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The Evolving Practice of Medicine: A View from the Front Line

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TENTH ANNUAL HERBERT LOURIE MEMORIAL
SYMPOSIUM ON HEALTH POLICY

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Policy Brief

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Introduction

The health care system in the United States has been experiencing rapid change for decades. Beginning after World War II, the health care system grew and expanded. Change was driven by advances in technology, shifting demographics, and increases in the supply of physicians and hospitals, all fueled by supportive public policy and governmental funding.

While change continues today, new dynamics drive the direction of change. These new dynamics generally share a common theme of cost containment. The purchasing power of buyers, both industry and government, has overshadowed the historical power of providers. Managed care financing mechanisms have changed provider behavior by introduction of utilization management mechanisms and shifted incentives through assumption of insurance risk by providers. The role of patients has also changed as the consumer has become more knowledgeable and empowered. There are large and growing numbers of uninsured Americans. There is growing discontent around the quality of care being provided by the health care system.

All these factors, and more, drive today's changes in the organization, delivery, and financing of health care in the United States. However, the change we see in each community varies in terms of its pace and in how the parts of the health care delivery and financing system have organized and reorganized. There appears to be no clearly articulated public policy that is shaping the structure and function of the health care system of the future.

This symposium is intended to explore the issues behind the variability of the change observed in the health care system from community to community and particularly to place Syracuse, New York, in the context of these changes.

Background – Thomas H. Dennison, Ph.D.

The only constant in health care today is change. We are seeing change in the way health care is financed, the way it's organized, and the way it's delivered. While the change is being driven by factors that are present on a national level, how these changes are expressed in each community is moderated by local factors. The purpose of this symposium is to examine some of the national forces of change and put the changes we see in Syracuse into that national context.

Dr. Paul Ginsburg is particularly well suited to provide a national perspective. Besides a background in a variety of health policy roles, he is currently President of the Center for Studying Health Systems Change (the Center). The Center is conducting a community tracking study that gathers and analyzes data on changes in the organization, financing, and delivery of care in 60 communities across the country. In 12 of those communities, Syracuse included, these health system changes are being studied in great detail.

Following Dr. Ginsburg, three physicians from Syracuse talk about the changes they are seeing and experiencing in this community, and about how those changes affect the practice of medicine and the delivery of care locally.

Dr. David Murray, an orthopedic surgeon and professor at the State University of New York Health Sciences Center (SUNY HSC) at Syracuse, has held many leadership positions in the community over the past 40 years. Dr. Murray has recently been appointed Director of the Center for Human Performance at the Health Science Center, scheduled to open in 1999.

Dr. Robert Corwin is a primary care pediatrician by background and, among other roles, currently serves as the medical director for HealthBest, an IPA associated with the SUNY Health Sciences Center.

Dr. Patricia Franklin, a specialist in preventive medicine and an associate professor of medicine at the SUNY HSC at Syracuse, is Medical Director for Quality Management at University Hospital. Her role at University Hospital and her background in public health and management prepare her well to talk about the health systems changes we are seeing here in Syracuse.

The symposium begins with a discussion of the national issues and forces affecting health systems change and then moves into a discussion of how these issues have become localized in our community.

The National Perspective - Dr. Paul Ginsburg

The Center for Studying Health System Change was created to produce objective data and analysis about how the health system is changing and to assess what effects these changes have on patients, practitioners, and the general public. The staff of the Center consists of researchers who have backgrounds either in public policy or in the delivery of health care. The Center was conceived by and is funded through the Robert Wood Johnson Foundation. The Center issues many publications, disseminated monthly, and has a Web site, where you can read or download the publications and sign up for the mailing list <http://www.hschange. com>.

The focus of the Center is on change because, as you know, the health care system is going through a revolution. However, we have very limited information about the nature of these changes and we don't always know what they mean for the people who work in the health system or to those who use health services.

We know about mergers of hospitals, we know about the formation of integrated delivery systems (IDS) and we know about the creation of a myriad of new organizations intended to realign physicians, hospitals, and payors. But we often do not know what this means for consumers and patients, to their health, or the nation as a whole. Much of the information out there is distorted. Often it describes what we call the leading edge, or even the "bleeding" edge, places that are furthest along, the most innovative, doing the newest thing. And that's very useful, as long as we don't get the impression that that it's that way everywhere. In contrast, sometimes we just hear about the worst developments in the health care system, which seem to get the most attention in the media. Our efforts at the Center are designed to sample a complete range of experiences, to examine communities that are leaders and communities that are laggers. We want to develop a complete picture of how the health system is changing and how it might affect the people who come in contact with it.

The research conducted at the Center has a community focus. Recognizing that health care is delivered in communities and that the health care system varies a great deal from one community to another, most of our research is based on samples of communities rather than just a sample of the national population.

The research of the Center takes a longitudinal perspective. We collect data on a two-year cycle; we are currently in our second cycle. Data collection consists of surveys and site visits. We do large comprehensive surveys of families, physicians, and employers, which are fielded in 60 communities that were randomly selected to be representative of the nation.

In 12 of those communities, we gathered particularly large survey samples, large enough to be able to say something specific. In those same 12 communities, also selected in a random process, we've conducted site visits, interviewing leaders of key organizations involved in providing, purchasing, and consuming health care, such as large employers. In addition, we analyze some secondary data. The communities that we have studied in detail include: Seattle, Washington; Orange County, California; Phoenix, Arizona; Lansing, Michigan; Indianapolis, Indiana; Little Rock, Arkansas; Miami, Florida; Greenville, South Carolina; Cleveland, Ohio; Newark, New Jersey; and Boston, Massachusetts, as well as Syracuse, New York.

Global Forces Drive Local Change

We look at health care markets in terms of the external forces that initiate change and how the various health care organizations in the system respond to these forces. We have found, principally through our site visits, that the *forces from the outside driving health care markets are relatively uniform across markets.* One of the most important forces is the activity by purchasers. We've been told that purchasers have been behaving differently over the last five or six years, that they are much more concerned about keeping their costs down and much more willing to switch health plans to get a lower premium. They are moving their employees into managed care plans, either through incentives or more commonly by simply abandoning the traditional plan and offering only managed care.

In contrast to this, *the responses by health care organizations vary by community*. One particularly important variable is the history of the health care system in the community. For example, in a health care system with very powerful and large hospitals, those hospitals are likely to be at the center of the delivery and financing of health care, getting physicians to affiliate with them, contracting with health plans on a capitated basis, and taking responsibility for care management. Boston and Indianapolis are examples of that. In other communities, where large physician organizations have historically existed, physician organizations seem to play a large role in the organization of health care. Orange County, California, is an example of that.

The long-standing collaboration in Syracuse among hospitals and throughout the health care system seems to be a factor that, while not necessarily unique to Syracuse, is certainly distinctive and something you don't find in many other communities.

Many of the responses by health care organizations to these forces are focused on two things: bargaining power and control of delivery.

- We define *bargaining power* as activities undertaken by organizations either to increase the price they get for their services or reduce the price they pay for the things they buy.

- We define *control of delivery* as direct influence by organizations (health plans, group practice or hospital systems) on clinical practice patterns.

Private Purchasers

Private purchasers, firms that buy health insurance for their employees, have a great deal of influence. We found that the key seems to be leverage by individual purchasers, rather than coalitions, bargaining with health plans, switching health plans to get a lower premium. Purchasers are also very interested in quality, but the tools currently available to do anything significant about quality tend to be quite limited. Bargaining for better prices is the most significant behavior.

We have found that coalitions of large purchasers either do not exist or are not very important in most of the communities that we study. The purchasing coalitions in Minneapolis-St. Paul or the Bay area in

California seem to be more the exception than the rule. They are fairly unique in having a concentration of large employers based or headquartered in the community, which seems to encourage such coalitions. Sometimes coalitions just aren't worthwhile for large purchasers. We had an example in Little Rock, Arkansas, where a coalition of large purchasers formed in order to fight any willing provider legislation at the state level.[1] After they had been fairly successful in that fight, they explicitly discussed whether to do joint purchasing and decided not to. Each of the key members of the coalition felt that they had adequate clout with health plans and did not care to spend the necessary time negotiating with other purchasers.

Employee Contributions

Private purchasers are requiring higher employee contributions. This began during the early 1990s, when the employee portion of premiums increased substantially. This trend, however, appears to have ended in the mid-1990s and contributions have stabilized.

Employment-Based Coverage

The declining rates of employee enrollments in health coverage are a very worrisome trend. While there has been a slow increase in the percentage of employers who offer coverage to their workers, the percentage of employees who enroll has been declining at a very noticeable rate, to the point where it has overwhelmed the increase in employers offering coverage. The increased share of premiums contributed by employees is clearly a factor behind this decline in rates of enrollment. The percent of employers offering health insurance in Syracuse is 50 percent, exactly equal to the national average. There is also less retiree coverage today. A U.S. Department of Labor survey showed that the proportion of retirees aged 55 and over who get health insurance coverage from their last employer declined from 44 percent in 1988 to 34 percent in 1994.[2]

Recent federal policy clearly has not been supportive of the employment basis of health insurance. Proposals by the Federal Government to expand coverage center entirely around the expansion of public programs. The expansion of Medicaid eligibility and the enactment of the child health insurance program are public approaches to expanding coverage. And even though it didn't go anywhere, the President's proposal for early retirees to be able to buy into the

Medicare program was also a government approach. Even Republicans are talking about breaking the link between employment and health insurance coverage by enabling a worker whose employer doesn't offer health insurance to a get a tax subsidy when buying an individual policy—similar to that enjoyed by employees of companies that do provide coverage. Some would even go so far as allowing employees in a firm that offers health insurance to get a tax subsidy from the Federal government instead to purchase individual health insurance. The policy environment appears to be almost giving up on employment-based insurance and is looking more toward either expanding public programs or empowering individuals to purchase health insurance on their own.

Public Purchasers

There has been a very rapid expansion of managed care enrollments paid for by the public sector, particularly in the Medicaid program, but it has been proceeding more slowly in Syracuse than we predicted two years ago. There has been an actual decline in the number of Medicaid beneficiaries enrolled in managed care. The movement from a voluntary program to a mandatory managed care program in Medicaid has been delayed.

Public purchasers, particularly Medicare and Medicaid, will play a very important role in structuring markets for health insurance in two ways. First, they will set standards for consumer protection and quality. Second, they will develop mechanisms to set payment rates and will pioneer risk adjustment (how rates will vary according to the expected need for health services of those who enroll). In addition, public purchasing has been very oriented toward provider-sponsored plans and is deliberately giving plans sponsored by hospitals or physician organizations opportunities to participate in these public programs, even if they would not qualify to participate as commercial insurers.

Choice

Purchasers are placing a new emphasis on choice of providers. Beginning three years ago, purchasers started telling health plans they wanted broad networks of providers, along with out-of-network options. One result is that health maintenance organizations (HMOs) have actually lost market share in the past year nationally and point of

service (POS) plans and preferred practice organizations (PPOs) are growing rapidly.

Health plans have been very responsive to employers' requests for broad networks. This switch to broader networks is going to be very important to health plans. It is going to hurt the health plans in their market power. Their product will be less differentiated. If an employer requires that employees have access to the same physicians in all of the plans, it is much easier to compare them solely on the basis of price. It will be less disruptive to employees and quality issues won't be prominent if the same providers are in all the plans. Broader networks limit health plans' market power vis-à-vis providers, because, for example, a leading hospital in such a situation knows that no health plan can exclude it from its network because consumers are demanding extensive choice.

Care Management

Another problem for health plans related to this movement toward broad networks is in care management. In the past, many health plans were working toward concentrating their enrollees in a subset of physicians so that the plan would be proportionately more important to each of those physicians. Now, with the growth of broad networks, that strategy is not longer available. In some markets, physicians do not have enough patients enrolled in a particular plan to really pay attention to what the plan is trying to do to manage care.

Managed Care Plans

Local and regional health plans are very important in the communities we studied. In all of these markets, with only one telling exception, the most important health plans (those with the largest market share) were local or regional plans. Ironically, the one exception was Orange County, California, and this is because many of the national health plans started out as local or regional plans in Orange County. In Syracuse, we observed how local plans were forming regional partnerships. In particular we learned about Prepaid Health Plan's merger with Health Care Plan of Buffalo and Central New York's Blue Cross/Blue Shield's merger with both the Rochester plan and the Utica/Watertown plan.

In Syracuse, managed care penetration is, at 19 percent, very low, probably because PPOs were not attractive under the previous state hospital rate regulations. Likewise, Syracuse has a much lower rate of persons covered under gatekeeping arrangements than the national average, although it is still striking that in Syracuse as many as 35 percent of people who are insured have some gatekeeping requirements.

Health Insurance Premiums and the Underwriting Cycle

What is striking about health insurance premiums since 1992 is how slow the increases have been for underlying costs of health care (costs of the benefits that an insurance plan has to pay out or what insurers pay providers of care). The rate of increasing premiums has been even lower than the rate of underlying costs, partly because employers have been particularly aggressive in seeking out less expensive health insurance, partly a result of the nature of the underwriting cycle. In the mid-1990s health insurers were very profitable. Insurers were very aggressively entering new markets and cutting premiums to increase their market share or just to get their foot in the door. As a result, health insurance today is very unprofitable and we're seeing the other side of the underwriting cycle, where insurers are pulling out of markets. Insurers are pulling out of the Medicaid market, the Medicare market, and some commercial markets where they're not making as much money or where they are losing the most. It's likely that this stage of the underwriting cycle will produce an upturn in premiums next year.

Syracuse appears to be ahead of the nation in this regard; it has already seen substantially increased premiums for 1998. Nationally the increase was only 3.3 percent but it was much higher in Syracuse. The outlook for 1999, at least nationally, is higher premium increases, perhaps in the 5 to 8 percent range. But it is important to note that if that happens we cannot infer the cost trends have accelerated that much; rather, the underwriting cycle leads us to expect that insurance premiums over the next two years will be increasing more rapidly than the trend of underlying costs.

Hospitals and Physicians

Turning to the hospital and physician components of the health care system, we have seen steps toward two distinct models, a hospital-centered model and a physician-centered model.

Hospital-Centered Model

The hospital-centered model begins with mergers and alliances of hospitals. In Syracuse, there's just been an important merger of two of the four leading hospital systems. In the hospital-centered model, hospitals partner with physicians. They have to work out arrangements with physicians to try to influence how physicians practice so that the two of them together can accept risk and survive. Hospitals all over the country have acquired physician practices, and the reported results are almost uniform; from a financial perspective, it hasn't worked out as well as expected. Another course taken is the development of joint ventures with physicians. The principal type of joint venture is a physician hospital organization (PHO). A PHO is an entity designed to contract with health plans for hospital and physician services combined. In Syracuse, independent practice associations (IPAs), which really are physician-driven organizations, appear to be replacing physician hospital organizations. This could have important implications as to who's going to be organizing the delivery of care in this market in the future. A final aspect of the hospital-centered model is insurance risk. In the hospital-centered model, the hospital is anxious not to be paid fee-for-service by health plans but to be paid a per-member per-month rate and to be responsible for care management. Some hospitals have done this by sponsoring their own health plan, others by contracting with health plans on a global capitation basis.

Physician-Centered Model

In the physician-centered models, the key organization is usually either a multi-specialty group practice or an independent practice association. This organization contracts on a capitated basis with either health plans or, in some cases, directly with employers. There is evidence of physician-centered models proceeding much more slowly than expected because of the scarcity of capital and also, it seems, a lack of know-how about managing risk. Physician practice management companies, which have been around for some time and were originally established to help physicians bill or manage their practices better, have

attempted to fill this void by supplying capital to physician organizations and providing some risk management expertise. However, in the past year or so the major publicly traded physician practice management companies have all stumbled very badly. They've lost credibility with physicians, and it's really not clear whether this model will be rescued or whether some new organization or form will come along.

Independent practice associations have developed rapidly in Syracuse after a change in state regulation in 1996 allows IPAs to contract with more than one health care plan. A large proportion of physicians in the area belongs to IPAs, and physicians are beginning to assume risk at the IPA level. IPAs and related plan contracts have influenced referral patterns, but there is no consensus at this point as to whether the IPAs have increased physician market power. Approximately 40 percent of Syracuse physicians report that they received capitation payments for at least some of their patients, which is somewhat less than the national average, but still surprisingly high given the very limited role that managed care plays in this market.

The Syracuse market shows evidence both of consolidation of hospitals, with the potential to move in the direction of a hospital-based system, and the development of physician organizations that could move Syracuse toward more of a physician centered system.

Public and Physician Perspectives

We asked two questions of households on their perceptions of the health care system. First, we asked how satisfied they were with the health care they received in the last 12 months. Syracuse had the highest rate of satisfaction of any of the 12 sites, with 92 percent of families reporting that they were satisfied with care. Second, we asked whether people are concerned that their doctor might not refer them to a specialist when needed. Syracuse had a much lower rate of patients who expressed concern about not being referred to a specialist.

We also asked some questions of physicians about their ability to deliver quality care for all of their patients, and about their ability to get specialty care for their patients who needed it. We found a very strong correlation across sites: when the families were pleased about their care, the physicians tended to be pleased about their ability to deliver

care and access to specialty services. There was a striking correlation in the perception of both families and physicians.

Follow-up Issues

I would like to close with a series of questions about the Syracuse health care system that we would like to come back to a year from now to ask. What will be the impact of the independent practice associations? Will the market, becoming more competitive, overtake the long-established local history of collaboration? What will be the impact of hospital deregulation, and of new consumer protection regulations at the state level?

How will purchasers respond to premium increases? We have already learned that plans were developing more tightly managed and lower cost products to sell to employers. The big question is whether employers will change direction and go from advocating looser networks, less managed products, toward more tightly managed products in order to deal with these premium increases. How will all these changes affect the people who work in and use the local health care system?

The Local Perspective: Health Care Delivery in Syracuse, New York

Dr. David Murray

Never before in history have we been able to deliver such excellent medical care to so many people. But never before have physicians been so frustrated, so concerned, so paranoid, or so angry. It is the best of times and the worst of times.

Cost has been a major driver of change in the health care system nationally. These cost pressures are also being felt here in Syracuse. However, the particular characteristics of this local health care system moderate how physicians feel these pressures.

The presence of a medical school in Syracuse has meant more physicians, more ancillary providers and, as a result, more cost. It also means that Syracuse has been able to become, over the years, a referral

center. Patients come from all over Central New York for the specialty services available in this community.

While the resource base of professionals has grown in Syracuse, the hospital situation is somewhat different. The hospital system has not been overbuilt. This conservative supply of hospital beds has positioned Syracuse to successfully weather the reductions in admissions and length of stay. And the expanding role as a referral center has kept the hospitals fairly full. But all this drives costs.

There is no single dominant force that controls payment to physicians in Syracuse. There is a multiplicity of payors that affords physicians a certain amount of freedom. There is no dominant payor that can control physicians and practice patterns.

While Syracuse remains a good place to practice medicine, external forces, primarily cost, are driving structural change. Physicians are joining bigger and bigger groups. Some physicians are retiring earlier. However, these changes are only the beginning. There will be, at some point, a major overhaul of the medical care system. And when this happens, we will see even more change in the way health care is provided and financed.

Dr. Robert M. Corwin

The current environment of shrinking resources and cost containment has caused significant change in the practice of medicine here in Syracuse. The practice of medicine has shifted from a dyad of the patient and physician to a triad of those who deliver services, those who receive services, and those who pay for services. Formerly, a physician and patient together were a unit, a unit whose goal was to treat illness, heal the patient and maintain or, if possible, improve health. Now, the triad relationship includes an explicit dimension of cost containment as the payor becomes a more tangible presence in the relationship.

This shift to a triad also has also changed the way physicians are viewed and how they view themselves. When I entered medical school 34 years ago, I had the expectation that if I were successful and graduated, I would be entering a respected profession—some would have said a calling—a profession where each day physicians would face the challenges of caring for patients and families with competence

and compassion. In this new triad, physicians have become providers, not physicians. I'm no longer called a pediatrician, I'm called a PCP, a primary care provider.

The triad does not allow the shifting of costs to cover unreimbursed services that in the past were delivered pro bono. Access to care for the uninsured is diminished. And all sources of payment, public or private, must now contain not only credible benefits but also credible reimbursement**.**

Contracts have replaced covenants. I have become a subcontractor of various companies and agencies (the payors), whose loyalty to my patient and me is tenuous and often short-lived at best. When I first entered practice in the early 1970s, I began keeping records of the demographic information of my practice. One marker of the change in the practice of medicine is summed up by the following example. In pediatric practice there is always patient turnover, because even the most loyal patients grow up and graduate to big people doctors, and that developmental milestone was the leading cause of patients leaving the practice in the 1970s. The second most common was that the children moved out of town with their parents when the person who worked changed jobs. In the 1990s the leading and single most common reason for leaving my practice became a change in insurance coverage.

An example of structural change in our community was the creation of Affiliated Pediatric Practices of Central New York in 1998, a management services organization (MSO) whose 129 physician members include general pediatricians, pediatric medical specialists, and pediatric surgical specialists. This organization was created to deal with pediatric issues and provide services to pediatric practices in a coordinated and cost-effective manner, and to have a strong voice in shaping the health care delivery system as an advocate for patients. One of the principal goals of the organization is to educate consumers, employers, and insurers about pediatric patients and their needs in obtaining the highest quality health care.

This MSO, and other similar organizations (such as: IPAs, PHOs, POs and IDSs; see the glossary at the end) all hope to facilitate the delivery of quality services while controlling costs. The outcome, or survival, of

any of these organizations and their ultimate structure will be determined eventually over time.

Changes in the delivery system also have had effects on how medicine is practiced that extend beyond the role of the physician. The limited choice of providers inherent in managed care and the avoidance of risk by managed care plans pose problems, particularly for those with special health care needs. The search for evidence-based research to justify methods of treatment and the re-evaluation of technological advances to determine when their utilization has true value in terms of cost-effectiveness to define medical necessity are among these changes.

To evolve from the current system into one that combines the positive elements of the original dyad as well as the positive attributes of the newer system requires discipline. Everyone in the relationship must do a better job of listening to patients. We must make sure that everyone in the relationship has a voice. We must listen to physicians. We must strengthen peer review. And we need to listen to payors. Cost containment and the allocation of shrinking resources are facts of life. But we cannot forget that true value is based on quality and cost, not exclusively one or the other.

Dr. Patricia Franklin

The traditional health care quality framework of structure, process, and outcome offers a perspective that we can use to look at the changes in the health system in Syracuse. To start, let us review the definition of these three attributes of quality.

- *Structure* refers to the design of the system. It is measured by descriptive variables; it defines the type and number of the resources available in the health care system. A structural assessment of patient access, for example, would describe the number of providers accepting new patients. In itself, a measure of structure does not tell us how accessible these providers are; it only can tell us if an adequate or inadequate number of providers is present.

- The attribute of *process* refers to how and where health care is delivered. It addresses the steps involved in the process of care and frequently quantifies the amount of resources consumed. To continue with the access example, a study of process could measure such

dimensions as how long it takes to get an appointment with a provider or the length of time spent waiting for the results of a particular test.

- Finally, an *outcome* assessment of quality addresses what was actually achieved. Outcome is measured by the real change in the product. In the case of access, the ultimate health of the patient or the population is an example of outcome.

Structural Change

Much of the discussion around health system change is focused on the structural strategies (often organizational, operational and financial) designed by managers and policy makers to realign incentives in the health care system. Cost reduction, or improved efficiencies, are most commonly cited as the goal, the intended outcome, of these structural changes. There are, however, changes in the process of clinical care and health status outcomes that parallel and sometimes flow from these structural changes. The key question is, does structural change serve the health of the population?

A number of structural changes in the health care system are evident in Syracuse. Physician-hospital organizations, which contract to manage specific groups of patients often under a capitated arrangement, have been formed. Affiliations between hospitals have also developed and these affiliations support a wide range of activities from merged and integrated operations through joint purchasing of supplies. Finally, various models of relationships between physicians are evident which range from creation of multi-specialty group practices to networks of providers in independent practice associations or health maintenance organizations.

The structural change also involves entry of new participants. National insurers have moved into a market that was formerly dominated by locally owned and operated plans. And the locally managed HMOs and insurers are merging and affiliating with plans from other communities. Purchasers are also restructuring. A local business coalition has developed. While these structural changes are not as mature in Syracuse as in other markets in the United States, the presence is established and we can anticipate continued growth of such relationships.

Changes in Process

Even though we have had only modest structural changes in the health care system in Syracuse, we have seen some real change in the process of care. HMOs have demonstrated for decades that substantial cost savings are associated with the avoidance of hospitalization. Thus, it was to be expected that a decline in hospital admission rate would be among the first practice changes that we would see even here in Syracuse, which has historically had a relatively low hospital bed to population ratio and admission rates compared to other communities. Syracuse also shifted much of its elective hospital admissions to ambulatory care, especially for surgery before many other communities. Nevertheless, there has been a recent decline in the number of discharges: discharge rates have fallen from approximately 98 per 1,000 residents in 1992 to 91 per 1,000 residents in 1997. Syracuse now has empty hospital beds.

The second trend we would expect to see would be shorter hospital stays for those admitted. Despite a higher inpatient severity mix, because the straightforward care is now in the outpatient setting, patients in the hospital are discharged sooner. Elaborate pre-admission programs prepare patients for elective procedures and begin the patient education that previously occurred in the hospital. Home care, ambulatory monitoring and hospital case management programs have extended clinical care into the patients' home. Ambulatory care visits to physician offices or in-home services substitute for the long hospital stays. The result has been a decrease in length of stay by one and a half days over the past four years: a 17 percent decline among hospitalized surgery patients and 22 percent for medicine patients. And these data are for the sicker adult population only and do not include the even shorter stays for obstetrics or pediatrics.

Managed care incentives promote ambulatory care and may be associated with these trends. However, we must note that significant technological innovation has enabled these changes. In the case of ambulatory surgery, innovations such as short-acting anesthetics and enhanced pain management, both involving costly drugs, have enabled patients to safely and comfortably return home. Cost shifting has occurred to enable these ambulatory settings to substitute for inpatient care.

Changes in Outcome

As we shift our attention to outcomes, we can use the example of the public debate regarding length of stay for post-delivery mothers and newborns to illustrate the issue. Although our country still advocates hospital-centered births, we have seen a significant shift away from the sterile, anesthetized procedures of the 1950s to the home-like experience of birthing centers. We've seen shorter and shorter hospital stays for mothers and newborns, both as a response to women who wanted to return home more quickly and to payors who noted that admission for delivery constituted the highest volume of admissions. Although there was considerable debate about this process change, a strong public reaction arose from the fear that neonatal outcomes were being compromised because all babies were not receiving appropriate neonatal screening. There was growing concern that undetected conditions and congenital disease would compromise the health of a small but significant population of children.

Beyond this clinical concern, the debate shifted focus to guaranteeing women and newborns two days in the hospital, and the forum moved to the state legislature. But if we look carefully, we see that a hospital day was not what the doctor ordered! What the babies needed was access to uniform congenital screening and monitoring at 48 hours. If we had designed the structural change, the birthing center, and the process change, early discharge to home, from an outcomes perspective we would have re-framed the debate. The debate could have been around how we provide the necessary clinical monitoring in an ambulatory environment and around how we identify those newborns who are at risk of not receiving the care unless they remain in the hospital. Legislation would not have been necessary.

Clinicians, patients, and providers should evaluate future structural and patient care process changes from the perspective of outcome. We should ask how the health of the population will be affected using four outcome measures: cost and utilization, quality as measured through clinical care, quality as displayed in functional health status and well-being, and satisfaction and access.

Cost and Utilization . Societal expenditures for health care continue to climb. In contrast, reimbursement rates to hospitals and clinicians are declining. Capital costs for new high technology, ambulatory services,

and marketing are placing a strain on provider budgets. But demographics and an aging patient population with chronic conditions are working against us. It is not clear that the real cost borne by society, payors, employers, or patients will decline. We must wrestle with the defining the cost outcome. Do we really expect lower costs, or is our goal a continued slow rate of growth? Is what we really want improved value? If the latter is true, then we may continue to spend at current rates in health care, but we need evidence that the access and quality of care, both clinical and functional, is increasing. To this end, we must scrutinize the traditional medical outcomes of mortality and morbidity, or the undesirable complications of care. And we must measure patients' satisfaction and their ultimate health status.

Clinical Care. During the decline in the use of hospital days in the past five years, two traditional clinical outcomes, readmission rates and mortality, have not changed. A recent local study found that the number of patients readmitted to the hospital within seven days of discharge has not changed while the length of stay was reduced. Additionally, hospital mortality has been stable despite a rising inpatient severity mix. Population based mortality is also unchanged. Moreover, the severity adjusted mortality comparisons with other upstate New York communities show Onondaga County (in which Syracuse is located) having favorable rates.

Functional Health Status. We must learn how to measure the values of patients and not allow a clinical definition of quality to suffice. We must balance patient-recorded outcomes with cost and quality measures. A recent study used sophisticated physiological variables to describe severity of illness in an intensive care unit to predict mortality. When patients' self-recorded functional status (ability to walk and to do self-care) was included in the prediction model, they found that patient-recorded health status contributed significantly to predicting the outcome defined as mortality. In the era of chronic disease, the contribution of emotional status will become more valuable in describing outcomes. Another study showed that among elders one year following a hip fracture, non-depressed patients were five times more likely than depressed patients to reach the highest level of physical functioning. The role of prevention, psychosocial support and physical rehabilitation, all interventions to address the total health of the population, must be evaluated for their long-term health benefits. The use of a consistent cost benefit model to discipline ourselves to

advocate for only those structural and process health care changes that truly affect the functional health of our population might contribute significantly.

Satisfaction and Access. Finally, this outcome model asks that we measure and respond to patients' satisfaction and access to care. The most comprehensive system will fail if patients cannot enter, participate in and exit the process with ease, comfort and respect. The Center for Studying Health System Change cites a report that 33 percent of uninsured patients in Syracuse had difficulty obtaining care in 1996 and 1997.[3] This rate was more than twice that of privately insured Syracuse residents.

Conclusion

Despite the limited structural changes in Syracuse, there is evidence of significant process changes in the clinical care of patients with no undesirable changes in the clinical outcomes. I'm hopeful that we can move forward with a mandate for a broader definition of patients' health and well being. I'm hopeful that we will use a health definition that embraces medical excellence and moves beyond to advocate for emotional and functional health status. Physicians can work within the integrated systems to enhance continuity of care and consider the needs for prevention and ongoing disease management. As hospitals provide an ever-decreasing proportion of the acute care, patients can benefit from multi-disciplinary care coordinated in an ambulatory setting. We can look to our colleagues in hospice programs as one example, for a holistic, non-institutionally based model of care. The model need not be limited to the end of life. Purchasers and patients can demand humane and high tech care that improves longevity while enhancing quality of life and well being. Structural changes may modify our methods (the process), but the optimal health of the population will consistently remain our goal, the desired outcome.

Endnotes

1. Any-willing-provider (AWP) laws require managed care organizations (MCOs) to allow any provider willing to accept the terms of their contracts to participate in the managed care network. Aside from this general requirement, the laws differ in a variety of ways.
2. U.S. Department of Labor, Pension and Welfare Benefits Administration, *Retirement Benefits of American Workers: New Findings from the September 1994 Current Population Survey*. Washington, DC: Government Printing Office.
3. Cunningham, Peter J. and Peter Kemper. 1998. "Ability to Obtain Medical Care for the Uninsured: How Much Does It Vary across Communities?" *Journal of the American Medical Association* 280(10):294.

Glossary

HMO	Health Maintenance Organizations – A health care plan that provides a plan through which each member of an enrolled population is entitled to receive comprehensive health services in consideration for an advance or periodic charge.
POS	Point of Service – A mixed managed care plan that offers members a choice of providers either in or out of the plan. Out-of-plan services are often subject to some type of deductible or higher co-payment. Enrollees have the option of choosing out-of-plan services at any time.
PPO	Preferred Provider Organizations – A health care plan that reimburses its participating (preferred) providers according to a negotiated contract. Similar to a point of service, enrollees have the choice of in or out-of-plan providers, with out-of-plan services subjected to higher deductibles or co-payments.
PHO	Physician Hospital Organization – A term that refers to any of a number of arrangements between physicians and hospitals created in order to achieve some purpose.
IPA	Independent Practice Association - A not-for-profit corporation or a business

	corporation which contracts with physicians and other providers of medical or medically related services in order that it may then contract with health care plans to make the services or such providers available to the health care plan and its enrollees.
MSO	Management Services Organization – An organization created to provide administrative functions (i.e.: billing, clerical, reception, etc.) for participating members.
IDS	Integrated Delivery System – Arrangements through which the processes of producing, delivering and sometimes financing patient care are coordinated, linked or incorporated in a single organization
PO	Physician Organization - A term that refers to any of a number of arrangements between physicians created in order to achieve some purpose.