

Expanding Health Coverage and Access for the Uninsured: A Model of Common Factors in the Experience of Several States

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Abstract

Why is health reform so difficult to achieve in the US? When it does succeed, what factors contribute to its success? This paper extends a causal model presented last year to include political and other factors that help to answer these questions. The paper examines the experience of several states in the US as they have struggled with a key aspect of health reform, extending insurance coverage to children, families, and other groups that are uninsured. . It also draws from other models that have been applied to understanding political and social change. The causal analysis that is presented emphasizes the importance of making policy choices in shaping proposed reforms that fit within a “window of opportunity” presented by the state’s political and economic environment. The paper concludes by suggesting that expanding access must be viewed as an ongoing process in which early successes create opportunities to benefit additional people.

Key words: health reform, health insurance

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Introduction

Why is health reform so difficult to achieve in the US? When it does succeed, what factors contribute to its success? This paper extends a causal model presented last year to include political and other factors that help to answer these questions. To better understand these factors, the paper examines the experience of several states in the US as they struggled with a key aspect of health reform, extending insurance coverage to children, families, and other groups that are uninsured. The paper concludes by drawing implications of the analysis for effective reform.

Background

A paper was presented by Homer, Hirsch, McDonnell, and Milstein¹, at the 2005 ISDC in Boston, that outlined causal relationships the authors believed were responsible for the multiple afflictions of the US health care system: costs apparently out of control, eroding access, and questionable quality of care. The authors suggested that the causal relationships presented also help to make the system resistant to reform. Key insights put forth in the paper were that these forces

- cause increasing amounts of resources to be spent “downstream” on the symptoms and complications of illness,
- leave fewer resources to be spent “upstream” on risk management to prevent illness and on disease management to prevent complications and for those who become ill,
- cause health insurance coverage to become less available for certain people and for primary care services, and
- create a powerful set of interests that benefit from this resource imbalance and resist attempts at change.

Dr. Steffie Woolhandler, an expert on US health care, presented data that quantified the magnitude of problems faced by the US and the worsening trends created by the feedback loops contained in the causal diagrams.

Several interesting ideas came out of the subsequent discussion at the HPSIG session in which the paper was presented². One was from Dr. John McDonough, Director of the Boston-based organization Health Care for All and a former state legislator who was extensively involved in Massachusetts health reform. McDonough suggested that the causal model presented, while comprehensive in many areas, lacked a political dimension that he has found essential for describing why health reform efforts succeed or fail.

Another idea suggested by Dr. Kim Thompson of the Harvard School of Public Health was that, while health reform has been somewhat limited at the National level in the US, a number of individual states had substantial experience in extending health insurance coverage to children and their families. One might be able to learn from these experiences. These two ideas provided the motivation for this paper: extending the

model presented last year to include a political dimension and applying it to states' attempts to expand health insurance coverage.

States' Experience with Health Reform and Expanding Access

Rogal and Helms, reviewing state efforts at health care reform in the 1990's, observed that while much of the focus in the US is at the National level, states had historically taken the lead in considering and implementing various reforms³. Some of these reforms were in the financing of health care, others focused on health care delivery, and some were a mix of changes in both financing and delivery. One state, Hawaii, implemented a health care financing system with universal coverage. Another, Massachusetts, developed and passed into law a similarly ambitious system, but was not able to implement it. Many other states made more modest reforms that led to improved access to care for their poorer citizens who could not afford care on their own and did not receive health care coverage from their employers. Rogal and Helms point out that the states, because they take different approaches, can serve as laboratories for the various mechanisms that ultimately might become part of a National reform effort.

A series of articles in a 1993 issue of the journal Health Affairs suggests the range of early reforms adopted by individual states. Hawaii, while already benefiting from a healthy population and better-than-average health care resources, is credited with an emphasis on primary care and universal access that enabled it to keep health care spending significantly below the National average while continuing to keep its population very healthy⁴. Maryland was able to build on a history of somewhat successful health care regulation to contain costs and thereby afford expansions in health insurance coverage⁵. In Vermont, a broad-based coalition was able to secure passage of legislation that addressed concerns about both cost and access⁶. Washington State used a process with widespread involvement to implement an ambitious set of reforms based on the principle of managed competition, a relatively new and untested idea at the time⁷.

A later review in 2000 by Riley and Yondorf for the National Academy for State Health Policy outlined a number of different approaches that states had taken during the 1990's for expanding coverage⁸. The strategies ranged from attempts at comprehensive reform in states such as those mentioned in the previous paragraphs and others including Oregon and Tennessee to more limited incremental changes such as

- Medicaid (publicly funded insurance) expansions,
- state-funded subsidized insurance pools for high risk patients,
- health insurance market reforms that made it coverage available for individuals and others who previously had difficulty purchasing it on the open market,
- purchasing cooperatives that allowed small employers to get more competitive rates,
- tax incentives to employers for providing insurance and to individuals to help them pay for health care,
- indigent care programs such as Massachusetts' uncompensated care pool,
- low cost health insurance policies providing limited benefits, and
- coverage expansions targeted at specific groups such as children.

Riley and Yondorf found that Medicaid expansions, state-subsidized insurance, and indigent care programs had the greatest impact in reducing the ranks of the uninsured while more market-oriented approaches such as health insurance market reforms and purchasing cooperatives proved to be less effective.

Much of the writing about state health policy describes what was done by various states rather than the dynamics of how new policies and programs were developed and implemented. One exception that traces the development of several states' innovative programs was written by Silow-Carroll, Waldman, Sacks, and Meyer from the Economic and Social Research Institute (ESRI)⁹. Their review traces the evolution of programs in six states ranging from Arkansas that had historically poor coverage, but expanded to include many of the uninsured to Michigan which had historically high percentages of its residents covered, but still managed to expand. Each state had its own unique approaches and problems, but there were some common factors identified in the ESRI report.

- The importance of raising public awareness of the problem of uninsured residents, especially in states where the percentage of uninsured was growing and working adults were losing coverage.
- Technical expertise was needed for analyzing options for expanding coverage and their potential costs. Several states used foundation grants to fund projects. This was especially important for states such as Arkansas that did not previously have such capabilities.
- Imaginative use of diverse funding sources such as tobacco settlement funds as a catalyst for creating new programs.
- Creating coalitions of different stakeholders and new entities that can serve as an umbrella under which different interests can work together to develop a common approach and educate the public.
- Relying on public/private partnerships rather than depending exclusively on either the public or private sector.
- Having separate programs that cover different groups of people or employ different ideologies rather than a single monolithic program that can cover everyone. There is, of course, the potential danger of fragmentation, confusion, and inefficiency with multiple programs, but it's possible to overcome or reduce these obstacles with administrative integration and coordination of outreach. The key is to get agreement on goals and then provide mutual support for multiple approaches to achieve them.
- A phased approach rather than single leap forward. This means having a series of small successes that build on each other and increase expectations about what can be done. A series of small steps may be better for avoiding the backlash from powerful interests that a major health reform initiative might provoke.

- Having an array of benefit packages for different sub-populations in order to target coverage at their most critical needs or on the most cost-effective services for each group. For example, people with moderate incomes who can pay for doctors visits and outpatient care may benefit most from “catastrophic” coverage for a serious illness. Those with very low incomes may get the most value from coverage for primary care as they did in a program adopted in Utah. It may even be necessary to reduce the less essential benefits of certain groups in order to afford some coverage for others.
- Work with employers rather than create adversarial situations that cause them to oppose any changes. New Mexico worked with employer focus groups to better understand their thinking before making changes. Michigan let employees use vouchers from the state to buy into employer-sponsored programs. Utah used a public/private approach based on cost sharing with state paying for primary care and employers buying “wraparound” coverage for hospitalization and other services.
- Build on existing programs where it is practical. Michigan built some of its newer programs on existing county-level indigent care programs and Utah built on a program for chronically ill adults. This probably should be done selectively since some programs such as Medicaid may engender negative reactions because of their past association with welfare programs or adverse effects on state budgets. New programs may require a new “brand” image to avoid these negative associations.
- Leadership by the Governor and legislative leaders is usually critical. So is working across political parties and across the different branches of state government including partnerships between health departments and legislative committees.
- Providers can also play a key role by, for example, donating hospital services if primary care is covered by a state program as it was in Utah. Freeing resources for better reimbursement may help encourage provider participation. Provider associations and their unions, usually adversaries, can exert a lot of influence if they work together as they did in New York.
- Good outreach is needed to get people to sign up for the new programs. This requires the use of community agencies, multiple sites, and several different funding streams. For example, in Vermont, school lunch funds were used for outreach to families with children.

Many of these ideas will be incorporated into a model that will be presented later.

One good account of a protracted battle to extend health coverage to children comes from John McDonough (who helped to inspire this paper) and his book Experiencing Politics¹⁰. In it, John writes about his experience as a Democratic state legislator who chaired the House Health Care Committee for several years that included achieving expanded health insurance coverage for children. John’s experience reflects many of the points outlined above. An ambitious plan to cover uninsured people was first whittled

back to cover only children when faced with opposition from the Republican Governor and his administration. The legislation was expanded to include:

- a prescription drug benefit for senior citizens who are an important voting bloc,
- an increase in the cigarette tax to generate additional income without a general tax increase, and
- repeal of an employer mandate (requirement that employers provide insurance) that had been passed in earlier legislation and was very unpopular with the business community.

The emphasis on children allowed McDonough and his allies to build a broad coalition of support that even included some prominent business leaders. Though it was less than its supporters originally hoped for, this broad coalition helped achieve passage of the legislation and expanded coverage for children over the opposition of the Governor.

Political Models Relevant to Health Reform and Expanding Access

In *Experiencing Politics*, McDonough uses two models political models as a lens through which to re-examine his experiences with health care legislation. One is called a *punctuated equilibrium* model that he uses as a framework for discussing a hospital rate-setting bill. John draws on theories of scientific revolutions and organizations as well as politics to describe a process in which social systems maintain an equilibrium for a number of years in which any change is limited and incremental. This equilibrium can be broken by a radically new idea that changes patterns of thinking and creates a new equilibrium. This new way of thinking becomes the framework for the next set of incremental changes until another radically new idea comes along. He cites the work of political scientists Baumgartner and Jones¹¹ and three concepts they introduce in explaining the process of policy change:

- structure and scope of conflict in bringing new ideas forward,
- role of “policy monopolies” in controlling the terms of debate, and the
- resulting rate of change that is usually slow, but can accelerate when a compelling new idea comes along.

McDonough applies this model by showing how a hospital rate-setting structure was put in place in Massachusetts to deal with a perceived “market failure” and then maintained for a number of years by a policy monopoly of interests that had put the structure in place. There was a long period during which there was minor tinkering with this system, but no major changes. Continued growth in health care costs, frustration with the complexity of the rate-setting system, an expanded market share for health maintenance organizations, and a sense among hospitals that they might do better without regulation led to what was then a radically new idea: the free market. While there was no evidence that it would work, the simplicity of the idea and sense the old system was broken were enough to cause a jump to a new equilibrium that persisted for a number of years.

The other model that McDonough presents is called the *agenda-setting* model that is based on the work of John Kingdon and applies it to the expansion of children’s health insurance coverage mentioned earlier¹². The agenda-setting model is characterized by the appearance of a window of opportunity and the convergence of three streams: problems,

policies, and politics. The absence or insufficient flow of any of these streams will keep policy change from occurring. In his example cited earlier, the problems of the uninsured were well documented and publicized. It was necessary to craft a viable policy which was, as indicated earlier, a compromise between what its backers might have wanted and what was practical to achieve (coverage for children instead of everyone below a certain income level). The political stream was the most challenging and involved creating and keeping together a coalition of disparate parties including children's advocates, sympathetic business leaders, and senior citizens attracted by the inclusion of a prescription drug benefit.

While McDonough presents these as two separate models, they seem to me to be part of the same, more complete model that helps to explain how change such as health reform is resisted for a long time and then "suddenly" happens. In this model, change takes place over a long period within narrow parameters while a policy monopoly controls the scope and terms of conflict and what is on the table" to be negotiated (equilibrium). As a window of opportunity opens (e.g., due to new actors coming onstage, changing economic conditions, some crisis), the right convergence of problem, policy, and political streams allows a new idea to be placed on the agenda (agenda-setting) and causes a jump to a new equilibrium. That new equilibrium is enforced by its own policy monopoly.

As I thought about these ideas and the combined model, they seemed somehow familiar. I realized that I had developed a similar model for my Master's thesis at MIT 35 years ago. It was called "Societal Response to Social Problems" and presented a two-stage model of response¹³. The thesis was inspired by insights from heroin policy work I was doing at the time. In the first or Social Control stage, existing institutions might attempt to control a problem based on how the problem is defined by society. In the case of heroin addiction, this might mean defining the problem as one of criminal behavior and responding to it with the police, courts, and prisons. This response is typically ineffective because it fails to deal with the medical and social aspects of addiction and may even stand in the way of more effective solutions because it consumes vast amounts of resources and also stigmatizes addicts and those who work with them. This Social Control stage persists for a considerable time as more and more resources are poured into control measures.

Social Control only gives way to the next stage, Social Change, when there is clear evidence that the control measures are not working and the problem becomes so pervasive that it affects much of the community at a personal level. These conditions can create the opportunity to have a new idea emerge on the agenda. In this second, Social Change stage, institutions can be developed around this new idea (e.g., that addiction is a multifaceted problem) and have the potential for achieving a more effective response. For health reform, the combination of worsening costs and eroding access, persistent failure of efforts to control costs, and the increasing pervasiveness of the problem to the middle class that previously had guaranteed access to care might create a window of opportunity for more fundamental change.

Toward A System Dynamics Model of Health Reform and Expanding Access at the State Level

1. Factors Driving Rising Cost and Eroding Access

The next several pages present causal diagrams that form the beginning of a model of a System Dynamics health reform at the state level. The first two diagrams provide a starting point by linking back to the work done for last year's ISDC to explain why health care cost and eroding access have become such a pervasive and persistent problem in the US as a country as well as its individual states. The next two diagrams display the responses to these trends and suggest why they may have been ineffective and actually created barriers to real reform. The final three diagrams suggest a different point of view. These draw on the ideas presented so far, from the Silow-Carroll paper, from McDonough's book, and my Masters thesis, for thinking about what has produced effective reform in some states and may hold promise for reform at the National level. An Appendix contains an attempt at a consolidated model that integrates these factors.

Individual states in the US have been coping with the same factors that have driven National health care costs upward while eroding access to care. Figures 1 and 2 summarize factors contained in the causal diagrams presented at the 2005 ISDC that the authors believed were responsible for increasing cost and reducing access.

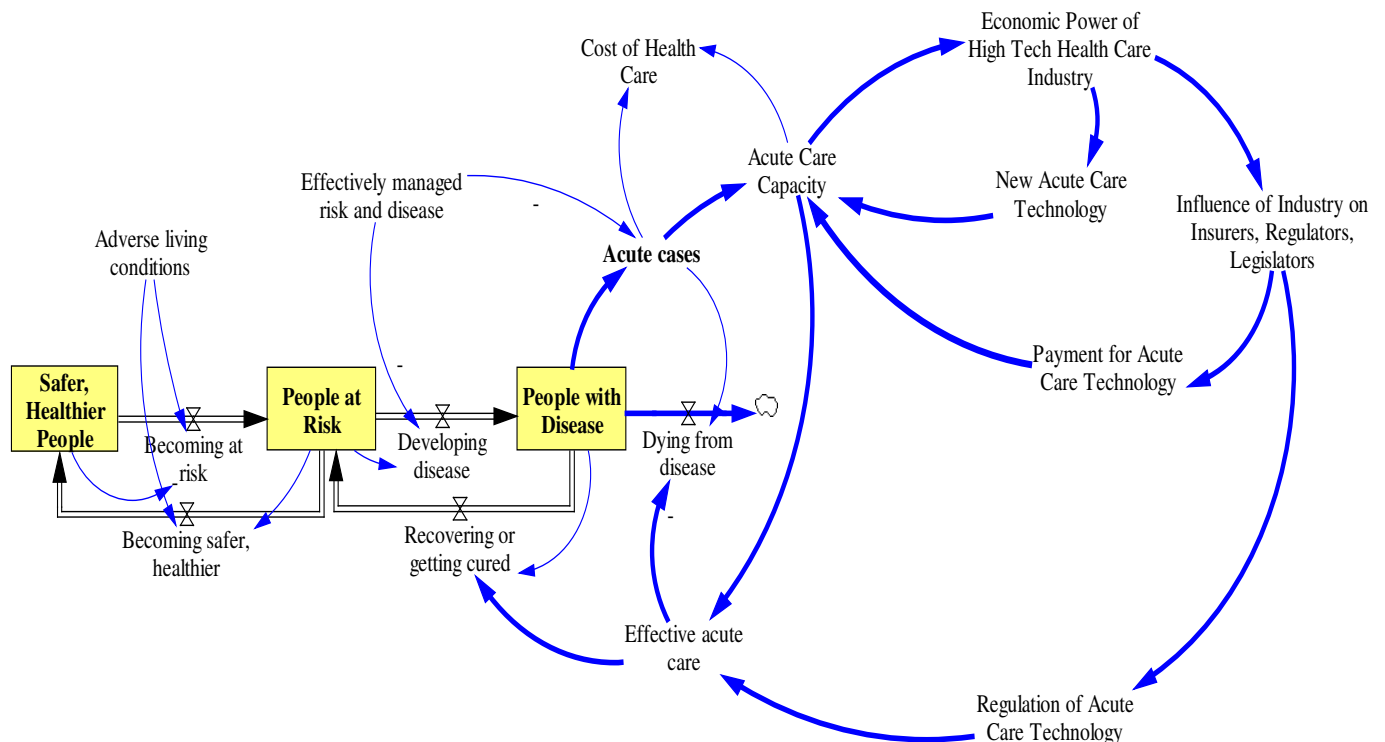


Figure 1: Reinforcing Loops Driving Health Care System Toward More High Tech Care

Beginning in Figure 1, health and illness are represented at a very aggregate level as a flow of people over time from Safer Healthier People to People at Risk, to People with Disease. People with Disease may recover and simply be at risk of further disease, but their illness may be chronic and persist. People with Disease will develop acute conditions that require medical interventions ranging from doctors' office visits to intensive care stays. Increasing numbers of Acute Care Cases require growth in Acute Care Capacity. There is a reinforcing effect as many of these interventions are effective, reduce the numbers of people Dying of Disease, and leave more people alive with disease, many of them with serious conditions that require extensive health care utilization. Effective Acute Care does cure some people, but the trend has been toward increasing prevalence of chronic illnesses such as diabetes.

Other reinforcing loops in Figure 1 create a bias toward high tech interventions in acute cases. The growing economic resources of hospitals and medical specialists create a market for New Acute Care Technology to be supplied by biomedical and pharmaceutical companies. Each new generation of this technology is typically more capable, but more expensive than the previous one. The combined Economic Power of the High Tech Health Care Industry (providers and their suppliers together) also enables them to exert increasing pressure on government and private insurers to provide more favorable reimbursement for high tech intervention and on government to weaken regulation of new technology. The result was a growing emphasis on high tech acute care that began in the 1960's and continues today.

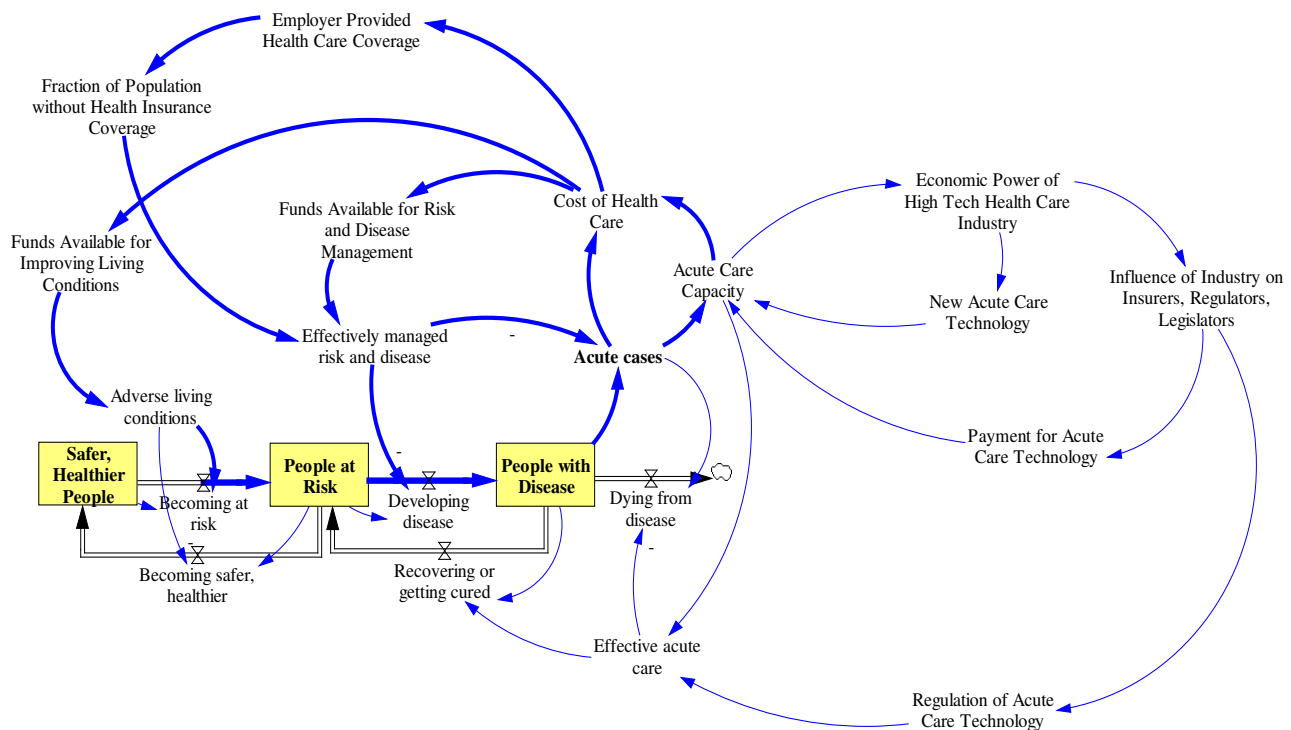


Figure 2: Reinforcing Loops Driving Health Care System Toward Higher Cost Acute Care and Reduced Access to Care

Even though spending on health care has grown dramatically, there is a limit at any time to what government and employers are willing to spend on health care. Figure 2 shows some of the consequences of growing spending on acute care in the presence of this practical limit on total spending. More spending on Acute Care Cases and Acute Care Capacity means more limited Funds Available for Risk and Disease Management. This, in turn, means that less can be done to prevent disease and the complications of disease that lead to acute complications. Similarly, governments spending more on acute health care have more limited Funds Available for Improving Living Conditions through housing, education, and social welfare programs. This puts more People at Risk of developing disease than there would have been with more generous spending to improve living conditions. Faced with increasingly higher costs that affect their competitiveness, employers begin to resist the trend by making employees responsible for more of the cost or simply refusing to pay for Employer Provided Health Care Coverage.

The effect of all of these reinforcing loops is to reduce “upstream” interventions that prevent illness and its complications and thereby increase “downstream” costs of illness. These higher costs make government and employers even more reluctant to pay for “discretionary” risk and disease management services not related to acute care (such as helping diabetic patients manage their weight) and the result is a further drift downstream toward more expensive care for a sicker population. Higher costs have also led to a growing problem of access to care and resistance to efforts to improve access.

2. Response to Cost: Ineffective Social Control and More Barriers to Expanding Access

The predictable response to growing costs has been embodied in the set of balancing loops shown in Figure 3 in red. These represent a Social Control response. If growing cost is a problem, focus on the immediate drivers of cost. This has entailed a variety of measures including

- limits on reimbursement rates paid by insurers through price controls, global budgets, and other mechanisms,
- controls on the use of specific procedures by requiring prior approval or second opinions and of acute care in general by utilization review processes and managed care arrangements such as health maintenance organizations,
- regulation of new acute care technology by requiring “certificates of need” for hospitals acquiring high tech equipment or building new facilities, and
- quality review processes designed to prevent inappropriate care.

These mechanisms have all had some effect, but unfortunately, the Political Influence of the Acute Health Care Industry and its suppliers (in black) has weakened these measures and limited them to slowing increases in cost rather than controlling or lowering it. In many cases these mechanisms such as the “DRG system” (fixed payment per hospital admission based on Diagnosis Related Groups) employed by the Medicare program have shifted costs to other insurers with only a limited effect on overall cost.

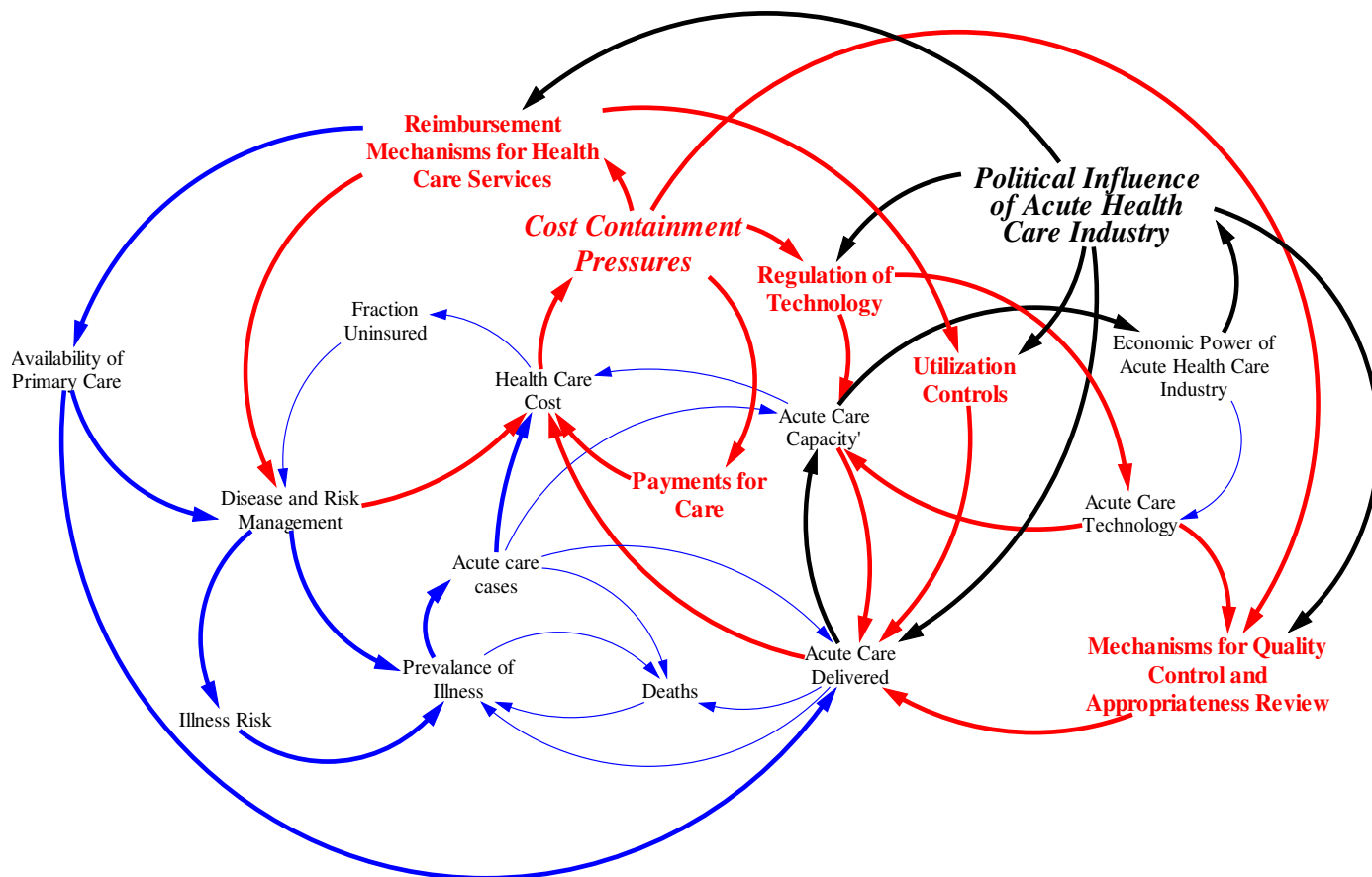


Figure 3: Balancing Loops That Implement Cost-Containment Measures

These cost-containment measures can have the additional unintended effect of exacerbating the reinforcing effects that drive up health care costs shown in Figure 2. Reimbursement Mechanisms for Health Care Services can reduce costs by limiting the volumes of Primary Care and Disease and Risk Management services. However, the inadvertent effect, shown by the thicker blue lines in Figure 3, is to allow more illness and complications to develop and create needs for expensive “downstream” care.

The *punctuated equilibrium* model introduced in McDonough’s book suggests that this Social Control-oriented cost-containment regime has not merely been ineffective, but may have created a set of barriers to more fundamental solutions. Figure 4 suggests a set of effects that may stand in the way of states’ Ability to Make Fundamental Changes. One is simply the Health Care Industry’s Resistance to Change that has been sensitized by the many attempts to bring it under control (much as a vaccine and minor infections strengthen an organism’s immune response). The many attempts to control health care costs has also created an “industry” of those responsible for doing so (Resources Devoted to Controlling Health Care and Incremental Solutions) that has a stake in perpetuating that system of controls and ways of thinking. These organizations constitute what McDonough refers to as a Policy Monopoly that, in turn, controls the Terms of Debate

and limits them to tinkering with the details of the current ineffective system of control rather than looking at health care in fundamentally new ways.

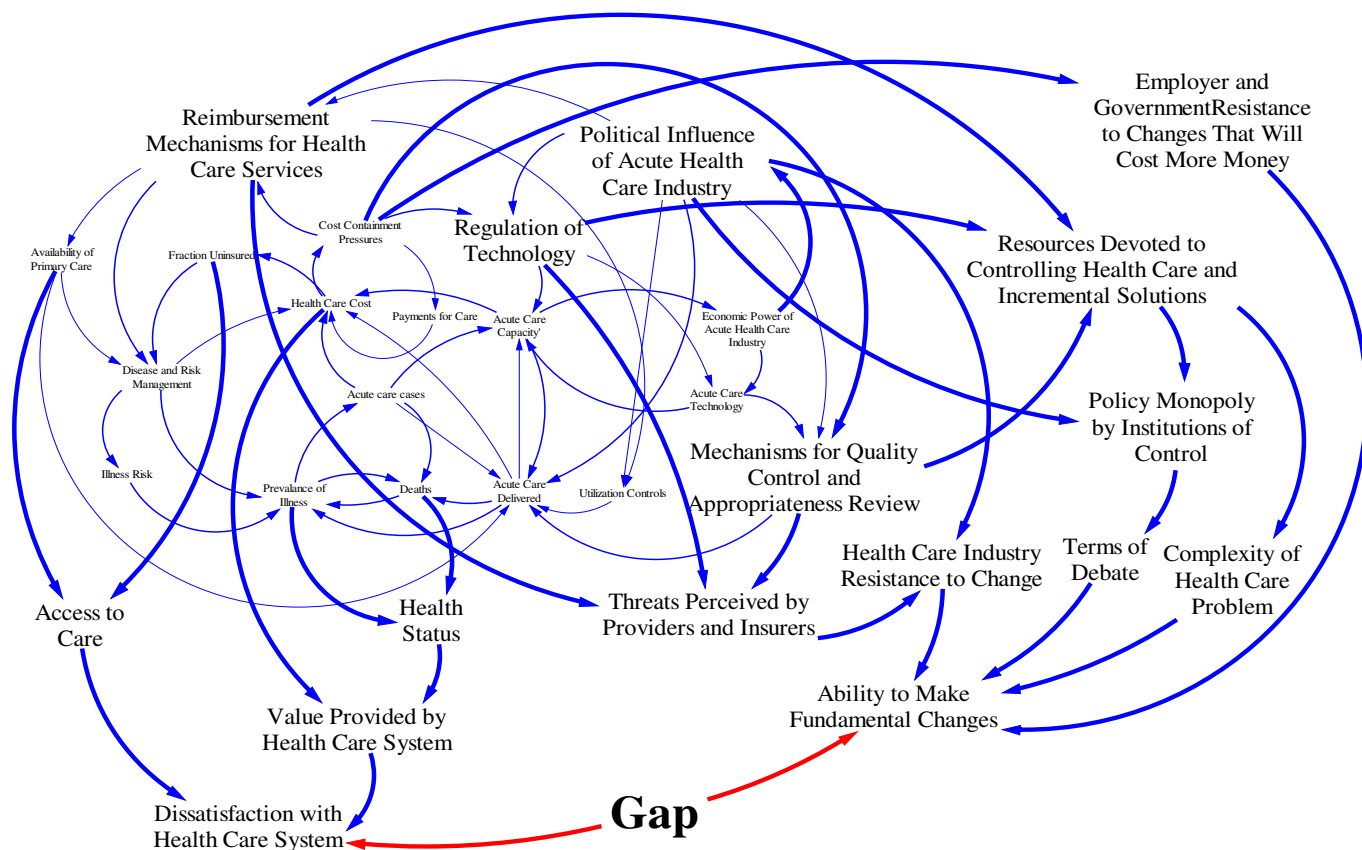


Figure 4: Resistance to Reform Created by Ineffective Cost Containment Mechanisms

The many layers of controls imposed in the past have also added to the Complexity of the Health Care Problem and have made it difficult to pick apart the various threads. People have trouble differentiating between failed “solutions” and fundamental problems. Finally, those responsible for paying for healthcare, employers and government, reflexively resist any changes that will cost more, even in the short-run, because they have been paying increasing percentages of their revenues for health care. The result is a growing Gap in most states between Dissatisfaction with the Health Care System and the Ability to Make Fundamental Changes. Dissatisfaction is increasing because of the perception that Value Provided by the Health Care System is declining (higher cost without proportional improvement in outcomes) and its benefits are available to fewer people as coverage and access to care erode. Efforts to push harder on the Social Control mechanisms introduced in Figure 3 have only limited effects and create additional barriers to dealing with the fundamental problems of access and cost.

3. Prerequisites for Social Change and Fundamental Reform in Expanding Access

The next several diagrams start at a very different point based on the experience outlined in the Silow-Carroll paper that reported on the favorable experience of several states in changing the Terms of the Debate and making some progress in improving access to care. As suggested in that paper, states that have had some success in moving the debate forward, have started by channeling widespread Dissatisfaction with the Health Care System into creating a broad coalition of interests. As shown in Figure 5, the Breadth of the Coalition of Interests provides greater reach in terms of both Dissemination of Public Information and acquiring Funding for Researching the Problem and Policy Alternatives. This Funding can be used to create Research Capabilities that develop well thought out Policy Choices and better information for dissemination to the public. Public information feeds a greater Public Awareness of Need for Reform and Sense of Urgency that, in turn, increases the Willingness of Groups to Join and Remain Part of the Coalition. This reinforcing loop can be the start of a groundswell of support for more fundamental reform and Potential Support for New Legislation.

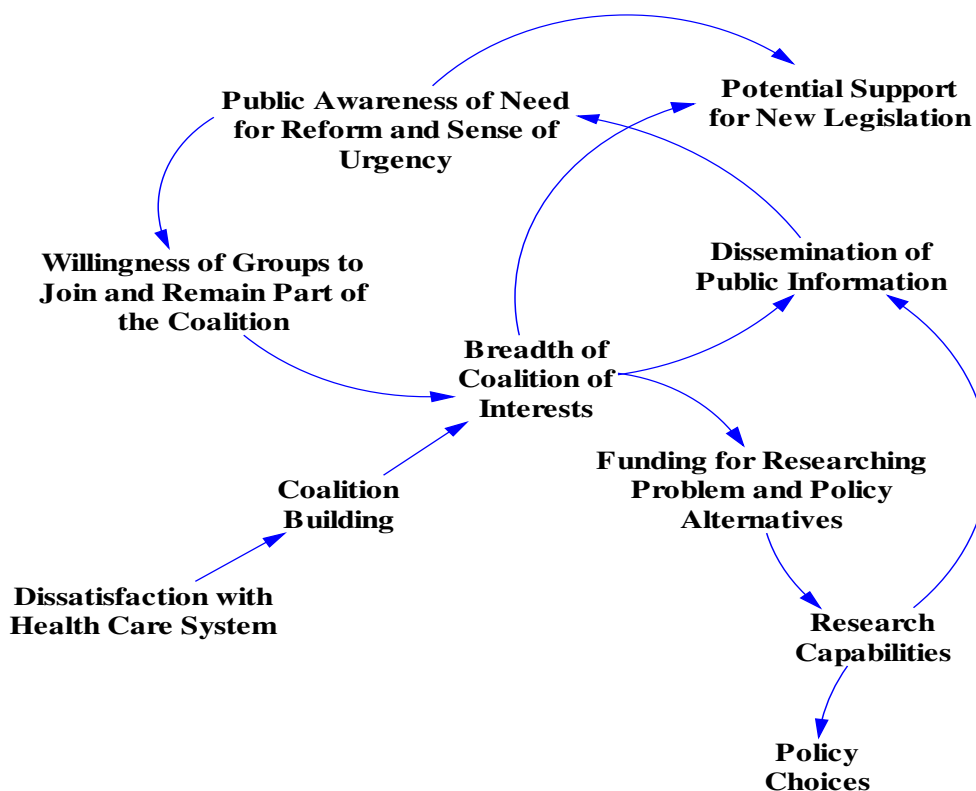


Figure 5: Coalition Building and Other Activities as Prerequisites for Any Reform Including Expansions of Access

The Policy Choices created by the early stage of this process lead to some critical decisions that will shape the reform and ultimately determine whether it will succeed. The choices, as shown in Figure 6, include the

- overall Magnitude of the Changes to be made (incremental vs. sweeping change)
- Numbers of People Covered and Benefits Provided to those receiving new or expanded insurance coverage under the proposed reform
- Degree of Provider Regulation entailed in the proposed reform and whether this represents a significant reduction in provider autonomy,
- Perceived Net Costs of Proposed Policies, and
- The fractions of those costs Borne by Taxpayers and Employers.

Perceived Net Costs of Proposed Policies, in turn, depends on the Numbers of People Covered and Benefits Provided, Cost Containment Provisions built into the proposed Legislation, and the Commitment to Reinvest Savings in improved access and services (vs. simply reducing the costs of those paying for care).

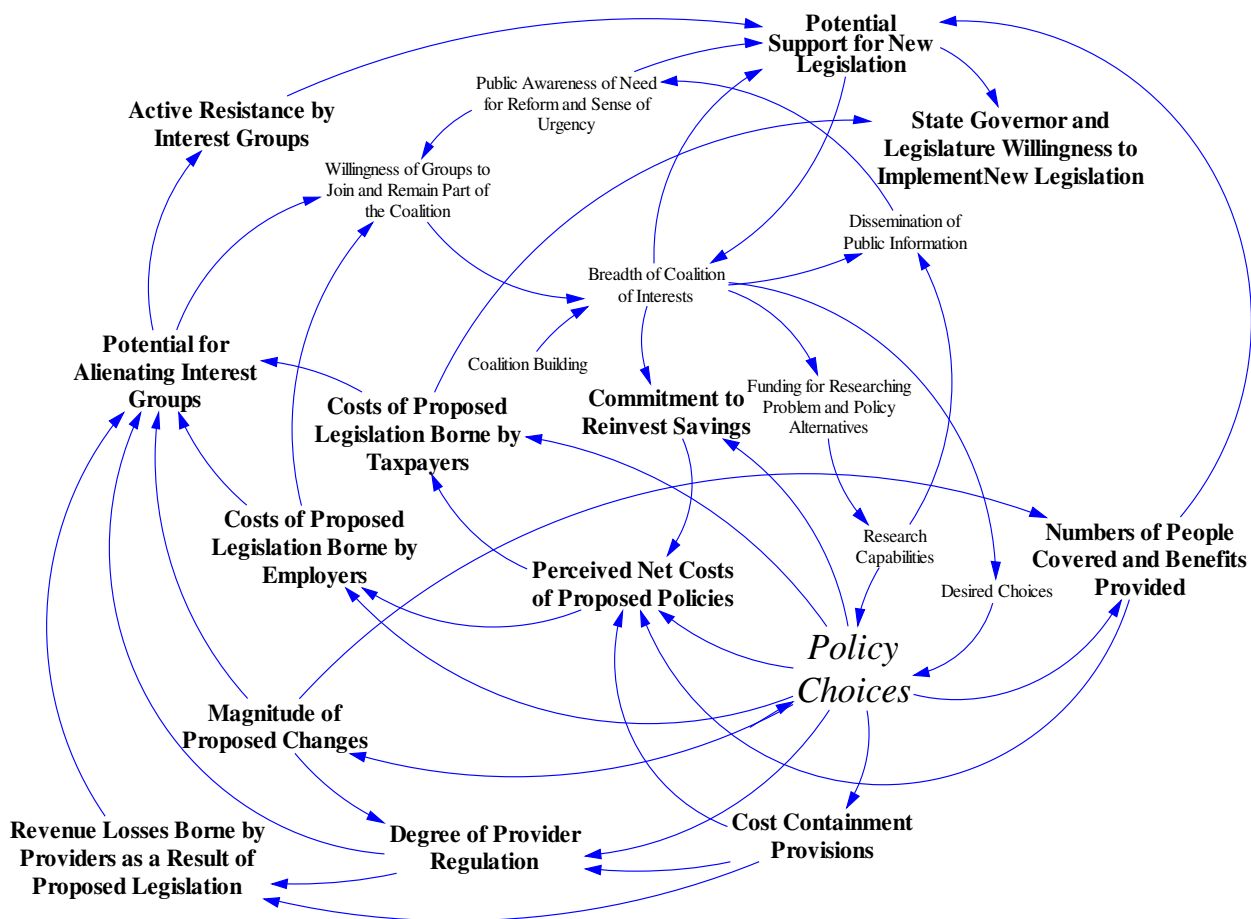


Figure 6: Policy Choices in Designing Expansions of Access and Potential Effects on Success

These choices all entail important tradeoffs. The further one goes in proposing changes the greater the potential impact on expanding access. Big changes mean potentially big impacts. However, each of the choices has the potential for alienating powerful groups that can undermine the work of the coalition and endanger the proposed legislation. Including too few people or benefits that are too modest may lose the support of important groups of health care activists and possibly some providers. On the other hand, including more people and greater benefits in efforts to expand access will increase the net cost. Similarly, reinvestment of savings can help to further expand access, but will increase the perceived net cost, at least in the short-term. Cost control measures proposed to help pay for expanded access can reduce net cost, but threaten providers by reducing both their autonomy and revenues. Having too much of any additional costs borne by employers or taxpayers will alienate those employers or the legislators who must answer to the taxpayers. Yet attempting too little will mean the loss of an opportunity and perhaps greater frustration with health reform because people see little being accomplished after a good deal of effort.

The challenge in choosing policy options is finding the right balance. What is possible will depend on the political climate and policy environment in the state, the level of trust among various parties, and history of past efforts at health reform. These characteristics determine the size of the window of opportunity for reform and the length of time it remains open. As in McDonough's example of the expansion of children's health coverage, a well-crafted reform will have enough in it for enough interest groups that it can be supported by a sufficiently broad coalition. It will not have features that threaten powerful groups that are willing to "go to the wall" to oppose it. A reform that is too big for the window of opportunity will set feedback effects in motion that undermine the coalition needed for support and make it difficult to pass as new legislation.

This exact struggle has been going on in Massachusetts with John McDonough at its center, as head of the activist organization Health Care for All (HCFA). An ambitious plan for expanding coverage for the uninsured championed by HCFA had the support of the leadership of one chamber of the legislature, but was deemed too aggressive by the leader of the other chamber and by the Governor who have both promoted more modest measures. A requirement in the HCFA measure that businesses provide insurance or pay into a state fund for this purpose (in order to pay for the broader expansion in coverage) brought strong opposition from the business community. A deadline by which the state must have a plan for the uninsured in place or lose Federal government funds threatened to close the window of opportunity.

Just when it looked as if a stalemate had been reached and no legislation would be passed, the key parties agreed on a set of compromises. These included subsidies for lower income people to help them purchase coverage and a reduced burden on businesses. With these compromises, the legislation received support from a substantial portion of the business community and was passed by the legislature. The actual impact of the legislation is currently unclear since it is in the midst of being implemented. The reduced financial burden on businesses that do not provide health insurance to their

employees may mean that there is too little money to make coverage affordable for lower income people.

4. Building on Reforms Toward More Fundamental Change in Expanding Access

Modest reforms in expanding access can only have modest or insignificant results if they are done incrementally and without a sense of where the real leverage lies in the system. At worst, they can add to the gridlock displayed in Figure 4. The key to fundamental change is to see reform as an ongoing process on which limited reforms and resulting successes create more opportunities that lead to more reform. Figure 7 shows how the reform process can link back to the loops in which expanded access can ultimately reduce costs and create the potential for further expansions in access. As highlighted in the blue loops in Figure 7, expansion in the Numbers of People Covered and Benefits Provided can help people get better access to primary care and to Disease and Risk Management. This can, in turn, reduce Illness Risk, Prevalence of Acute Illness, Acute Care Cases, Acute Care Utilization, and Total Costs. Savings From Implemented Legislation can be invested in coverage for greater numbers of people. At the same time, the Perceived Improvement in Value from Previous Legislation can create a climate in which it is easier to achieve further reforms and expansion of access.

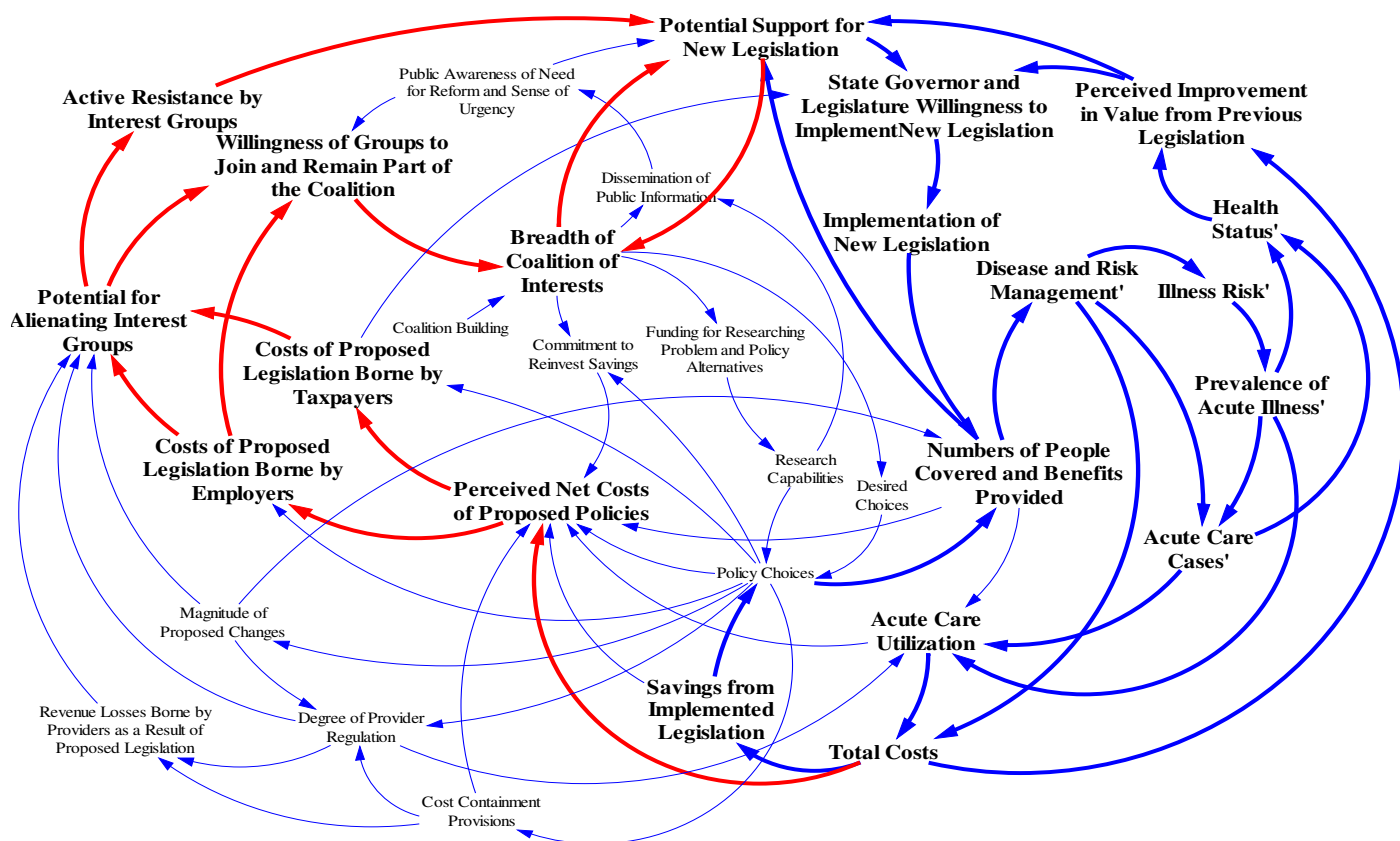


Figure 7: Potential Reinforcing Effects of Well-Designed Expansions of Access

To achieve these reinforcing effects however, three things are absolutely critical:

- Health reform must be viewed as an ongoing process rather than a “one-shot deal”,
- Savings created by giving people better access to care must be reinvested in further improvements in access, and
- Improved access must feature better primary care and Disease and Risk Management.

Simply giving some people better access to the same set of health care resources that are skewed toward high tech acute care will, instead, cause the loops highlighted in red in Figure 7 to dominate. Higher costs will make health care more burdensome for employers and taxpayers alike and undermine support for further reform. Further attempts to expand coverage and access will be resisted.

It’s possible to implement changes that can lead to the reinforcing feedback effects highlighted by the blue arrows in Figure 7. Some states such as Tennessee have very deliberately reserved savings from cost-containment measures to be invested in coverage expansions. As mentioned earlier, Utah focused improvements in access on primary care and management of chronic illness, relying on hospitals to continue absorbing the cost of inpatient care for people with acute complications. Hawaii was able to achieve almost universal access together with lower cost and better health outcomes.

If the reinforcing feedback effects highlighted by the blue arrows in Figure 7 can be achieved, there is also the potential for influencing the reinforcing loops shown in Figures 1 and 2. Shifting more care “upstream” as people get better access can eventually help to shift the balance of resources invested in the system and the political power that goes with it. Better disease and risk management can reduce the need for acute care resources and increase demand for services that help to reduce the prevalence of illness and its complications.

Conclusions and Future Work

The relationships presented in the last section draw on the positive experiences of a number of states in the US as they attempted to expand access to health care for people who were uninsured and lacked access. The relationships reflect the lessons of those states in terms of building coalitions of support and making policy choices at each point in time that fit the window of opportunity that had opened. The relationships also suggest the importance of regarding the expansion of access and any health reform as a strategic, ongoing process where leverage can potentially be achieved by giving people access to more cost-effective services rather than just making the same sort of inefficient care more available.

Future work with the relationships that were diagrammed in this paper can include further research on the experience of other states to enrich the picture they present of steps to effective reform and the expansion of access to care. Once a sufficiently complete

picture has emerged, the model can be quantified with data that reflects a cross-section of states and can be tailored to represent the starting conditions and health care environment in particular states. Simulations with the model can help to refine the reform strategies suggested in the paper and develop more fine-tuned approaches to expanding access to care. Lessons derived from these simulations at the state level may also offer insights for National health care reform in the US.

References

1. Hirsch, Gary with Jack Homer, Geoff McDonnell and Bobby Milstein “Achieving Health Care Reform in the United States: Toward a Whole-System Understanding”, *The 23rd International Conference of the System Dynamics Society*, July, 2005 Boston, Ma. USA
2. Hirsch, Gary, “Health Policy Special Interest Group Session Notes”, *The 23rd International Conference of the System Dynamics Society*, July, 2005 Boston, Ma. USA
3. Deborah Rogal and W. David Helms, “State Models: An Overview—Tracking States’ Efforts to Reform Their Health Systems”, *Health Affairs*, Summer 1993, 27-30
4. Deane Neubauer, “State Model: Hawaii—A Pioneer in Health System Reform”, *Health Affairs*, Summer 1993, 31-39
5. Gerard Anderson, Patrick Chaulk, and Elizabeth Fowler, “State Model: Maryland—A Regulatory Approach To Health System Reform”, *Health Affairs*, Summer 1993, 40-47
6. Howard M. Leichter , “State Model: Vermont--Health Care Reform In Vermont: A Work In Progress”, *Health Affairs*, Summer 1993, 71-81
7. Robert A. Crittenden, “State Model: Washington--Managed Competition And Premium Caps In Washington State”, *Health Affairs*, Summer 1993, 82-88
8. Trish Riley and Barbara Yondorff, “The Flood Tide Forum: Access for the Uninsured—Lessons from 25 Years of State Initiatives”, *National Academy for State Health Policy*, Portland, Maine, January, 2000
9. Sharon Silow-Carroll, Emily K. Waldman, Heather Sacks, and Jack A. Meyer, “Assessing State Strategies For Health Coverage Expansion: Profiles Of Arkansas, Michigan, New Mexico, New York, Utah, And Vermont”, *Economic and Social Research Institute Field Report*, Washington DC, February, 2003. (This report (#597) is available online only from The Commonwealth Fund’s website at www.cmwf.org.)

10. John McDonough, *Experiencing Politics: A Legislator's Stories of Government and Health Care*, Berkeley: University of California Press, 2000
11. Frank Baumgartener and Bryan Jones, *Agendas and Instability in American Politics*, Chicago: University of Chicago Press, 1993
12. John Kingdon, *Agendas Alternatives and Public Policies* (2nd Edition), New York: Harper Collins College, 1995
13. Gary B. Hirsch, *Societal Response to Social Problems*, MIT Master of Science Thesis, June, 1971
14. John Wennberg, Elliot Fisher, and Jonathan Skinner, "Geography and the Debate Over Medicare Reform", *Health Affairs Web Exclusive*, Feb. 13, 2002, at <http://content.healthaffairs.org/cgi/content/abstract/hlthaff.w2.96v1>

APPENDIX

A Consolidated Health Reform Model

The preceding pages have presented insights about how successful health reforms might be crafted that were drawn from the experiences of several states in the US and the Political Science literature. These insights were discussed as an incremental set of ideas on top of the health reform model presented at last year's ISDC. This section presents a combined health reform model that attempts to integrate the ideas presented so far with those from last year's paper. The model attempts to explain why the US has developed its' problems of rapidly rising cost along with eroding access to care and the forces that affect its ability to change those patterns.

Figure A1 shows the first set of feedback loops that make up the combined model, focusing on some of the forces that have driven up health care spending in the US. In loop R1, Investments in High Tech Health Care drive Demand for High Tech Care and High Tech Acute Care Utilization which, in turn, leads to more investment. This set of relationships has been confirmed by the work of John Wennberg who has demonstrated the link between the supply of high tech care and higher demand for that care¹⁴. The Effect of High Tech Care does help to reduce the number of Deaths due to acute illness and in loop R2, this keeps people alive longer and increases the number of Acute Cases and High Tech Acute Care Utilization.

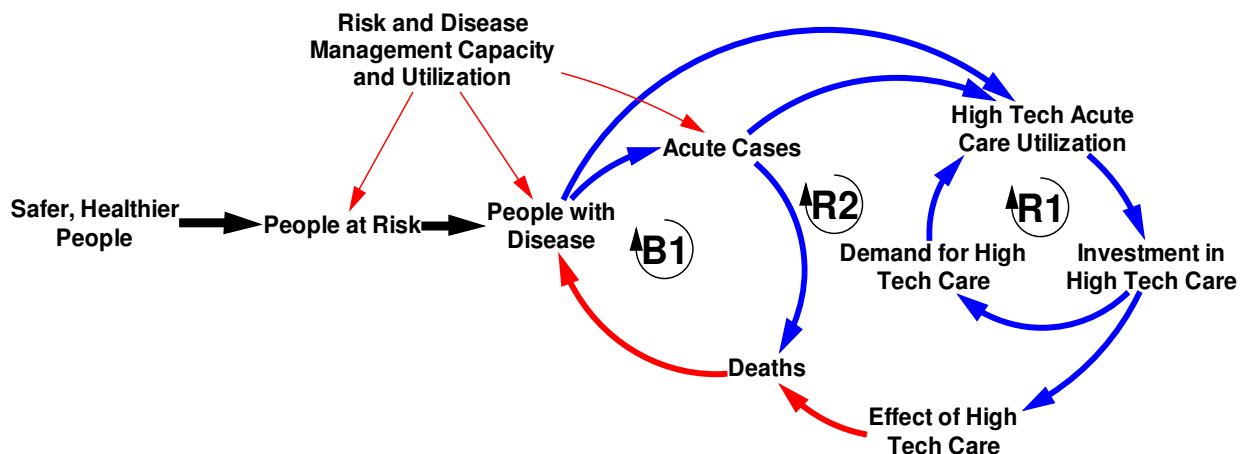


Figure A1: Expanding High Tech Health Care

Figure A2 shows some of the consequences of the higher cost produced by these reinforcing loops. There are naturally balancing processes (B3 and B4) that attempt to reduce the volume of care delivered. However, the effects of B4 on High Tech Acute Care Utilization are muted somewhat by the Political Influence of High Tech Care Providers and Suppliers that has grown with growing Investment in High Tech Care (R3). The result is to enable continued growth of Investment in High Tech Care and High Tech

Acute Care Utilization as well as increasing Political Influence of High Tech Care Providers and Suppliers. Unfortunately, providers of Risk and Disease Management Services may not have the same degree of financial power and political influence and these services may suffer as those who pay for care attempt to control costs. High costs will also cause some employers to cut back on coverage for their employees which leads to an increase in the Fraction of People Uninsured. Loops R4 and R5 amplify the effect of reduced Risk and Disease Management Capacity and Utilization and increasing Fraction of People Uninsured through missed opportunities to prevent and reduce the burden of illness leading, in turn, to more People with Disease and Acute Care Utilization and Costs.

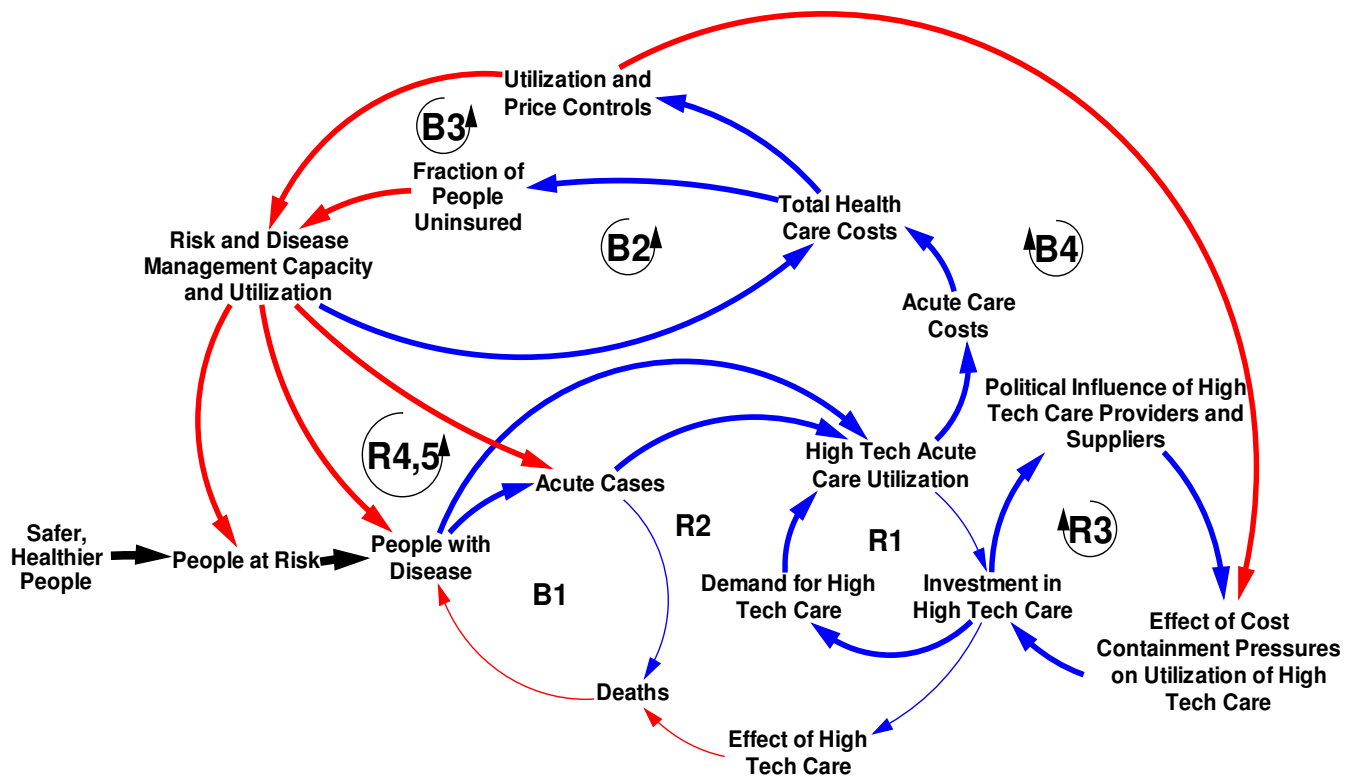


Figure A2: High Costs Resulting in Eroding Coverage and Reduced Risk and Disease Management

Figure A3 shows where the insights drawn from experiences of the states fit in. Pressure to Expand Coverage can result in proposals with different degrees of breadth in terms of the numbers of people covered and the depth of that coverage. Breadth of coverage, in turn, affects both the Extent of Coalitions in Support of Coverage Expansion and, because broader coverage is likely to cost more, Resistance to Proposed Expansion on the part of employers and others who will pay. That resistance will also be affected by the fraction of the additional costs proposed to be paid by each of the major stakeholders, another one of the Policy Choices. Striking the right balance between breadth of coverage and cost will enable Effective Coverage Expansion to Occur which will bring down the Fraction of People Uninsured. Trying to place too much of the burden on

powerful business or provider groups will prevent Effective Coverage Expansion, leave the Fraction of People Uninsured high, and make any future coverage expansions more expensive.

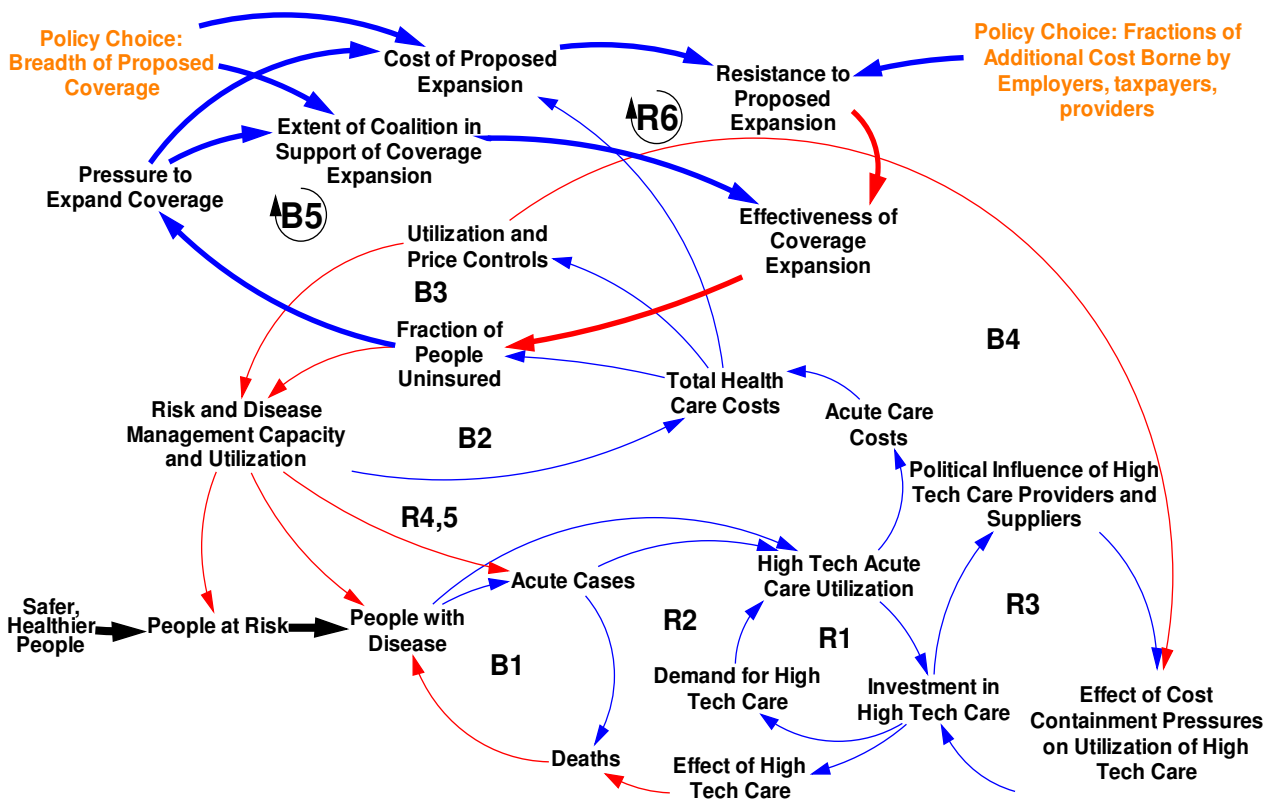


Figure A3: Forces Favoring and Resisting Coverage Expansion

Coverage expansions may be only temporary victories if higher costs due to broader coverage create resistance to further health reform. Figure 11 indicates that policies favoring Risk and Disease Management can help to create reinforcing feedback (R7) in which these services result in fewer People with Disease, fewer Acute Cases, and lower Acute Care Costs. Investing Savings in total Health Care costs in more Risk and Disease Management Capacity and Utilization can reinforce the reduction of the number of People with Disease and create additional savings.

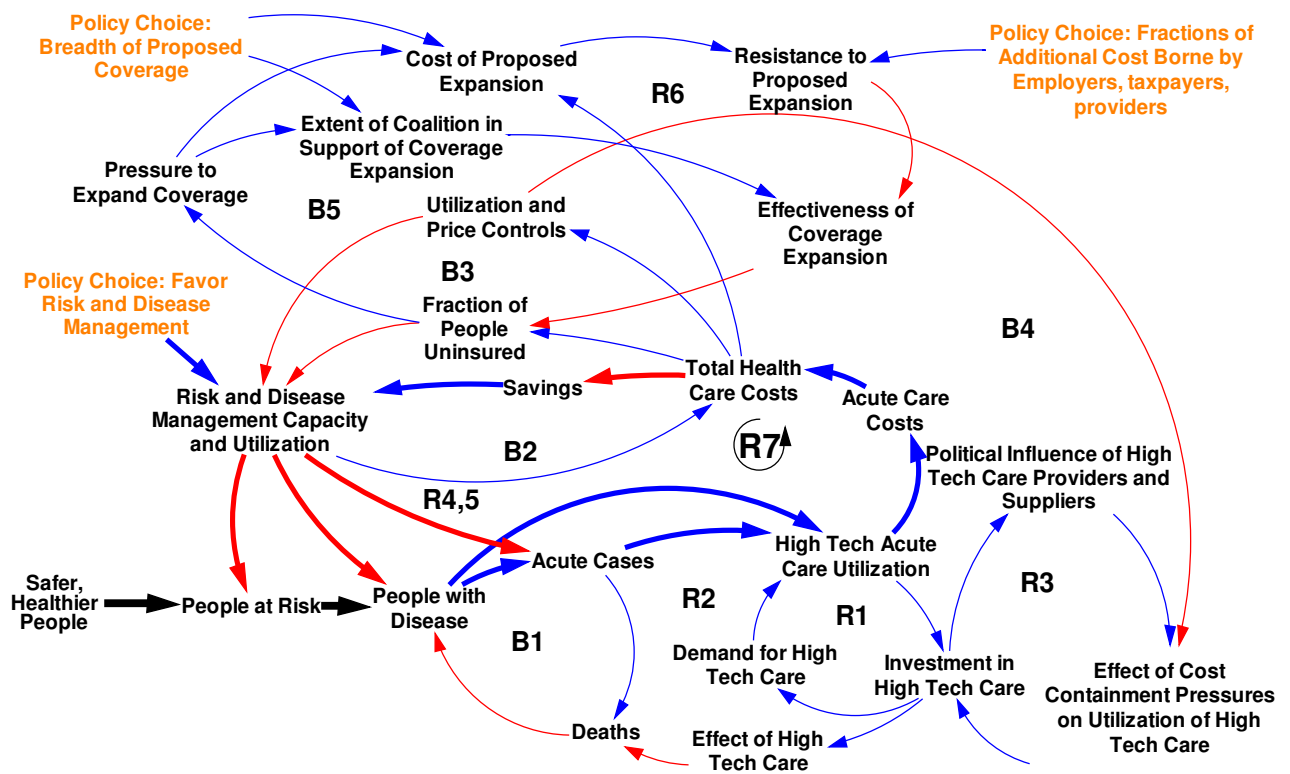


Figure A4: Reinforcing Effects of Favoring Risk and Disease Management Along with Coverage Expansion

The graphs shown in Figures A5 and A6 suggest four reference modes that might be displayed by such a model. One possibility is unrestrained growth (1) in costs as new technologies are continually developed and applied to an aging, unhealthy population. A more likely scenario (2) is one with sporadic attempts to control costs that result in stair-step growth as those efforts slow the rate of growth for a while every few years, but costs grow inexorably. Health reforms of various sorts may be successful in the short-term (3) as more people get access to care and costs due to medical neglect go down. However, if the care provided is still focused heavily on high tech acute care, growing costs will ultimately squeeze out coverage and preventive care for many people. A deliberate shift toward greater emphasis on management of health risks and chronic disease (4) is required to help offset the pressures of technology and an aging population. Similarly, the graphs in Figure A6 show a steady erosion of access as the Uninsured Fraction increases, even when health reform is successful in the short-term. Again, it would take a shift toward a greater emphasis on Risk and Disease management to help assure that gains in coverage of the uninsured will not be lost to rising costs.

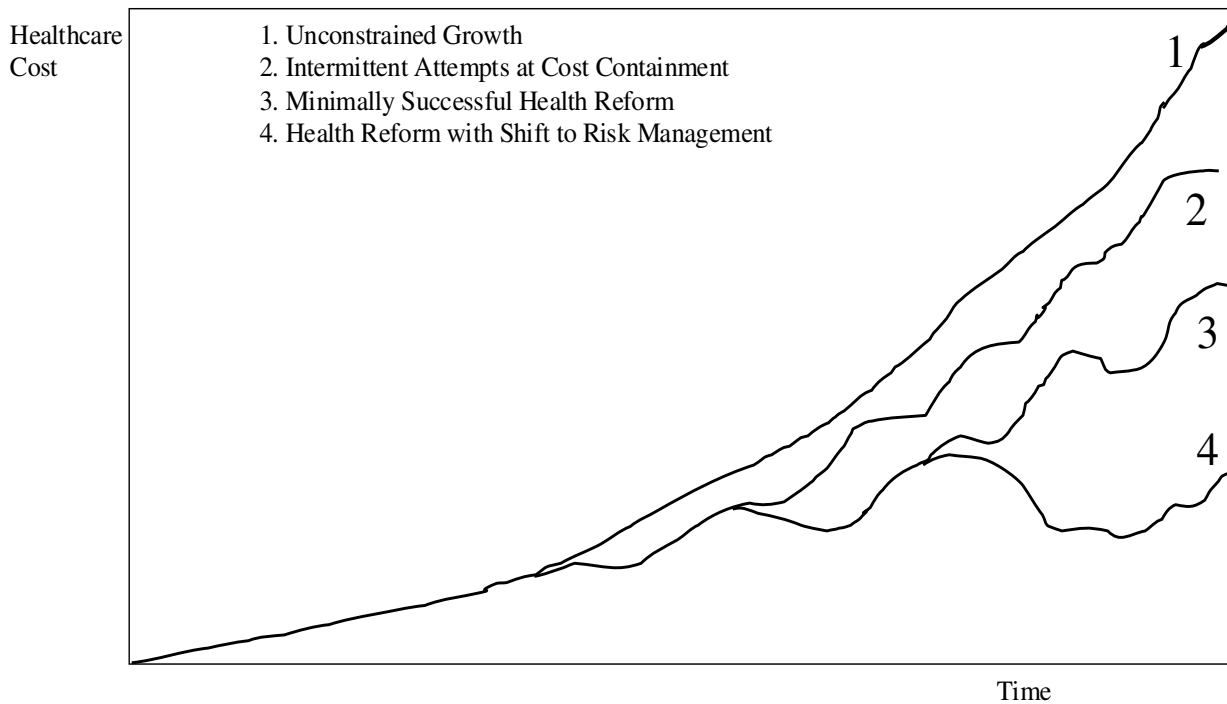


Figure A 5: Potential Reference Modes for Consolidated Health Reform Model--Cost

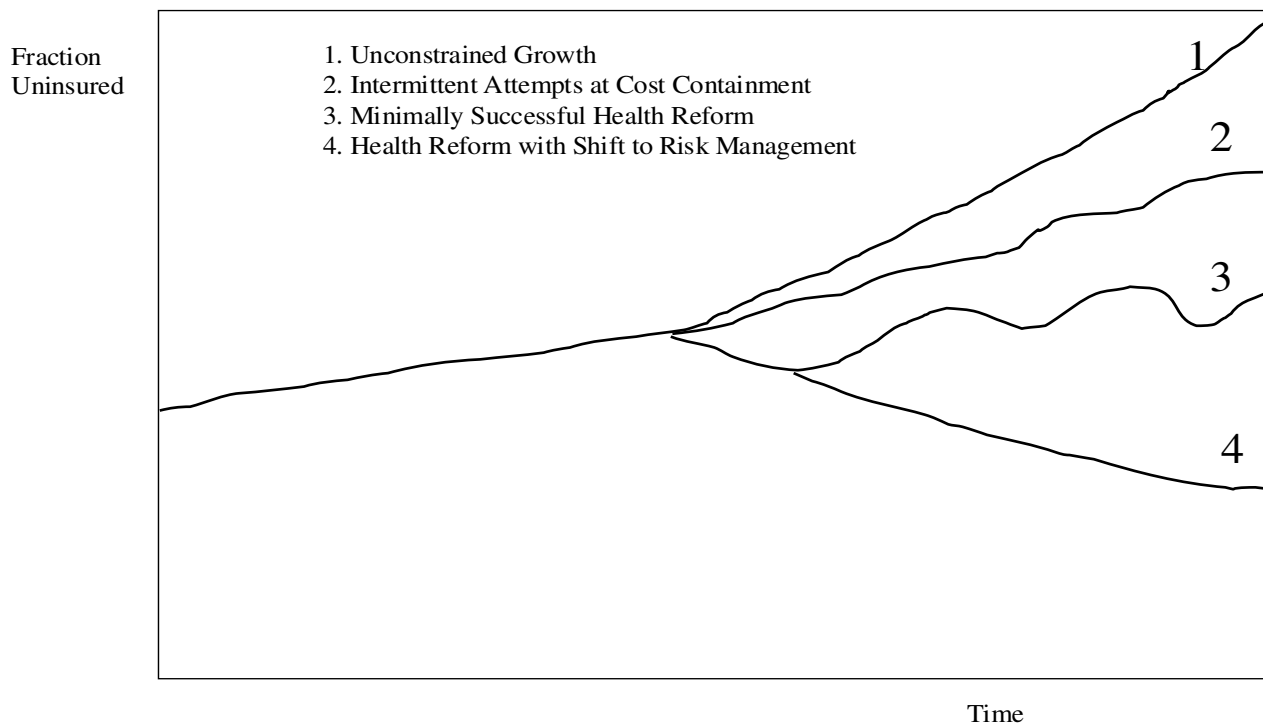


Figure A 6: Potential Reference Modes for Consolidated Health Reform Model—
 Fraction Uninsured