

Corporate and Statewide Perspectives on the Liability Insurance Crisis

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Abstract

The costs associated with liability insurance in the United States are rising dramatically and persistently. Escalating medical malpractice premiums threaten the scope and availability of health care in many states. Increasing costs for automobile insurance have led to public referenda to cap premiums, in turn driving insurers out of practice in some states. Runaway litigation costs are prompting calls for major revisions in liability statutes and the whole tort liability system.

Over the past two years, two independent system dynamics studies of the rising costs of liability insurance have been conducted. One study focused on forces driving rising settlement costs within a leading property and liability insurance provider. That study has resulted in a *learning laboratory* to help managers throughout the firm form a more systemic perspective on how established policies and practices within the firm might contribute to rising costs. The other study, done for the New York State Insurance Department, looked at the problem of medical malpractice liability from a statewide regulatory perspective. It was designed to provide help to the state legislature in setting the state's policy on rates over the next three years.

This paper assembles some of the work done in these two independent studies, reports on their findings, and discusses their policy implications. Of particular interest are implications of the *internal* and *external* system dynamics perspectives on the problem — where they agree, where they disagree, and where they help to illuminate each other.

The Problem

The costs associated with liability insurance are rising dramatically and persistently. From 1976 through 1985, for example, medical malpractice settlements in New York State grew about 22 percent per year, almost doubling every three years. The *average* malpractice settlement for cases originating in 1985 is now projected to be over \$1 million. A New York State doctor in 1985 paid on the average over \$38,000 in malpractice insurance premiums alone. Automobile premiums throughout the U.S. have increased 63 percent from 1982-1987. General liability policies for municipalities and product liability policies for corporations have also escalated in cost: from 1985 to 1987, some municipalities' premiums went up 100-to-200 percent, toy manufacturers's liability policies shot up 50-to-1000 percent, and chemical companies saw premiums rise 200-to-400 percent (Huber 1987). Moreover, escalating costs often have been accompanied by reductions in coverage.

The rising costs of liability insurance severely strain our social systems. Rapidly rising medical malpractice awards threaten the health care system, as doctors curtail their practices to cope with rising insurance premiums; they pressure legislators and public policy makers who try to hold down health care costs and doctors' premiums while maintaining the health care system; and they threaten the insurance industry, which must try to provide coverage and yet stay in business in an increasingly costly and regulated area of insurance. The strains in the automobile insurance system have already brought citizen response: in 1988, California voters passed the first state-wide referendum to cap automobile premiums. Other states are likely to follow suit, which may, in turn, lead to mass exodus of insurers from states where they feel that can no longer earn an adequate profit.

The Need for a Systemic Perspective

Property and liability insurance is a complex industry interrelating public, corporate and government interests. It is affected by changes in technology, personal habits, societal trends, and management practices within insurance companies. The purpose of the system is to manage risk equitably and efficiently. The present insurance system is failing to serve that purpose. Neither insurance customers, who are paying increasing premium costs, nor insurance companies, who are trying to achieve stability in an increasingly unstable industry, are seeing their interests met.

Moreover, current reactions to the crisis are likely to exacerbate rather than alleviate problems. Frustration leads actors in different parts of the system to strike out at problem symptoms, using any means at their disposal. Increasing political pressure from frustrated consumers is leading to legislated caps on premium growth, revisions of accounting practices, and redefinitions of liability limits. Financially pressed insurance companies are intensifying expense controls, boosting legal staffs, and increasing political lobbying efforts. But none of these reactions is likely to get at underlying causes of escalating settlement and litigation costs, which lie in deeply rooted societal trends and well-established management practices.

What is needed is examination and fundamental rethinking of underlying causes of the insurance crisis at the corporate, industry and societal levels. There is no one cause or set of causes of the present crisis. Undoubtedly, basic changes will be needed in corporate policies and practices, regulatory mechanisms, and personal and community behavior if the liability insurance system is to come back into balance. From one viewpoint, the

insurance industry can be thought of as sensing mechanism, an early warning system, for signaling societal trends that are out of balance and unsustainable. For example, rising automobile rates are driven by overcrowded highways, rising theft rates, and escalating costs of medical treatment. But, acknowledging the contribution of societal trends should not absolve insurers from a share of responsibility for escalating costs. There is evidence that many firms, and probably the industry as a whole, have focused on marketing and expense control over customer service and quality claims investigation and adjustment, thereby sewing the seeds for escalating settlement- and litigation costs.

What is needed first and foremost are ways to elevate the quality of debate, and to promote new shared understandings of underlying causes of the crisis. This will require tools for seeing beyond short-term events to understand the longer-term trends of increasing costs and growing instability. It will require committed groups of managers, regulators, and citizens who are willing to set aside pat answers and politically convenient solutions to probe more deeply for high leverage changes that will bring lasting improvement. It will require bold experiments to test out new insights and approaches.

The two projects described below provide starting points for the types of initiatives required. The common denominator of the projects was to begin the process of getting actors within the system to begin looking at the insurance crisis from a systems perspective. One project involved managers within a leading property and liability insurance company reflecting on long-established practices and policies within the firm. The other involved a state insurance department assessing alternative legislative initiatives. Both projects represent starting points that could lead to important insights and actions to reverse the insurance crisis.

Medical Malpractice Insurance in New York State

Background

The New York State study began in the fall of 1987 at the request of the State Insurance Department. The Department, headed by the state insurance commissioner appointed by the governor, has overall responsibility for the proper functioning of insurance programs operating in the state. Actuaries in the department check that rate increases requested by insurers are justified, and they monitor the financial health of insurance companies. Both of these duties are intended to serve the public interest: If rates are excessive then the public overpays, and if rates are too low and companies move toward insolvency then the public will not get what it has paid for – insured parties will not be covered and victims will not receive just compensation.

Legislation passed in 1985 regulating doctors' premiums for medical malpractice insurance was due to expire in April 1988. The Legislature asked the State Insurance Department to provide advice to avert an impending crisis. Before the 1985 legislation, premium increases on the order of 40-to-50 percent demanded by the insurance companies were so large that doctors threatened to cut back services. Some mothers-to-be found it almost impossible to find an obstetrician willing to care for them. The crisis was averted when the legislature passed a bill limiting increases in doctors' premiums to 14 percent the first year and 9 percent for each of the next two years. Recognizing that such low increases would not match the increasing costs of the insurance companies, the legislature

also decreed that no insurer would be declared insolvent and be barred from selling malpractice insurance in the state during these years. Indeed, such a provision was necessary: As shown in Figure 1, the 1986 assets of the five New York State malpractice insurers were estimated by the State Insurance Department to be 2 billion dollars shy of what they will eventually be required to pay in claims, and the situation has been getting steadily worse since.¹

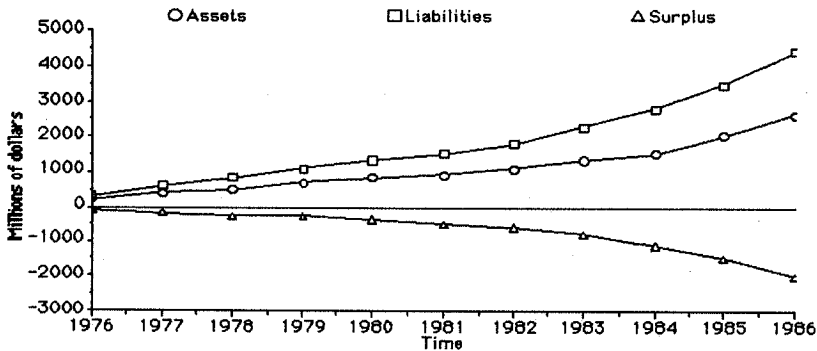


Figure 1: Aggregate assets, projected liabilities, and the surplus (assets minus liabilities) of the five medical malpractice insurers in New York State, 1976-1986. In 1986 the companies were statistically insolvent in an amount estimated to be about 2 billion dollars.

Modeling for Decision Support Conferences

Now that the three years were up, the legislature wanted a more permanent solution. The State Insurance Company contracted with members of the faculty of the Rockefeller College to run three decision conferences designed to develop consensus within the department about more than forty policy options they were considering. To provide the greatest decision support, the Rockefeller College team decided to include the development of a system dynamics model to project the implications of various policy options.

A model reference group was formed (Stenberg 1980) and met three times over a six-week period to discuss model structure and the focus of the modeling effort. In the most productive of these meetings, the roles of group facilitator and model-builder were separated, enabling the modeler to concentrate solely on gathering, interpreting, and reflecting back information for the model-building process.²

The decision conferences were designed to evaluate the maze of policy options the Department, its consultants, and the legislature wanted to consider. The conferences were facilitated by professionals in group process and decision support from the Rockefeller College, and were computer-aided by the use of system dynamics simulations and multiattribute utility analyses projected for all to see and reflect upon.³

¹ See NYSID (1988) for a more complete discussion of the history leading up to the study.

² For in-depth discussion of group processes in eliciting knowledge for model-building, see Andersen et al. (1989).

Because of the time constraints leading to the first decision conference at which the system dynamics model would be used, the model was developed to address a small subset of the policy options facing the State Insurance Department. The model (Schuman and Richardson 1987) consisted of about 300 active equations (22 levels) organized in the following sectors:

Doctor populations	Incidence of adverse effects (<i>frequency</i>)
Case flow	Settlement awards (<i>severity</i>)
Case liability	Settlement forecasts
Loss Projections	Insurer costs
Assets and payments	Setting premiums
Security fund	Fund use for claims

The initial list of policy options being considered emphasized financial solutions, so the model was more detailed on the financial side and had only a rudimentary treatment of the processes underlying the dramatic growth in settlement awards. It was, in fact, an outcome of the fall decision conferences that policies that ignore the growth in awards would work only in the short run, if they worked at all. Confidence in the model in the decision conferences was the result of confidence in the model reference group that contributed to its formulation, the close dynamic fit between the model and historical time series, and the fact that participants could give real-system explanations for model behavior in the policy simulations shown.

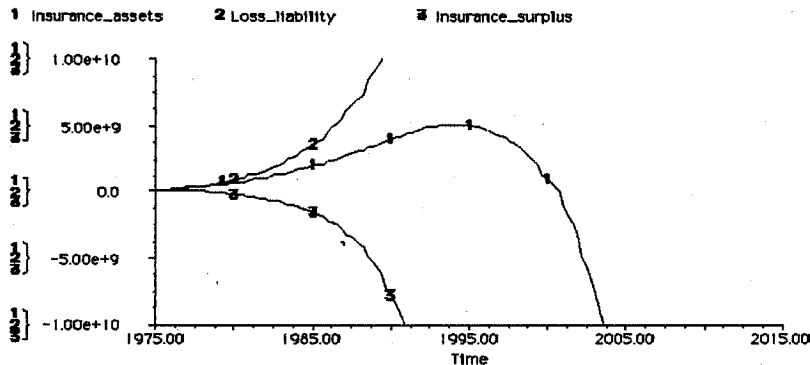


Figure 2: Base run of the New York State medical malpractice model: Assets and liabilities rise until the last half of the 1990s, when the greater growth rate of liabilities overwhelms the system and brings bankruptcy by 2003.

Important variables from the base run of the model are shown in Figures 2 and 3. The base run scenario reinforced perceptions within the State Insurance Department that although the five insurers currently have a large asset base the system is headed for default and bankruptcy within fifteen years. The ebb and flow of regulatory politics is

³ The multiattribute utility software used was Hi-View on the IBM PC (Phillips 1986; Humphreys & Wisuda 1987); STELLA (Richmond, Peterson, & Vescuso 1987) was used for the system dynamics modeling.

reflected in the oscillations in annual fractional premium increases granted, which closely match the real data. The model structure responsible for these oscillations was a simple two-level subsystem that accumulated discrepancies between tolerable and actual premium increases and generated increasing pressure for reduction in the maximum premium increase allowed. In responding to accumulated past discrepancies more than the current discrepancy, this political regulatory process appears to have the unstable character of the engineer's *integral* controller.

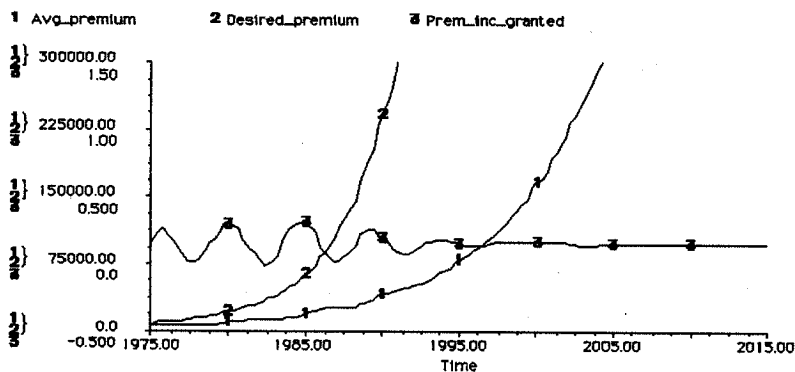


Figure 3: Base run: The political struggle in setting doctors' premiums is reflected in the ups and downs in fractional premium increases granted. The average premium that results is consistently too low to bring assets into balance with projected liabilities.

Medical Malpractice Policy Simulations

The most important simulation shown in the first decision conference, at least in terms of its effect on the thinking of the group, was a simulated test of switching the malpractice insurance system to a *pay-as-we-go* system. The idea is seductively attractive: In the current scheme, the system operates as a true insurance system, in which a stock of assets is required to cover the *stock* of projected liabilities. In a pay-as-we-go system, the stock of assets would only be required to cover the *flow* of payments over some number of years (as with social security in the United States). Switching to pay-as-we-go for the malpractice insurance system would immediately and dramatically drop the asset requirement for insurers and cure the insolvency problem. In addition it would allow doctors' premiums on the average to drop significantly. It looks like a win-win policy.

The simulation shown in Figures 4 and 5 altered that perception. In the simulation, beginning in 1988 the system switched to a policy of assets required to cover a year's flow of malpractice payments, and the requirements of insurance companies were given much greater weight in the premium setting process. The result is immediate solvency for insurers, which lasts beyond the year 2000 but turns into insolvency and then bankruptcy within five more years. Doctors' premiums actually decrease and stay below their 1987 levels until 1992. The system is still driven, however, by 20 percent annual growth in settlement awards. Trying to come closer to the premiums required to keep insurers solvent

results in faster premium growth: the average doctor premium actually exceeds the base run value by 1995. Pressures to hold down the increases accumulate and finally can not be ignored. The system collapses about the same time as it did in the base run.

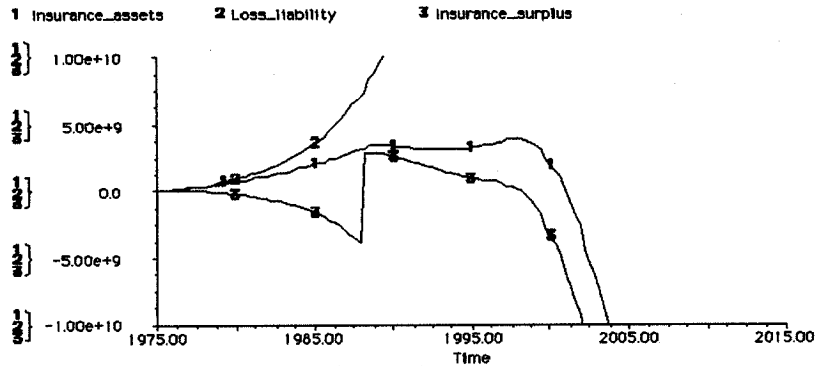


Figure 4: Pay-as-we-go policy simulation: The system becomes solvent and remains so until after the year 2000, but falls into default and bankruptcy shortly thereafter as settlement awards still outstrip doctors' premiums.

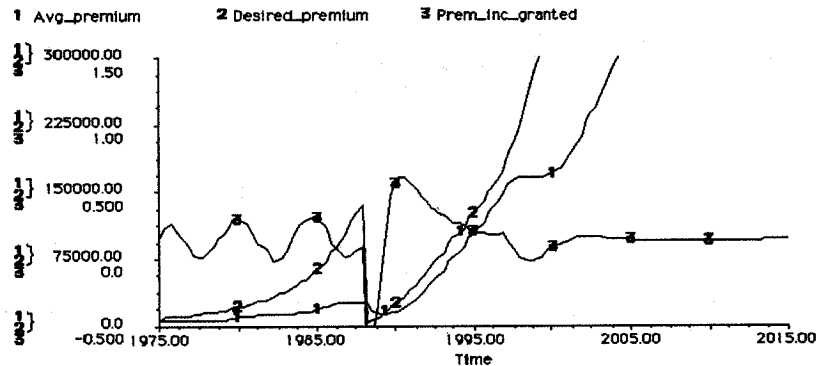


Figure 5: Pay-as-we-go simulation: Doctors' premiums are reduced but eventually exceed their base run value by 1995.

Seeing that the policy gains only about eight years of premium relief, and hearing the explanations of that result from the actuaries around the table at the decision conference, the state insurance commissioner ruled out the pay-as-we-go policy option. It was not discussed again and was dismissed in the policy recommendations finally sent on to the legislature (NYSID 1988, 163-171).

Evaluating Policy Options

To focus the decision group on the dynamics of their detailed policy options, participants were given graphs of the six time series shown in figures 2 and 3 from 1975 to 1986 and asked to complete them to 2015 for every policy option they considered. Those graphs and the increasingly sophisticated mental models of the participants formed the

basis for the detailed multiattribute utility analyses that structured the group's evaluation of policy options.

The group identified six constituencies and generated more than forty criteria those constituencies would use to evaluate policy options. The criteria, including a category of concerns assumed common to all constituencies, are shown in Table 1.

Most of the discussion in the decision conferences focused on generating policy options and evaluating them in detail on these criteria. The simulation model was revised as necessary during the conferences and used at the close of each conference to test the favorite policy mix.

Table 1: Criteria used in the decision conferences to evaluate medical malpractice policy options

<u>Common criteria</u>	<u>Hospitals</u>
Solvency	Financial
Short term	Cost
Long term	Reimbursement
Constitutionality	Reputation
Cost	Malpractice visibility
Severity	Competitive position
Frequency	Administrative burden
Predictability (stability)	Doctor selection
Speed	<u>Doctors</u>
Incidence	Professionalism
<u>Consumers as payers</u>	Aggressive defense
Cost	Discretion in defense
Long term	Discipline
Short term	Legal system
Care	Number of suits
Availability	Intrusion on time, life, practice
Quality	Amount of settlement
<u>Victims</u>	Financial
Damages	Independent fees
Pain and suffering	Adequate coverage
Economic damages	Premium cost
Quality of representation	Long term
Punishment	Short term
Access	<u>Property/casualty insurers</u>
<u>Lawyers</u>	Free enterprise
Merits (fairness, equity)	Defense control
Due process	Underwrite
Role of lawyers	Adequate premiums
Compensation (self)	

One month before their April 1988 report was due, the Insurance Department held a final decision conference to check their recommendations in a structured setting. The model was used to predict aggregate impacts of three policy sets, one developed by the Department and two others developed by outside consultants. The policy recommendations were extremely detailed and complex, and the model was able to represent them only approximately. The simulations suggested that only the Department's own proposals were adequate to prevent the insolvency from getting worse. The day-long discussions and policy evaluations, again primarily aided by multiattribute utility analyses, reinforced the

Department's thinking and convinced them to go ahead with their proposals to the Legislature.

The Department's subsequent report to the New York State Legislature was a book of more than 240 pages describing the problem and its history, why action was necessary as soon as possible, what options were available and what outcomes they were like to produce, and an outline of the processes the Department went through to produce its recommendations. The Department's preferred policy option package contained 29 detailed proposals in four categories: Ways to decrease malpractice, Spreading the costs of the system across a wider base, Tort changes, and Procedural changes. The proposals reflected the Department's thinking about the political acceptability of the total package as well as the efficacy of its elements.

Faced with time running out on the 1985 legislation, the complexity of the problem and the recommendations, the observation that none of the insurers are in danger of immediate bankruptcy, and the possibility that further research might suggest a better solution,⁴ the legislature passed continuing legislation that simply extended the 1985 law another three years. This potentially disappointing result was probably appropriate: much work remains to be done to develop deep understandings about the systemic causes of the problems and to identify focused, high-leverage policy options that should be adopted.

Claims Management in a Leading Property and Liability Insurer

Background

For the past two-and-a-half years, there has been an ongoing project to promote systems thinking in medium-size insurance firm. The company is one of the most profitable in the industry and has grown 50 percent faster than the industry average over the past 10 years. Yet, despite this success, management felt that there was room for fundamental improvements that would come from fostering a more systemic, long-term view of strategy and operations.

The first target for this improvement was the claims function, which has suffered chronic neglect throughout the insurance industry. Without doubt, effective management of the claims function is a cornerstone of a successful insurance firm. Between 60 percent and 70 percent of the total expenditures of a typical firm are in indemnity or settlement payments. Experienced claims adjusters argue that quality investigation and negotiation are essential to customer service and fair settlement awards. Effective claims adjusting is a high-skill profession that involves interpreting complex coverages, careful investigation of accidents, and thoughtful and considerate interactions with claimants who have suffered property loss and/or bodily injury.

Typical claims adjusting today is a far cry from this professional ideal. Where claims adjusting was once a respected profession, it now enjoys low status. Typically, claims adjusters are recent college graduates who stay on the job 1-to-2 years, earn salaries in the vicinity of \$25,000, and, if they have aspirations for a career in insurance, eagerly seek ways to shift their careers into marketing or underwriting. Today, a large majority of claims are not investigated promptly on site, but are dealt with through independent

⁴ A study of a malpractice system analogous to workmen's compensation is being carried out by the Kennedy School but was not completed in time for the 1988 legislation.

appraisers and "telephone adjusting." Experienced adjusters argue that this results neither in quality customer service nor in fair and just settlements.

A Systemic View of Claims Operation

A one-year study involving the Claims Vice President and his staff and two system dynamics consultants resulted in a systems theory of the interactions of workload management, capacity, quality, and costs that began to illuminate unintended consequences of established management practices (Senge 1987). Specifically, a series of models developed by the team suggested managers' predominant focus on controlling production measures created subtle pressures to compromise quality and capacity. Data for such production measures as the number of claims settled each month relative to new claims received (production ratio) and the size of the unsettled claims pending relative to new claims (pending ratio) are easy to collect and disseminate. Managers tend to focus on satisfying production indices at the expense of less readily measured standards for fair settlements, quality investigation, and customer service. It began to appear that there may be a long-term trend of underinvestment in skilled adjuster capacity (hiring, training, pay, retention), masked by eroding quality standards. The work was getting done, at a lower standard of quality, by an increasingly inexperienced and overstressed adjuster force.

The heart of this systems theory is an internal view of the different ways claims managers and adjuster supervisors dealt with time pressure. Time pressure arises from more time required than effective time available. Time pressure is a fact of life in all businesses. How managers respond to time pressure is the issue. In claims adjusting, we felt that there were three basic responses: build adjuster capacity (training, hiring), work harder, or work faster (take less time per claim).

Building adjuster capacity involves significant time delays in finding, hiring, and training new adjusters or in better training for existing adjusters. It also involves a significant financial commitment. Working harder (increasing work intensity) is a temporary relief valve, which has the advantage of having short delays but has the disadvantage of being difficult to sustain. If high levels of work intensity persist, the consequence will be increased turnover and reduced capacity. Working faster involves individual adjusters spending less time investigating and negotiating claims. Reports are taken over the phone. Settlements are agreed to more quickly. Less time is spent on record keeping.

The different possible responses to time pressure constitute an internal pressure control system generic to any service business (Figure 6). The system contains multiple balancing (negative) feedback processes for coping with time pressure. Coping with time pressure is essential to manage the work flow - in this case, to get claims settled. If effective time available remains below time required, the backlog of unfilled work continues to build. In claims adjusting, a rise in cases pending means more dissatisfied customers waiting longer to have their claims examined.

The team that developed the theory outlined in Figure 6 felt that there were tendencies within the claims organization to shift the burden for controlling time pressure to the "work faster" and "work harder" processes (B1 and B2). These tendencies came, they felt, from emphasis in the company on controlling the production measures. Given inevitable delays in building capacity, reliance develops on working harder and working

faster, the two feedback processes that provide the most rapid and low cost means of controlling production measures. In part, this is a classic management problem where performance measures that are highly tangible and readily measured, like pending ratio and production ratio, drive out softer performance measures like quality of investigation and negotiation.

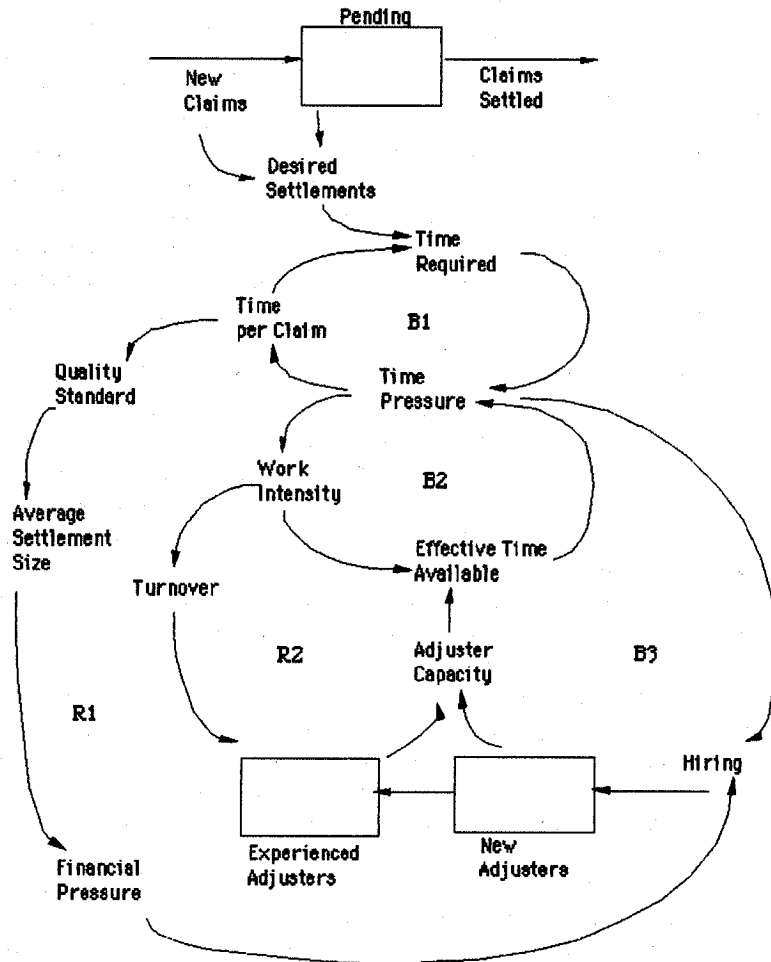


Figure 6: Generic feedback structure underlying a systemic view of the operation of the claims function of an insurance company.

The team also came to appreciate the costs of such tendencies over the long term. Expense-conscious managers could look at the production measures and argue that there was not a condition of undercapacity because the work was getting done. In other words, once the burden begins to shift to the "working faster" and "working harder" processes,

signals that adjuster capacity are inadequate (persisting time pressure and unmet production measures) disappear, and there is less apparent need to build capacity (B3). The team also realized that reinforcing (positive) feedback processes were coming into play to exacerbate the situation. Working faster reduces quality standards, which results in higher settlement size, increases financial pressure, and makes investing in adjuster capacity more difficult (R1). High work intensity also increases turnover, which means that, even with aggressive hiring, loss of experienced adjusters continually erodes effective adjuster capacity (R2).

Developing this theory of claims operations had profound effects on the management team. First, they came to recognize how counterproductive were many well established management policies and practices. The long-term effects of practices held in good stead were an underexperienced adjuster work force, operating under continual time pressure, producing low quality work, resulting in high settlement costs and continuing financial pressure. Second, they came to realize how difficult it would be to develop new, more effective policies. Near the end of this first year, the vice president highlighted all of the above points in his annual address to claims managers. Yet, there was little apparent change forthcoming. As he later put it, "When I talk to my managers I know that many of the actions they are taking will make matters worse rather than better, but I do not know how to help them see this for themselves."

The Claims Learning Laboratory

In response to the challenge of fostering a more systemic view of claims operations throughout the organization, the team developed the Claims Learning Laboratory (CLL), in operation for over a year. An initial three-day workshop, conducted by the managers in the original study team, has been attended by virtually all claims managers and a surprising number of managers from the other functions in the company.

The introductory CLL workshop is designed to help managers to reflect on their current policies and strategies and to discover some of the longer term consequences of these strategies, just as the top management team had done in the initial one-year study. The CLL begins with a series of conceptualization exercises that help managers see the feedback processes described above in the context of their own experience. They then conduct a series of simulation experiments using a decision-making game embodying these feedback processes. For example, in one exercise the managers, working in teams, manage a simulated claims office by focusing exclusively on controlling their production measures. Each month they must decide how many adjusters to hire and set targets for claims settled and average settlement size, decisions made by actual claims managers. For most, the result of this experiment is that they are able to keep production measures in line but settlement size steadily creeps upwards. By setting stringent goals for claims settled, managers playing the simulation end up creating forces that erode quality standards and elevate settlement size. In a second exercise, they endeavor to improve quality by setting targets to lower settlement size, which can only be accomplished by improving quality of investigation and negotiation. The result is that pending stocks get out of control, turnover rises precipitously and settlement sizes eventually go up, not down.

In effect, the claims managers discover that by following many of the same

strategies they follow in their claims offices they reproduce many of the problems of escalating costs and high turnover that they are struggling to solve. The goal of the workshop is not to place blame, but to enhance understanding – to facilitate reflection and learning, especially among groups of managers who have the capability to change operating policies.

The CLL introductory workshop has served to establish a common language for discussing issues from a systems perspective and to seed ideas for new policies and strategies. A significant percentage of managers in the firm are beginning to realize that considerable influence over problems of runaway settlement- and litigation costs may lie in their own hands. This represents a potentially significant shift in thinking. The next step is to help managers design specific changes in policy and structure intended to reverse long-standing forces toward eroding quality and rising costs.

Contrasting the Two Projects

Both of the project described above represent, to our minds, useful starting points. The Claims Learning Lab illustrates a process for helping groups of managers toward new, shared understandings of underlying causes of the insurance crisis. The Decision Support Conference illustrates a method for helping groups of policy makers sort through alternative policies. The two types of processes ought to be complementary, just as the two levels of analysis, micro and macro, should complement one another.

Several interesting points of contrast between the two are worth noting. First, the two models used were quite different. The model used in the decision conference was relatively complex, containing 22 level variables and over a hundred feedback loops. The model is fairly complex because it was necessary to *analyze a variety of policy initiatives* and to instill confidence that the model captured a range of variables deemed important by the members of the State Insurance Department. The model used in the CLL is quite a bit simpler, containing only about 5 key level variables and less than a dozen important feedback processes. The model used in the CLL is simple because the overall goal of the CLL is to *foster understanding* of key dynamics in claims in operations, especially dynamics pertaining to rising costs.

Not only is the CLL model simple, it can be grasped intuitively given a moderate time and opportunity for experimentation. Experience has shown that the most effective models to foster deep understanding are "generic structures," which managers can grasp intuitively in light of experiencing similar dynamics in many different settings. In the CLL, the core generic structure is a *shifting the burden* structure revolving around different responses to time pressure. Such structures arise whenever an emphasis on the symptoms of a problem can substitute for fundamental solutions, a condition human beings encounter in many different personal and organizational settings.

Laying behind these differing goals are different visions of the process of change. The Decision Conference focuses on informing a set of policy decisions under tight time constraints. By helping policy makers assess the consequences of alternative policies more thoroughly, better decisions will be made. The implicit assumption is that *within the range of existing decision alternatives under consideration* lie policies that can make a difference for the insurance crisis. Even if that assumption is invalid, the Decision Conference can help to avoid making very poor decisions, as was apparently the case in

rejecting the pay-as-we-go-system. However, it will not lead to major, lasting improvements in the insurance crisis.

By contrast, the Learning Laboratory does not start with a given set of policy alternatives. The underlying assumption is that whole new ways of thinking are needed before the managers can even begin to see clearly the range of choices they face. Many managers appear to leave the introductory CLL workshop considering policy alternatives that they had never thought of before or had thought of but considered impossible. As one recent participant said, "I now see that the reality we have is only one of several possible realities."

On the other hand, striving for such rethinking takes considerable time and commitment on the part of the managers. The introductory CLL lasts three full days. And, it was not designed to produce any decisions! By contrast, the three Decision Conferences together took five days, during which 40 policy alternatives were evaluated, and the Commissioner was present only once. In the present climate, it is unlikely the State Insurance Commissioner and his staff would participate in a three-day meeting solely for the purpose of advancing their understanding of the nature of the insurance crisis. Furthermore, the final decision rests with legislators, who would be even less approachable.

Lastly, there are significant differences in complexity and urgency in the two settings. The State Insurance Department was duty-bound to assess 40 policy alternatives within a very specific time frame so as to make recommendations to the legislature. Decisions had to be made. The problem was highly complex because of diverse constituencies. To the beleaguered public servant in the caldron of policy making, the option of getting together for three days to begin crafting a new way of looking at problems may seem a lovely but impossible luxury. If that is so, we should not hold the officials themselves at fault but question the whole process whereby officials are expected to foster public understanding and enlightened choice.

Future Directions

The two research projects will continue. The malpractice study will enter a phase of model reformulation and refinement, guided mainly by perceptions of the directions of state policy investigations and by the model's current shortcomings. The settlement side of the model, which is related to the focus of the Claims Learning Laboratory work, is treated very superficially in the New York State model. At the aggregate level of regulatory politics, no one is confident they know why settlement awards are growing at 20-to-25 percent per year. The rate persists independent of inflation, as if plaintiffs, claims officers, judges, and juries have some psychological expectations for the nominal growth in awards. The malpractice study will also try to move somewhat away from simply predicting the outcomes of policy options, more in the direction of trying to build understanding of the endogenous dynamics of the system. The pressure to produce policy analytic results will make this move difficult, but it appears essential if a repeat of the past legislative stop-gap measures are to be avoided.

The Claims Learning Laboratory will evolve in the direction of helping management teams design and experiment with new policies and organizational structures. The focus will remain on how the people that make up the organization can learn from such

experiments so that lasting organizational improvements can take place. It is clear that performance measures will be a central concern. How should traditional performance indices such as the production measures be used? What other measures can be formulated that will align incentives to improve quality, customer service, and productivity?

At some stage the most productive direction for both studies is to converge on common questions of endogenous structure and dynamics of the liability insurance system. The problem of escalating costs is larger than either study alone addresses. A number of reinforcing positive feedback processes complicate the problem. As premiums sky-rocket, for example, some of the insured will elect to go without insurance, and those that do are likely to be those least likely to need it. The result must be an increase in the frequency (probability) of claims among the remaining insured. Many hypothesize that psychological processes reinforce the growth in costs: as accident insurance premiums increase, for example, people may feel more inclined to inflate claims because they have paid so much for coverage. As doctors raise fees, in part to pay for rising insurance costs, patients may be more inclined to sue and to press for higher claims. Settlement awards may have a natural psychological "ratcheting mechanism" that lets costs move easily upward but tends to prevent them from adjusting downward. If internal corporate claims-settling functions have systemic weaknesses, as the M.I.T. study suggests, and courts have different and equally flawed processes, then jury awards and out-of-court settlements could ratchet upward as each uses the other as a base.

In addition there are some insidious compensating negative feedback loops that must be acknowledged and understood before any regulatory action can be successful. The New York State Insurance Department estimates, for example, that only about 10 percent of potential medical malpractice cases are actually reported. The remaining fraction of unreported cases constitute an enormous pool that can be tapped by lawyers whose incomes are threatened by any legislation intended to hold down costs.

Finally, there are two deep tendencies in the nature of an insurance system that will make solutions difficult: the widespread perception of liability awards as punishment, and the use of insurance to avoid financial punishment. To minimize risks in an increasingly litigious society people seek insurance against suits. Insurance fortunately or unfortunately allows some would-be punishment to be sidestepped and passed on to the wider insured population base. In pursuit of punishment, we commonly overlook who ultimately pays. The complimentary urges to punish and to avoid punishment appear capable of generating self-reinforcing growth in awards and costs. Moreover, it is conjectured that the size of a claim tends to rise with the insured's perceived ability to pay. To the extent that claims are not firmly anchored in real economic loss, and are free to rise as perceptions of the economic value of pain or suffering rise, costs can apparently rise without bound.

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