The Level of State Involvement in the Reconstruction of the Municipal Healthcare System

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Key Findings

- The State of Louisiana needs to rebuild its healthcare system but will have limited historical experience and applicable evidence on which to draw.
- Basic considerations in the design process include efficient use of resources, meeting needs of diverse stakeholders, meeting preparedness standards for natural disasters and bioterrorism, and reflecting important trends in care delivery.
- In governing the decision process, the State can rely on market forces, determine the structure of the system itself, or use a consensus process. Each option has advantages and disadvantages.
- Policy levers available to the State include Certificate of Need regulation, licensure, control of conversions and mergers, redesigning Medicaid reimbursement schedules, and financial incentives such as pay-for-performance.
- The State may wish to consider incorporating certain accepted best practices into the reconstruction process, including electronic medical records, centers of excellence, the Chronic Care model, and magnet hospitals.
- Potential funding sources for the reconstruction include dedicated disaster relief funds, existing federal programs, and the charitable organizations and foundations. Matching funding sources with projects will require reviewing the conditions for each program on a case-by-case basis.

Overview

Access to healthcare is a precondition for attracting residents back into the New Orleans area; thus reconstructing the municipal healthcare system will be one of the most important tasks of the post-Katrina efforts. The goal of reconstruction should obviously not be to re-create the pre-Katrina situation and its problems,1 but rather to build a healthcare system for the 21st century, one that can serve as a model for the nation and be a source of pride and ownership for the community. Emergency facilities have been set up and temporary structures are being erected to provide care for reconstruction workers and returning residents, but thoughtful planning will be required to transition to a permanent solution.

The decision process will have to strike a balance between several contradictory goals so trade-offs will be inevitable. The need for speedy decisions to move the reconstruction efforts along must be balanced with the need to plan carefully. Innovation should not be stifled, but overinvestment in expensive technologies and facilities should be avoided for cost containment reasons. Competition between providers should be encouraged to

1 Among those problems were the oversupply of hospital beds and the dominant role of the Medical Center of Louisiana at New Orleans (MCLNO) in the delivery of uncompensated care.
improve efficiency, but the social protection function of the healthcare system needs to be preserved. The latter is particularly important in Katrina’s aftermath.

To complicate matters, important decisions will have to be made based on limited data and evidence. Although it can be safely assumed that the future size and composition of New Orleans’ population will be different from the pre-Katrina state, the extent of the change will not be clear for some time. There is little past experience in rebuilding an entire healthcare system in an industrialized country; most of the evidence comes either from developing countries with very different characteristics, or from evaluations of marginal changes in industrialized countries.

**Approaches to the Reconstruction Effort**
We outline some design considerations for the State’s future healthcare system in order to provide a target for the reconstruction efforts. We then discuss options for governing the decision making process. We consider the pros and cons of different policy levers available to the State and summarize selected best practices that can inform operational decisions. We conclude by listing potential funding sources that are available to support the reconstruction efforts.

**Design Considerations for the Future Healthcare System**
It is difficult to make specific recommendations about the future structure of New Orleans’ healthcare system at this point in time. However, there are some basic considerations that should govern the decision process.

- **The system should make efficient use of scarce resources**
  Pre-Katrina New Orleans had an oversupply of hospital beds and specialty physicians.\(^2\) There is evidence that excess supply leads to higher and possibly inefficient utilization, a phenomenon called supplier-induced demand.\(^3\) In particular, fee-for-service payers like the Louisiana Medicaid system are vulnerable to supplier-induced demand, as additional services always generate additional revenues. Thus, the interaction of the payment system and the delivery system needs to be considered in the reconstruction process.

- **The system should meet the needs of a diverse population and serve the disadvantaged**
  New Orleans has historically had a very diverse population and a disproportionate share of indigent residents, whose main source for care used to be the Medical Center of Louisiana at New Orleans (MCLNO). Although uncompensated care and Medicaid-financed care might be spread more evenly in the future, any system must ensure that

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access to quality care is available to everyone. Such access will be a critical component in rebuilding the community.

- **The system should meet preparedness standards for natural disasters, disease outbreaks, and bioterrorism**

Clearly, New Orleans’ medical facilities were ill-prepared for a natural disaster and the future design of the healthcare system needs to improve readiness on this dimension. Besides improving the physical structures, the new system must incorporate better planning for medical care in disaster situations — for example, evacuation plans and state-wide coordination of roles and responsibilities. A community-wide electronic medical record could, as discussed below, play an important role in disaster preparedness. Not only would it keep medical records secure and accessible in any disaster, but it would also allow community monitoring for disease outbreaks and bioterrorism attacks as well as for epidemics of chronic disease, such as diabetes and obesity.

- **The system should reflect important secular trends in the delivery of care**

*The changing nature of inpatient care.* There is a general trend towards less invasive procedures. More and more procedures are performed endoscopically, which shortens recovery times and length of stay. Care that does not involve procedures tends to focus more on aggressive treatment of acute exacerbations, with the goal of discharging patients as soon as possible to avoid complications related to hospital care, such as hospital-acquired infections. Both trends lead to shorter but more intense hospital care, implying the need for fewer beds overall but more beds in intensive care, step-down units and post-surgical recovery units.

*An aging population with multiple comorbidities.* There is a trend towards a rising proportion of frail elderly patients with multiple comorbidities. It is particularly critical for those patients to minimize hospital stays. However, they may not be able to return to the community immediately. As a consequence, the demand for intermediary care services, such as post-acute care (PAC), skilled nursing facilities (SNF) units and post discharge treatment facilities, has increased and will continue to increase. There will also be the need for better care coordination for these patients—for example, through disease or care management.

*More center-based care.* Hospitals are traditionally organized around disciplines rather than conditions, which makes navigation for patients difficult. More recently, many hospitals integrate care for selected conditions into centers that provide both inpatient and outpatient services in various specialties. For example, a Breast Center would bring together gynecologists, general and plastic surgeons, oncologists, radiation oncologists, and support services in one unit instead of requiring patients to seek care in the various specialty departments.

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4 More detail on this issue can be found in brief #4 and brief #1.
5 More detail on physical plant requirements can be found in brief #2.
**Greater accountability.** Increasingly, unconditional trust in professional authority is being replaced by formal systems of accountability. Providers are required to collect and report data on their care internally for quality improvement project, to external self-regulatory institutions (e.g., JCAHO), and even to the public (e.g., HQA). Although this trend is widely regarded as positive, it imposes a substantial data collection burden. A modern healthcare system should thus facilitate data collection and reporting as well as provide decision support for acting on the available information. The cornerstone of efforts to facilitate data collection, reporting, and decision support is the electronic medical record.

**Governance of the Decision Process**
An important decision for the State is how to govern the process of deciding about the structure of the future healthcare system. The three options are (1) leave it to market forces to determine the outcomes, (2) have the State determine which structure the healthcare system will have and under which rules it will operate, and (3) use a consensus process, such as a planning commission, to reach decisions. While this question is too complicated to be covered comprehensively here, some advantages and disadvantages of the different options are as follows.

**Market-based decision making**

*Advantages:*
- There is no need to make complex decisions a priority
- It decreases the risk to State policymakers of getting very consequential decisions wrong
- The decision process would be detached from the political process
- Decisions can be made quickly

*Disadvantages:*
- At best, markets can produce efficient solutions, but they will not address issues such as social protection and equity
- Widespread market imperfections in healthcare—for example, the lack of perfect information on products and services, the dual role of physicians as both suppliers of care and agents for patients, and insurance that removes incentives for patients—make even an efficient solution unlikely⁶
- Committing to market-based decision making may be politically problematic after Katrina
- Strategic behavior of market participants may delay decisions

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⁶ For a detailed discussion, please see: Nichols LM et al. Are market forces strong enough to deliver efficient healthcare system? Confidence is waning. Health Affairs 2004; 23: 8-21; Newhouse JP. Why is there a quality chasm? Health Affairs 2002; 21: 13-25
Central planning

**Advantages:**
- The State retains full control over the decision process and can enforce policy goals explicitly
- Potential for balancing efficiency and social protection goals
- Decisions can be made quickly

**Disadvantages:**
- The lack of information and data on which to base planning decision implies a substantial risk that the State may make a wrong decision
- A centralized process may not be very responsive to stakeholders and could become politicized
- It may be difficult to change decisions once they have been made
- Evidence about the effectiveness of different policy levers in achieving certain goals is mixed, as outlined below
- Central planning tends to yield inefficient solutions

Consensus-based decision making

**Advantages:**
- Broad stakeholder involvement, even of groups that may lack the voice to influence political and market decisions, would ensure that diverse needs are being met
- Process would communicate a sense of community
- Responsibility for success and failure of decisions would be shared
- Possibility of balancing efficiency and social protection goals

**Disadvantages:**
- Decision process may be delayed or become stalled
- Accountability is diluted

Policy Levers Available to the State

Louisiana has a variety of policy levers that it can use to limit and shape the healthcare market as it rebuilds. Below we describe these levers, comment on their potential strengths and weaknesses, and describe the evidence about their effects.

Certificate of Need regulation

Most powerful among the tools for limiting the capacity of the rebuilt healthcare system is the certificate of need (CON) requirement, a regulation that prevents new investments in capacity unless need has been formally established. CON laws have long been used to prohibit the building of additional hospital capacity, but they have also been used to limit the purchase of expensive medical equipment, such as MRI units. The laws have been defended on the grounds that this form of planning could set industry capacity at an efficient level that minimizes average costs. “Free-entry,” on the other hand, could lead to the building of excess capacity, which can increase costs because it entails unnecessary
overhead or because the “extra” beds might be filled with patients who do not need to be hospitalized (supplier-induced demand).  

Strengths: 
CON laws are designed to prevent overbuilding, thereby containing costs, and they could be used to limit investments in hospital beds, outpatient clinics, or expensive medical technologies. They could promote desirable substitution of outpatient services for expensive inpatient care. By limiting the proliferation of low-volume centers, they could be used to encourage the development of high-volume centers, increase regionalization, and promote the development of centers of excellence, all of which could enhance efficiency and improve quality.

Weaknesses: 
Judging “need” correctly and setting hospital capacity at the efficient level are challenging even in steady-state economies. The additional uncertainty about short-term and long-term needs in New Orleans and the rest of Louisiana makes determining need even more difficult. Setting capacity too high would encourage the building of excess capacity. Setting hospital bed capacity too low could result in limiting access and undesirable substitution of outpatient care for appropriate hospitalizations, potentially compromising quality. Theory suggests that, given a binding capacity constraint, the industry would shift to other, perhaps less efficient, means of increasing volume—for example, housing pediatric patients in adult wards or increasing other inputs such as nursing services. Finally, by constraining entry, CON laws protect the market positions of existing hospitals, which may allow these institutions to increase their profits, limiting the cost savings induced by CON. Uncertainty in determining need may have led to declining use of CON laws over the past decade.

Evidence: 
The empirical evidence regarding CON laws is mixed. All of the evidence regarding CON effects has been developed through changes in CON laws (the implementation of new CON requirements and the removal of CON requirements) and none have been developed in the context of reconstructing an entire hospital market; thus the applicability of the evidence to the case of Katrina may be limited. Nevertheless, there is no evidence that CON laws have significantly reduced overall medical spending. They have been found to reduce capacity (slightly) as well as long-term acute care spending (modestly), but they have also been found to increase costs per inpatient day and per admission (not unexpectedly if the laws reduce the number of admissions). CON laws have not been found to affect access to care or the diffusion of hospital-based medical technologies.  

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There is some limited evidence that by promoting high-volume centers, CON laws may have some positive effect on quality of care.  

**Licensure**
Licensure is a common form of healthcare regulation. Every state licenses hospitals, clinics, and nursing homes, but licensure is typically limited to issues such as fire and safety.

**Strengths:**
Because licensure is used to affect processes, it could be part of a strategy for establishing interoperable electronic medical records across hospitals by making such participation a requirement for licensure. It could also be used to impose provisions for uncompensated care and safety net functions.

**Weaknesses:**
Licensure can only be used for narrowly targeted purposes. It would be difficult to use licensure to limit capacity.

**Evidence:**
Because licenses are rarely revoked, licensure has historically not been very influential.

**Hospital governance and market competition**
By exerting control over hospital mergers and the conversions of public hospitals to for-profit or not-for-profit hospitals, the State may be able to influence the shape of the developing hospital marketplace. This is particularly relevant with respect to the reshaping and rebuilding of the Medical Center of Louisiana at New Orleans (MCLNO), which is addressed in detail in Policy Issue #4. Title 51 of the Louisiana revised Statutes (Section 121) gives the State the authority to prevent mergers and acquisitions that substantially lessen competition.

**Strength:**
This tool may be useful in preventing the development of highly concentrated hospital systems that may reduce competition without promoting the development of high-volume centers of excellence.

**Weakness:**
Antitrust provisions are only useful as a reactive measure, not as a tool for redesigning the marketplace.

**Evidence:**
Empirical evidence suggests that consolidation of hospitals into systems does increase market power but does not improve quality of care or hospital efficiency.  

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Medicaid reimbursement
Although Medicaid has not been a large source of funds for the hospital market overall, it has been an important and influential source of funds for the MCLNO. Payment systems and the incentives they generate play an important role in determining the structures of delivery systems. To date in Louisiana, Medicaid reimbursements for inpatient stays have been made on a fee-for-service basis, providing no cost-reducing incentives.

Strengths:
Redesigning Medicaid reimbursement schedules and payment rules for inpatient stays (e.g. managed care, capitation, and prospective payment system) could significantly affect the use of hospital resources, improving the efficiency of hospital use, and generating implications for rebuilding capacity. Because Medicaid care and uncompensated care are disproportionately provided at MCLNO, Medicaid payment designs that encourage efficiencies could have substantial effects on the delivery of care at MCLNO.

Weaknesses:
Payment systems, such as managed care, that encourage efficiency generate concerns about limiting access and quality.

Evidence:
Evidence suggests that private managed care and Medicaid managed care reduced hospital admissions and hospital costs.13 14

Financial incentives
As a way to encourage (rather than require) development of desirable characteristics in hospitals and hospital markets, financial incentives (subsidized loans, grants and tax credits) may offer a suitable alternative to regulation. Pay-for-performance incentives, in which providers receive additional funds if they achieve specified quality goals, could also be used to encourage continuous quality improvement and reward centers of excellence. Pay-for-performance programs would have to be carefully coordinated with the State’s Quality Improvement Organization.

Strengths:

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Subsidized loans, grants, and tax credits could be used broadly to encourage the development of coordinated electronic medical records, or targeted specifically to develop centers of excellence. For example, tax credits have been proposed to expand development of new vaccines.\textsuperscript{15} Pay-for-performance would encourage centers of excellence by providing additional funds to high-quality providers.

\textbf{Weaknesses:}  
Because of the relatively small role of for-profit hospitals and the tax status of public hospitals and not-for-profit hospitals, tax credits may be of limited use. Quality indicators upon which pay-for-performance is based may be too narrowly defined to raise quality broadly throughout healthcare systems.

\textbf{Evidence:}  
Because pay-for-performance is a relatively new concept, there is little evidence on which to judge its effectiveness and efficiency. One concern is that pay-for-performance may produce modest gains in quality at a relatively high cost, and that it may simply reward providers with higher baseline quality.\textsuperscript{16}

\textbf{Accepted Best Practices}  
A number of health care system characteristics have been shown to promote effectiveness and efficiency of care and could be considered as elements to be incorporated in the reconstruction process.

- \textbf{Electronic Medical Records}

It is widely believed that broad adoption of Electronic Medical Records (EMR) can lead to cost reductions and better quality of care, and initial studies confirm this expectation. For example, a recent RAND simulation exercise predicted that widespread EMR adoption could yield savings of $142-371 billion over 15 years\textsuperscript{17}. Intermountain Health Care in Salt Lake City, Utah, one of the pioneers in EMR adoption, was able to reap cost savings of about $20.7 million in one year, while reducing one-year mortality and hospital readmission rates for congestive heart failure from 23 to 18 percent and 47 to 39 percent, respectively.\textsuperscript{18} In addition, EMRs facilitate surveillance for disease outbreaks and bioterrorism and allow secure data storage and retrieval in the case of disasters\textsuperscript{19}. On


\textsuperscript{19} A large part of the paper medical records for New Orleans facilities are irreversibly lost. Bower A. Katrina's Lingering Medical Nightmare. Chronically ill storm victims struggle to piece together medical
the basis of this evidence, President Bush has recently called for widespread adoption of EMRs. Key to success of this technology will be interoperability, i.e., adoption of common standards for data storage and interchange to allow participants to share information.  

**Centers of Excellence**

An increasing body of evidence suggests that high hospital volumes for high-cost, high-risk procedures are associated with better outcomes. 21 This has been shown for various procedures, such as coronary artery bypass grafting, pediatric heart surgery, pancreatic resection and carotid endarterectomy. 22 More recently, studies have also shown a negative volume-outcomes relationship for the treatment of medical conditions. 23 Although some experts challenge the causal relationship and argue that the association is rather an effect of selective referral to better providers, 24 the intuitive plausibility of the results has led many to argue for a concentration of such procedures in so-called Centers of Excellence. 25 A similar issue is the regionalization of trauma care, i.e., statewide planning and coordinating of a trauma system. For example, a national evaluation has shown that a state trauma system is associated with a reduction in injury-related deaths. 26

**The Chronic Care Model**

Although the Chronic Care Model does not offer specific guidance about how to structure a healthcare system, it does provide a framework incorporating the essential elements of a healthcare system that encourage high-quality chronic disease care. 27 It identifies the components at the community and the healthcare system level that are required for patients to be informed and activated and for providers to be prepared and proactive. A recent RAND evaluation found that the Chronic Care Model can serve as a basis for.

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25 For example, Topol EJ and Kereiakes DJ. Regionalization of Care for Acute Ischemic Heart Disease. A Call for Specialized Centers. Circulation 2003; 107(11): 1463-1466
27 The Chronic Care Model was originally developed by Ed Wagner at the MacColl Institute for Healthcare Innovation. For background information and a full description of the model, please see: [http://www.improvingchroniccare.org/change/model/components.html](http://www.improvingchroniccare.org/change/model/components.html)
reorganizing care delivery, which in turn improved quality for various chronic conditions.28

- **Magnet Hospitals**
  Magnet hospitals have a number of organizational characteristics that are known to promote professional nursing practice and to increase retention and job satisfaction, such as flat organizational structures, unit-based decision making processes, influential nurse executives, and investments in the education and expertise of nurses. The American Nurses Association operates a recognition program for hospitals meeting these criteria. 29 Recent studies have shown that these hospitals also have good outcomes.30

**Funding Sources**
There are three main funding streams available for implementing or supporting reconstruction of New Orleans’ healthcare system. However, funding is complicated and evolving, and matching funding sources with projects will require decisions on a case-by-case basis.

**Disaster Relief Funds**
- These funds offer potentially large amounts of money with the potential for flexibility in use of the funds.
- These funds are likely to have conditions and limitations attached and there is currently limited information on amounts available, timeframe, and allocation rules.

**Existing federal programs**31
- Most grant programs focus on research and on narrow topics, which may fit with New Orleans’ needs on a case-to-case basis.
- The Health Resources and Services Administration offers direct support for healthcare provision but eligibility requires special designations such as a Health Professional Shortage Area, for which New Orleans can apply. The Substance Abuse and Mental Health Services Administration (SAMHSA) also offers state grants.
- Medicare demonstration projects and Medicaid waivers and demonstration projects do not provide new federal funding, but they do provide flexibility in using current

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29 The Magnet Recognition Program was developed by the American Nurses Credentialing Center based on these characteristics. See http://pcs.mgh.harvard.edu/abt_magnet2.asp

30 Magnet hospitals have a 4.6% lower mortality rate than non-magnet hospitals. The same factors that lead hospitals to be identified as effective from the standpoint of the organization of nursing care are associated with lower mortality among Medicare patients. (Aiken et. al., 1994).

federal funding for benefits and services, eligibility requirements and processes, program payment, and service delivery.

- In general, the application process to those programs has to match their legal and regulatory requirements and tends to be time-consuming.

**Charitable Organizations and Foundations**

- Most focus on research and on narrow topics and prefer to support innovative ideas and experiments, which may fit with New Orleans’ needs on a case-to-case basis. Katrina-related foundations will be evolving as donations are received and they begin giving out grants.
- Funding is likely to be tied to narrowly defined purposes and amounts for each individual award may be small.

Examples:

- Bush Clinton Katrina Fund[^33] – to provide relief and rebuilding resources to help the victims of this disaster.
- The American Cancer Society, American Diabetes Association, and the American Heart Association donated $1 million to help get hospitals, healthcare systems and patient support services in devastated areas up and running again[^34].
- The Susan G. Komen Breast Cancer Foundation[^35] is providing funds to assist not-for-profit institutions and providers of breast cancer care impacted by Hurricane Katrina in rebuilding efforts, including but not limited to rebuilding facilities, equipment replacement, hiring staff, replacing/buying supplies, record retrieval, and patient location and provider reassignment.

[^32]: See the Health Funding Watch [http://fdncenter.org/hfw/](http://fdncenter.org/hfw/)
[^34]: [http://www.americanheart.org/presenter.jhtml?identifier=3033347](http://www.americanheart.org/presenter.jhtml?identifier=3033347)