



findings brief

Hospital Consolidation: Investigating Causes and Consequences

A new project from the University of Minnesota and The University of Pennsylvania offers fresh insights into the relationship between hospital consolidation, the managed care environment, and consumer welfare. Robert Town; Ph.D., Douglas Wholey Ph.D., and Roger Feldman Ph.D., in collaboration with Lawson R. Burns Ph.D., conducted two related analyses, the first examining the relationship between managed care and hospital consolidation, and the second examining the impact of hospital consolidation on consumers. Their research reveals that hospital consolidation has a distinct impact on consumer interests, increasing both HMO premiums in the most competitive markets and the number of uninsured.1 These findings are the result of the first systematic examination of the consequences of hospital consolidation for consumers.

Background

The 1990s saw an increase in both hospital mergers and HMO expansion. Some academics and analysts have speculated that the emergences of these two phenomena are inter-related, with the increase in HMOs acting as a catalyst for hospital consolidation. However, Town and co-authors Wholey, Feldman and Burns found that the proliferation of HMOs has no connection with the upsurge in hospital consolidation.²

After the wave of hospital mergers in the 1990s, both the Department of Justice and the Federal Trade Commission brought suits to enjoin hospital consolidations under anti-trust statutes. Ruling in favor of the hospitals, the courts effectively reduced anti-trust oversight.3 The combination of a de-facto unregulated market for the hospital industry and a change in some local market structures as a result of hospital mergers created a natural experiment for the researchers to examine the results of these mergers on premiums and insurance rates.4 Town notes that "understanding how hospitals and the insurance industry evolves is important for understanding what the right policies are and what the welfare effects will be."5

Popular belief links the rise of hospital consolidation with the advent of managed care organizations (MCOs) as managed care displaced indemnity insurance to become the dominant form of insurance in the private sector.⁶ Historically, health service researchers and health economists have argued that the increased presence of HMOs spurred hospital mergers in the following ways: (1) managed care reduced demand for hospital services and hospitals merged to avoid closure, compensating for this excess market capacity; (2) HMOs changed the bargaining power of



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hospitals, necessitating hospital mergers to control costs; and (3) forming integrated delivery systems through consolidation allowed hospitals to engage more effectively in capitation arrangements.⁷

Previous studies suggest that hospital concentration leads to higher prices for in-patient care. The impact of hospital mergers on consumers depends on whether or not these increases are passed on to them. The researchers hypothesized that "hospital mergers should affect consumer well being more in un-concentrated HMO markets as increases in inpatient costs are more likely to be passed onto health insurance consumers. This implies that we should see mergers in these markets leading to an increase in the rate of un-insurance."8 Changes to prices and insurance rates, the researchers theorized, will be dependent on the market structure prior to the merger.9 Areas where HMOs are operating in competitive markets prior to consolidation will experience price increases, while those within less competitive ones will face fewer adjustments.¹⁰

Methods and Results

Examining the period 1990-2003,11 the researchers used a mix of survey data from multiple sources including: the American Hospital Association (AHA), the Current Population Survey (CPS) for people ages 22-63, the Inter Study HMO Census (1985-2001) and the Group Health Association of American HMO directories.¹² Town and co-authors Wholey, Feldman, and Burns drew financial data used to measure commercial premiums from annual reports filed with state regulators. Hospital mergers, acquisitions, and expansions were analyzed geographically using Metropolitan Statistical Areas (MSAs). According to these data, there were 58 hospital mergers within MSAs in any given year, on average, with the peak occurring in 1996 when there were 108 consolidations.¹³ This consolidation did not take place across all markets. In approximately 45 percent of the MSAs there was no change in market structure due to consolidation.14

Unlike previous research, "we are basically finding that there is very little that correlates with hospital consolidation, and that surprised us," Town stated. The findings beg the question, if the appearance of managed care did not create this shift within the hospital industry, then what did? While the study did not find any significant relationships to explain the shift, there are several commonly cited rationales for consolidation including: (1) to address hospital specific, rather than market specific, concerns; (2) to strengthen a hospital's financial position; (3) to integrate services; and (4) to appease academics and consultants who advocate a "full systems approach" within the industry. 15 Whatever the reasons for the rise in hospital consolidation during the 1990s, the study documents important consequences for consumer welfare as a result of hospital concentration.

As predicted, premiums were estimated to be, on average, 3.2 percent higher than they would have absent a merger. For the most competitive HMO markets, premiums were 5.3 percent greater following consolidation.¹⁶ According to Town, premium increases affect the quantity and composition of health insurance acquired by those under age 65. Rising prices also reduce the amount of health insurance purchased from private sources and expand the number of Americans without health insurance. In 2003, the researchers estimate that because of price increases resulting from hospital mergers 695,000 people left the insurance rolls.17 From 1990 to 2003, 5.8 million people were unable or unwilling to purchase private health insurance due to price increases resulting from changes in hospital concentration.18

What happens to those who no longer purchase private health insurance as a result of hospital mergers? The study findings indicate that the vast majority of those that exit the private insurance rolls join the ranks of the uninsured. In 2003, approximately 650,000 people had no health insurance because of consolidation. Between 1990 and 2003, Town estimates that 5.5 million people were without insurance as a result of hospital mergers.19 Hospital consolidation also appear to contribute to racial and economic healthcare disparities. For those with high incomes, hospital mergers did not significantly affect their likelihood of buying health insurance. However, those with household incomes under \$60,000 were less likely to be insured after changes in the local hospital market structure.²⁰ Practically, this means that the impact of premium increases on insurance take up is limited to the poorer half of the population. Town emphasizes that findings on disparities are preliminary. Early results indicate that "hospital consolidations effect non-whites more than whites and effect the poor more than the rich in their take up of insurance. Although it is too early to say much about the policy implications of these findings, we can say that disparities are likely."

In markets without strong HMO competition, hospital mergers did not affect the amount of private health insurance coverage or the number of people without insurance.

Policy Implications

Findings from Town's study on the effects of hospital consolidation on consumer welfare have implications for ongoing court cases reviewing anti-trust action in the hospital industry. If courts continue to allow unregulated hospital consolidation, consumers can expect to face higher prices for private insurance in markets that are highly competitive prior to mergers. This study suggests that current challenges by the Federal Trade Commission to hospital consolidation may be justified.

Town says that "there is still plenty of room for significant consolidation [of hospital markets] in the future and because the markets are already semi-concentrated, these results have implications for what can occur." Lessons from the study, Town explains, are several fold. "Competition is important in keeping HMO premiums down," he says. "The results imply that if there is an increase in HMO competition, this can lead to a decrease in premiums." Expanding healthcare disparities can be an

unintended consequence of hospital consolidation as those with lower incomes become unable to afford the price increases that result. Although the work on disparities is still in its early stages, Town notes that "antitrust policy and disparities work have not intersected in a way that this study shows maybe they should."

Endnotes

- Town, R. et. al. "The Welfare Consequences of Hospital Mergers," a working paper February 2006.
- Town, R. et. al. "Revisiting the Relationship Between Managed Care and Hospital Consolidation", a working paper for *Health Services Research*, publication forthcoming February 2006.
- Town, R. et. al. "The Welfare Consequences of Hospital Mergers," a working paper publication forthcoming February 2006.
- 4. Ibid
- Robert Town, Interview by the author, Washington D.C., March 6, 2006.
- Town, R. et. al. "Revisiting the Relationship Between Managed Care and Hospital Consolidation," a working paper for Health Services Research, publication forthcoming February 2006.
- 7. Ibid
- Robert Town, Interview by the author, Washington D.C., March 6, 2006.
- Town, R. et. al. "The Welfare Consequences of Hospital Mergers," a working paper publication forthcoming February 2006.
- 10. Ibid.
- 11. The years 1990-2003 were used to investigate the consequences of hospital consolidation on consumer welfare, but the researchers only used data from 1990-2000 to examine the association between the upsurge in HMOs and hospital consolidation.
- Robert Town, Interview by the author, Washington D.C., March 6, 2006.
- Town, R. et. al. "The Welfare Consequences of Hospital Mergers," a working paper publication forthcoming February 2006.
- 14. Ibid.
- 15. Ibid.
- 16. Ibid.
- 17. Ibid.
- 18. Ibid
- 19. Ibid.
- 20. Ibid.