadvantaged to advantaged, a person is less likely to experience stress-related disease, more likely to engage in healthy behaviors, more likely to live in a safe environment, and more likely to have health insurance and access to quality health care.

Strengthen civic muscle
Increase people's power to overcome resistance and enact chosen interventions. You may strengthen civic muscle in preparation for intervening more effectively elsewhere in the system.

Consequences: Greater civic muscle increases the extent or coverage of all interventions listed above aside from changes in reimbursement rates, gatekeeper requirement, and self-pay fractions.

Intervention Specifications

The table below lists assumptions regarding the effectiveness, implementation cost, and time delays for each intervention option.

Intervention		Baseline value(s) (~2003)	Value(s) with full intervention	Unit implementation cost	Time delay (years)
	Expand Insurance Coverage				
	for the Advantaged	86.8% coverage	100%	$100 per person helped	2.5
	for the Disadvantaged	75.9% coverage	100%	$100 per person helped	2.5
	Improve Quality of Care				
	Preventive and chronic care	80% adoption of best practices	90%	$50,000 per provider helped	2.5
	Urgent care	80% for Advantaged, 70% for Disadvantaged	90% for Advantaged, 85% for Disadvantaged	$5 million per hospital helped	2.5
	Simplify Insurance				
	Standardize plans	No standardization	100%	$5 per insured person	0
	Single payer	No single payer	100%	$10 per insured person	0
	Expand Primary Care Supply				
	for the Advantaged	No effect	Increase 50%*	$150,000 per additional PCP	10
	for the Disadvantaged	No effect	Increase 50%*	$300,000 per additional PCP	10
	Improve Primary Care Efficiency	20% adoption of best practices	100%	$10,000 per PCP helped	2.5

Intervention		Baseline value(s) (~2003)	Value(s) with full intervention	Unit implementation cost	Time delay (years)
	Change Reimbursement Rate				
	For office visits	1	± 20-40%	No cost	0
	For hospital visits	1	± 20-40%	No cost	0
	Require Gatekeeper Approval for Specialist Services	No extended requirement	For the Advantaged, reduce by half the fraction of non-urgent visits to specialists**	No cost	0
	Change self-pay fraction for the insured (cost sharing)	25% for Advantaged; 10% for Disadvantaged	0-75%	No cost	0
	Enable Healthier Behaviors				
	for the Advantaged	10%/yr behavioral reform	12-30%/yr***	$2,000 per person helped	Varies (~3-8)
	for the Disadvantaged	8%/yr behavioral reform	12-30%/yr***	$2,000 per person helped	Varies (~3-8)
	Build Safer Environments				
	for the Advantaged	5%/yr remediation	12-30%/yr****	$500 per person helped	Varies (~3-8)
	for the Disadvantaged	4%/yr remediation	12-30%/yr****	$500 per person helped	Varies (~3-8)
	Create Pathways to Advantage	Not-DI 3.1%/yr DI 2.3%/yr become Advantaged	Not-DI 15%/yr, DI 10%/yr*****	$5,000 per person helped	Varies (~7+)
	Strengthen Civic Muscle	50% capacity	90%	$1 per capita/ yr to increase 10 pctg. points	2.5

NOTES

PCP = Primary care provider

DI = Population with disease or injury

* The supply of PCPs is also affected by their net income. If increased supply is not met by increased demand, then net income will be hurt by increased supply, and supply will accordingly end up growing by less than the potential 50%.

** The gatekeeper requirement affects the Advantaged sub-group and reduces by half the fraction going to specialists for non-urgent care if PCPs are sufficient, from a baseline value of 42% down to 21%. In contrast, only 16% of the Disadvantaged go to specialists for non-urgent care if PCPs are sufficient. The lower fraction for the Disadvantaged reflects greater gatekeeper requirements under their plans already, as well as more limited access to and affordability of specialists.

*** The max risk reduction rate is greater when unhealthy behavior prevalence is higher, according to a nonlinear function reflecting the "low hanging fruit" idea. Specifically, max reduction=30%/yr when unhealthy prevalence=>50%, but only =12%/yr when unhealthy prevalence<=10%.

**** The max remedy rate is greater when unsafe prevalence is higher, according to a nonlinear function reflecting the "low hanging fruit" idea. Specifically, max remedy=30%/yr when unsafe prevalence=>50%, but only =12%/yr when unsafe prevalence<=10%.

***** The max rate of moving into advantage is greater when disadvantage prevalence is higher, according to a nonlinear function reflecting the "low hanging fruit" idea. Specifically, max movement=15%/yr when disadvantage prevalence=>20%, but then slows as disadvantage prevalence declines.