Federal Health Plan Merger Enforcement Is Consistent and Robust

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In May 2009, the American Hospital Association (AHA) released a letter and companion white paper that expressed “concerns about the lack of a robust and coherent enforcement policy on health insurance plan (health plan) mergers.”² ³ ⁴ The AHA requested that the Department of Justice (DOJ), in conjunction with other agencies, take the following steps:

1. Undertake “a comprehensive study of consummated health plan mergers.”
2. Convene “public hearings to better understand the reasons for the lack of competition among health plans in most markets.”
3. “Revisit and revise its analytical framework for reviewing health plan mergers.”

I was asked by America’s Health Insurance Plans to review the AHA’s letter and white paper and to analyze the assertions, recommendations, and requests contained in those documents. This white paper presents the results of this analysis and an explanation of the problematic issues with the AHA’s requests. This paper also includes a discussion of the proper framework for analyzing health insurer mergers. As discussed below, this framework is precisely the careful, fact-intensive, guidelines-driven analysis utilized by DOJ in each of the health insurer mergers that it has analyzed.

1. Executive summary

The two principal conclusions from the review and analysis in this white paper are as follows:

1. The AHA recommendations and requests are unwarranted and unsupported in a variety of respects.
2. There is no need for the “reinvigorated enforcement” (including hearings, retrospectives, and new analytic frameworks) called for by the AHA, and there is potential harm from diverted resources.

While a number of reasons for these conclusions are discussed in detail below, several bear particular highlighting:

- The American Medical Association market share and concentration figures, which the AHA relies upon, are plagued by a number of critical limitations and appear to

⁴ AHA Letter, 1.
be unreliable. The AHA uses market share and concentration figures reported by the
American Medical Association (AMA) to support the claim that health plan markets are
highly concentrated. However, as described in detail in this white paper, the AMA data
fail basic checks of accuracy and reliability. First, the AMA data do not accurately
capture overall enrollment—state-level aggregate enrollments implied by the AMA’s data
do not even approximately match the true state-level aggregate enrollments. For example,
the total enrollment in private insurance plans indicated by the AMA data is between 80%
and 105% of the true enrollment total in only 14 states. Second, the AMA’s concentration
figures demonstrate an implausible pattern of volatility over time—increases and
decreases in the state-level concentration measures reported by the AMA appear to be
almost completely unrelated to actual health plan mergers. Third, state-level
concentration as calculated by the AMA is consistently and significantly greater than
state-level concentration as measured using data available from the National Association
of Insurance Commissioners (NAIC), the organization of the nation’s state insurance
regulators. A significant shortcoming of the AMA data that may in part explain the
various inconsistencies is that the data do not include enrollment in various types of self-
funded plans (self-funded HMOs, self-funded plans that are self-administered, and self-
funded plans administered by a third-party administrator (TPA) that is not a health
insurer). As described below, the self-funded portion of the market is large and growing,
so the potential bias is large.

• The AHA offers no evidence that health insurer mergers have led to lower payments
to healthcare providers or lower quality healthcare, and, in fact, the evidence
suggests that increased payments to providers of healthcare goods and services
account for all or nearly all of the premium increases over the last decade. The AHA
white paper suggests that health plan mergers have led to lower payments to providers
but provides no evidence in support of this assertion. The white paper also implicitly—
and falsely—equates the level of payments to providers with the quality of healthcare.
As described below, empirical research shows that higher levels of provider
reimbursement are not generally associated with improved healthcare outcomes. Further,
data from the Centers for Medicare and Medicaid Services (CMS) indicate that increases
in expenditures on healthcare provider services and equipment account for essentially the
entirety of premium increases since 1999.

• The states that the AHA alleges are most concentrated actually have more—not
fewer—people insured (as a fraction of the under-65 population). The AHA claims
that health plan mergers have led to increases in premiums, which presumably would

6 See infra note 71.
expand the ranks of the uninsured.\textsuperscript{7} Based on the American Medical Association (AMA) report and data, which the AHA relied upon,\textsuperscript{8} those states that the AMA and, by extension, the AHA allege are most concentrated actually have lower, not higher, rates of uninsurance. This remains true even after controlling for income and unemployment. Such higher rates of private insurance coverage in the states that the AHA alleges are most concentrated are not consistent with the theory that health plan mergers have led to higher premiums. Moreover, there is no relationship between the AMA-reported concentration measures and per capita private healthcare spending; this fact is similarly inconsistent with the theory that health plan mergers have lead to the exercise of monopsony power.

- **The FTC and DOJ explicitly, and correctly, caution that market shares and concentration measures are only starting points in antitrust analysis of mergers.** As noted in the DOJ and FTC *Horizontal Merger Guidelines*, “. . . market share and concentration data provide only the starting point for analyzing the competitive impact of a merger. Before determining whether to challenge a merger, the Agency also will assess the other market factors that pertain to competitive effects, as well as entry, efficiencies and failure.”\textsuperscript{9} In short, simple examination of concentration indices alone cannot substitute for the intensive, case-specific investigation the agencies routinely undertake when reviewing mergers.

- **The unusual set of circumstances that suggested the need for a retrospective review of hospital mergers does not exist with respect to health insurer mergers.** By the time the FTC launched its hospital merger retrospective, economists had generated an extensive body of economic research that suggested (1) that some hospital mergers had resulted in anticompetitive price increases and (2) that the approaches to market definition accepted by the courts in the 1990s were flawed.\textsuperscript{10} As a result of this analytic backdrop, as well as the unique antitrust history of hospital mergers, the FTC undertook its hospital merger retrospective, which it publicly announced in 2002.\textsuperscript{11}

\textsuperscript{7} “The trends in health plans that have collided over the past decade involve increased concentration, increased profitability, and increased premiums.” “AHA White Paper,” 24.

\textsuperscript{8} American Medical Association, *Competition in Health Insurance: A Comprehensive Study of U.S. Markets, 2008 Update* (Chicago: AMA, 2008). As noted in the AMA report, the underlying HealthLeaders-InterStudy (HLIS) data are subject to a number of significant limitations (see section 3.6). (The AHA cites and reviews the AMA report. “AHA White Paper,” 18–19.)

\textsuperscript{9} DOJ and FTC, *Horizontal Merger Guidelines*, § 2.0.

\textsuperscript{10} In 2006, the Robert Wood Johnson Foundation sponsored a survey of the economic literature on hospital mergers. After reviewing the literature, the authors concluded that “[t]he balance of the evidence indicates that the 1990–2003 [hospital] consolidation in metropolitan areas raised hospital prices by at least five percent and likely by significantly more” and that “the best event studies found that, relative to controls, hospital prices rose 10 percent or more after mergers.” See section 4.3.

\textsuperscript{11} FTC, “Federal Trade Commission announces formation of merger litigation task force,” news release, August
The AHA calls for hearings and analysis that the FTC and DOJ have already done. The AHA calls on DOJ to “revisit and revise its analytic framework for reviewing health plan mergers.”\(^1\)\(^\text{12}\) DOJ has, however, already conducted this examination. In 2006, the FTC and DOJ published a formal commentary on the Horizontal Merger Guidelines; in this commentary, they validated the approach embodied in those guidelines as “both robust and sufficiently flexible to allow the Agencies properly to account for the particular facts presented in each merger investigation.”\(^2\)\(^\text{13}\) Further, in 2002 and 2003, the FTC and DOJ held a series of workshops on healthcare that culminated in their comprehensive report, Improving Health Care: A Dose of Competition. Two chapters in that report focus on insurance markets and address the very questions raised by the AHA.\(^\text{14}\)

DOJ and the FTC did not change their analytic framework for evaluating hospital mergers, even after losing a series of hospital merger cases. In spite of losing six consecutive hospital merger cases and being informed by the economic research on the price effects of hospital mergers, the agencies did not recommend or adopt unique standards, analytic frameworks, or special presumptions for assessing hospital mergers. The time-tested agency approach to analyzing all mergers is similarly appropriate and fully sufficient for antitrust analysis of health plan mergers.

DOJ maintains an active and effective merger enforcement program with respect to health insurer mergers. One piece of evidence of the active nature of this program is the AHA’s long list of health plan mergers reviewed by DOJ and the Federal Trade Commission (FTC).\(^\text{15}\) Moreover, as noted in the AHA white paper, DOJ has sought divestiture even in the context of health plan mergers with post-merger shares below the levels typically associated with anticompetitive effects.\(^\text{16}\) In this respect, DOJ policy with respect to health plan mergers has been more stringent than in other industries.

This white paper is organized as follows:

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1. AHA Letter, 2.
2. DOJ and FTC, “Commentary on the Horizontal Merger Guidelines,” March 2006, v [hereinafter “Guidelines Commentary”]. This review included an analysis of both monopoly and monopsony power. “The Agencies, therefore, consider the possibility that a merger would produce a significant anticompetitive effect by eliminating competition between the merging firms in a relevant market in which they compete for an input.” “Guidelines Commentary,” 36.
5. “In United-PacifiCare, DOJ was apparently able to demonstrate that there were a sufficient number of physicians who were heavily dependent on the merging health plans and that the plans would acquire a market share sufficient to create monopsony power, albeit the actual reported market share was only 33 percent.” (Emphasis added.) “AHA White Paper,” 10.
• Section 2 summarizes important changes in the private healthcare delivery system over the last 20 years and examines the evolving role of health insurance plans.

• Section 3 reviews the claims and arguments put forth in the AHA white paper and takes particular note of claims that are (1) at odds with available empirical evidence, (2) at odds with publicly available information regarding DOJ’s enforcement policy and record with respect to health plan mergers, or (3) simply unsupported or speculative.

• Section 4 reviews the unique history of antitrust enforcement of hospital mergers and highlights the particular circumstances that warranted the FTC’s hospital merger retrospective but that are not applicable to health plan mergers.

• Section 5 concludes.

2. Insurance companies offer distinct types of services and their role in the healthcare delivery system has evolved over the past several decades

2.1. Selective contracting and other innovations by health insurance companies helped slow healthcare spending growth

The private health system in the United States is a complex network that intertwines employees and their dependents, employers, insurance and related companies, and healthcare providers. Most people with private insurance obtain their coverage through their employers.¹⁷ Employers that offer insurance to employees generally do so because they believe it helps them recruit and retain qualified employees.¹⁸

Throughout the 1980s, most Americans had “indemnity” or fee-for-service (FFS) coverage; this coverage gave enrollees unrestricted access to providers. As indicated by the term “fee-for-service,” indemnity insurers reimbursed providers based upon their fee schedules. This often entailed paying full list charges, though insurers, in some cases, limited reimbursement to “usual and customary” levels. In essence, reimbursement was on a cost-plus basis.

The fee-for-service system yielded few of the benefits typically associated with competition. In traditional competitive markets, competitors have strong incentives to reduce prices (in order to gain volume) and decrease costs (in order to increase margins). In contrast, healthcare providers under the old fee-for-service system had little incentive to reduce prices or increase efficiency.

¹⁸ Paying workers a portion of their total wage in the form of health benefits rather than direct payments can result in tax savings for both the employer and the employee.
because insured patients had little incentive to select providers on the basis of price or efficiency. Price played little role in patients’ decisions as to which provider to visit, and patients generally could select any provider.

Over the course of the 1980s, this began to change. Insurers, beginning with Health Maintenance Organizations (HMOs), began to use selective contracting. Under selective contracting, HMOs directed their members toward providers that offered value in terms of price and quality and away from providers that did not. Preferred Provider Organizations (PPOs) also began growing in the 1980s. Like HMOs, PPOs also engaged in selective contracting in order to obtain discounts from providers. Generally, PPO networks are broader than HMO networks and usually allow reimbursement when patients use non-network providers.

Selective contracting by insurers introduced a feature that is ubiquitous in most markets: a meaningful relationship between providers’ prices, quality, and volume. Under selective contracting, as a provider seeks higher and higher rates, it will be included in fewer and fewer insurers’ networks. As a result of reduced coverage for patients who visit out-of-network providers, this will, all else equal, cause a reduction in volume for that provider. Conversely, lowering price allows a provider to increase volume. Selective contracting can also create an incentive for providers to increase quality, because network selection is based on quality as well as cost factors.

The shift from what was effectively a cost-plus reimbursement system to selective contracting with strong incentives had striking effects on healthcare expenditures. As shown in Figure 1, real per capita national healthcare expenditures were increasing at an average rate of more than 4% above inflation in both the 1970s and 1980s. Then, at the start of the 1990s, the growth rate of healthcare expenditures slowed markedly. The reduction was particularly sharp for the private component of national health expenditures, which fell to a 20-year low in 1994. As shown in Figure 2, over the course of the 1990s, HMOs, PPOs, and other new types of health insurance


20 Point-of-service (POS) plans combine elements of both HMO and PPO coverage and are a third, less common form of plan.

21 Capps, Dranove, and Satterthwaite (2003) and Town and Vistnes (2001) show that hospitals and hospital systems that have differentiated and valued service offerings and attractive locations are able to negotiate higher prices (see infra note 129). Additionally, D. Howard, “Hospital Quality and Selective Contracting: Evidence from Kidney Transplantation,” Forum for Health Economics & Policy 11, no. 2 (2008): Article 2, analyzes a related issue by using data on five health plans’ kidney transplant networks. Howard finds that in-network hospitals have better outcomes than out-of-network hospitals.

Selective contracting also creates an incentive for providers to merge and otherwise coordinate so that they become more difficult for an insurer to exclude. See Capps, Dranove, and Satterthwaite (2003) and Town and Vistnes (2001) (showing that hospitals that merge with their close rivals are able to negotiate higher prices).
plans almost completely displaced conventional FFS insurance. Many studies analyzed the effect of the growth of HMOs, PPOs, and other plans using selective contracting and concluded that the reductions in spending growth were a direct consequence of the growth of such plans. Even though spending growth rates increased in the latter part of the 1990s, the expansion of plans using selective contracting and other tools during that era made the 1990s a decade of historically low real healthcare spending growth (from 1990–1999, the average growth rates of real total and private national health expenditures were 2.8% and 2.2%, respectively).

**Figure 1. Growth rate of real per capita total and private national health expenditures**

Source: 2007 National Health Expenditures tables; BLS CPI-U, U.S. City Average, All Items.

22 Beginning in 2005, consumer-driven health plans began gaining some market share, as indicated by the grey area at the top right of Figure 2.

2.2. Health insurers compete to provide both insurance and administrative services

Health insurers engage in two distinct but related activities. The first is the commonly understood role of providing genuine “insurance” in the sense of offering health plan enrollees a reduction in financial risk in exchange for fixed payments (similar to auto insurance companies, for example). The second is the provision of administrative services, such as provider contracting, claims processing, and benefits management, all of which are ancillary to the provision of health insurance. Employers and other plan sponsors may purchase both components from commercial insurance companies, purchase only the administrative services, or self-produce both the insurance and administrative components.\textsuperscript{24}

Employers (and other plan sponsors) that self-fund are responsible for the healthcare costs of their employees and assume the risk of providing covered services to plan enrollees by paying directly for participants’ costs.\textsuperscript{25} Most firms that self-fund do not find it cost-effective to develop

\textsuperscript{24} Health insurers typically do not sell insurance coverage separately from administrative services.

\textsuperscript{25} Relatively few small firms self-fund, but a distinct majority of larger firms do. Larger firms are more likely to self-fund because they have more covered lives and more statistically predictable healthcare expenditures. (See
staff, systems, and processes for contracting with providers, administering claims, and generally managing the process of providing and paying for benefits. Instead, they turn to third-party administrators (TPAs) or to a health insurer to provide these administrative services. Because self-funded employers can select an insurance company or a pure-play TPA to administer their health benefits, independent TPAs are important competitors to health insurance companies.

Since 2003, the majority of individuals who receive coverage through their employers have been enrolled in self-funded plans.\textsuperscript{26} In the self-funded segment, insurers and independent TPAs earn revenue primarily on the basis of administrative fees charged to the employer. The TPA is, in effect, a direct proxy for employers’ interests, and the employer rather than the TPA or insurer will realize any savings from lower total payments to providers.

### 3. The AHA white paper—and the history of antitrust enforcement with respect to health insurer mergers—does not support its request for study and reinvigorated enforcement

As described in the preceding section, over the course of the 1990s, plans such as HMOs and PPOs supplanted conventional FFS insurance. Such plans were able to use selective contracting to obtain more competitive pricing from providers and to employ other measures to reduce inappropriate or ineffective utilization that traditional FFS plans could not. As a result, HMOs and PPOs could offer customers expanded benefits for comparable or lower premiums, and the market shifted accordingly.\textsuperscript{27}

Thus, the evidence to date indicates that selective contracting by private health plans has generally served to reduce the rate of growth of real private sector healthcare expenditures over the last 20 years.\textsuperscript{28} Against this positive track record and in support of its call for hearings, new and unique antitrust standards, and retrospective investigation, the AHA offers no meaningful data, theory, or evidence.

\begin{itemize}
\item Kaiser/HRET 2008 Survey, 155. The self-funded enrollment share increased from 44% in 1999 to 55% in 2008.
\item The 1999 Kaiser/HRET Employer Benefits Survey shows that HMOs had lower premiums than FFS plans and that PPOs had comparable premiums (Survey Ex. 2.9). PPOs and HMOs offer more covered services and benefits (Survey Ex. 8.2), have lower deductibles (Survey Ex. 7.18), and have relatively low fixed copayments rather than percentage coinsurance (Survey Ex. 7.20–Ex. 7.23).
\item Most providers endorse the goal of reducing healthcare expenditures. Nevertheless, it is important to note that national health expenditures represent expenses to consumers but are income for providers, such as hospitals and physicians.
\end{itemize}
3.1. The AHA neither offers nor alleges any evidence of anticompetitive effects resulting from health plan mergers

The AHA white paper offers no evidence that any of the described health plan mergers resulted in anticompetitive effects on price, quality, cost, or reimbursement rates. Indeed, the AHA does not even allege that any specific health plan merger reduced competition, either in a market for the sale of commercial insurance or in a market for the purchase of provider services. Instead, the AHA simply summarizes the history of health plan mergers, offers no evidence of or basis for presuming any anticompetitive effects, much less causality, and then calls for extensive investigation and hearings.

In fact, the antitrust history of the health plan mergers reviewed in the AHA white paper demonstrates that DOJ has consistently sought relief in health plan mergers that would otherwise substantially increase concentration in a geographic area. As noted in the AHA white paper, DOJ has sought divestiture in the context of health plan mergers even when it alleged post-merger market shares below the levels typically associated with anticompetitive effects.\(^\text{29}\) In this respect, DOJ policy with respect to health plan mergers has been more stringent than in other industries.

3.2. DOJ has consistently required divestiture when it concluded that health plan mergers, as proposed, would substantially increase concentration in a relevant market

Contrary to the AHA’s claims that there is a “lack of a robust and coherent enforcement policy on health insurance plan . . . mergers”\(^\text{30}\) and that “health plan mergers have received relatively little antitrust scrutiny,”\(^\text{31}\) DOJ has actively scrutinized health plan mergers and has consistently required divestitures in cases where it concluded that overlap within a relevant product and geographic market was high. DOJ’s analytic approach, as outlined in the *Horizontal Merger Guidelines* and reiterated in the “Guidelines Commentary,” has remained consistent.\(^\text{32}\)

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\(^{29}\) “In United-PacifiCare, DOJ was apparently able to demonstrate that there were a sufficient number of physicians who were heavily dependent on the merging health plans and that the plans would acquire a market share sufficient to create monopsony power, *albeit the actual reported [post-merger] market share was only 33 percent.*” (Emphasis added.) “AHA White Paper,” 10.

\(^{30}\) AHA Letter, 1.

\(^{31}\) *Id.* at 3.

\(^{32}\) The FTC and DOJ *Horizontal Merger Guidelines* detail the methodologies and standards that the agencies use to evaluate the likely competitive effects of horizontal mergers, including effects on prices and output as well as efficiencies. The current version of the *Guidelines* was issued in 1992, and a new section on the assessment of efficiencies was added in 1997. The agencies issued the “Guidelines Commentary” in 2006 in order to “provide greater transparency and foster deeper understanding regarding antitrust law enforcement” (“Guidelines Commentary,” v).
The specific details of DOJ’s theories—particularly, the relevant product market utilized by DOJ—have in fact varied over time, but that evolution mirrors parallel changes in the industry. For example, by the end of the 1990s, it had become clear that most consumers would prefer to pay somewhat higher premiums to have a more inclusive network and, accordingly, enrollment began shifting toward PPO plans. This shift is clearly evident in Figure 2, which shows PPO growth accelerating in the late 1990s until aggregate PPO enrollment exceeded aggregate HMO enrollment. HMOs responded to this market shift by developing broader provider networks and loosening gatekeeping requirements, effectively becoming more like PPOs.33 The product market identified by DOJ in cases involving the sale of commercial insurance, as described in the AHA white paper, evolved in tandem to reflect this market shift.34

While DOJ has consistently sought divestiture when it has concluded that a health plan merger would otherwise significantly increase concentration in a relevant market, it has not opposed health plan mergers when the available evidence indicates that the merging insurers were not close competitors prior to the merger. This will be the case, for example, when the merging health plans principally operate in distinct geographic areas, as was the case for 18 of the 34 health plan mergers listed in the AHA white paper.35 These 18 mergers, which include the 2004 merger of Anthem and WellPoint, involved combining Blue plans in disparate states.36 Similarly, other mergers listed by the AHA do not reflect an enforcement policy that is inconsistent or not

34 “A key issue that DOJ has struggled with in health plan mergers is how to define the relevant product market” (“AHA White Paper,” 7). “DOJ review of health plan mergers between 1995 and the present show some consistency, but no uniformity, in the definition of the relevant product market” (“AHA White Paper,” 8). DOJ has not “struggled” to define the relevant product market, but rather has tailored its analysis of the relevant product market to the structure of the industry in the period and geographies relevant to a particular merger.
35 “AHA White Paper,” 6. The AHA white paper identifies one merger as “HCSC–Blue Cross.” This appears to be a typographical error and is most likely a reference to the 2005 merger between HCSC (the BCBS plan in Illinois, Texas, and New Mexico) and BCBS of Oklahoma.
36 While the Anthem-WellPoint merger created the largest health insurer in the nation, it resulted in minimal effects on concentration within relevant markets:

   - Anthem and WellPoint do not compete against each other under the Blues trademarks....However, in each of the nine states in which Anthem is a Blues licensee, Anthem does compete with two WellPoint subsidiaries, which sell health insurance plans and provider network services under WellPoint’s “UniCare” and “HealthLink” brands.
   - WellPoint’s market share in each of these nine states is very small. Furthermore, the information obtained from employers and other market participants indicate that neither UniCare nor HealthLink is a close competitor to Anthem in any of these states.

DOJ, “Statement on the closing of its investigation of Anthem, Inc.’s acquisition of WellPoint Health Networks, Inc.,” news release, March 9, 2004, 1. DOJ also analyzed monopsony issues and concluded that “Anthem and WellPoint do not directly compete in contracting with hospitals, physicians, and other healthcare providers in Blues plans.” Id.
robust, as the mergers were either abandoned (two mergers)\textsuperscript{37} or closed subject to remedies (five mergers).\textsuperscript{38, 39}

In contrast to the impression given by the lengthy list in the AHA white paper, only a handful of health plan mergers may have involved more than a modest degree of overlap and closed without DOJ requiring a divestiture.\textsuperscript{40} The AHA white paper offers no evidence, nor even a specific allegation, that these (or any other) mergers resulted in anticompetitive effects, whether in a market for the sale of commercial insurance or in a market for the purchase of provider services.

\textbf{3.2.1. DOJ’s approach to geographic market definition is appropriately determined by the specific facts of each merger}

All merger analysis is case-specific and fact-intensive. Thus, while DOJ commonly uses the metropolitan statistical area (MSA) as the relevant geographic market for assessing potential monopoly and monopsony harm in health plan merger investigations,\textsuperscript{41} in some circumstances, DOJ has also assessed competitive effects within other relevant geographic markets.\textsuperscript{42} This comports with common sense and the industry structure reviewed above: health insurers assemble networks of local physicians, hospitals, and other providers and then market those

\textsuperscript{37} These are United-Humana and Independence Blue Cross (IBC)-Highmark.

\textsuperscript{38} Four of these were approved subject to divestiture: United-MetraHealth (1995); Aetna-Prudential (1999); United-PacifiCare (2005), and United-Sierra (2008). The fifth, the 1999 merger of Yellowstone Community Health Plan and BCBS of Montana, was investigated by the FTC rather than by DOJ. There, the FTC noted that “[t]his matter involved . . . two of the largest health insurers in Montana . . . although the transaction raised significant antitrust concerns, the Commission closed this investigation in light of conditions placed on the merger by the Montana Insurance Commissioner, in consultation with Commission staff.” Federal Trade Commission, “Overview of FTC Antitrust Actions in Health Care Services and Products,” September 2008, 99, \url{http://www.ftc.gov/bc/0809hcupdate.pdf}.

\textsuperscript{39} Of the remaining nine mergers, four are from the mid-1990s and/or involved acquisitions of smaller health plans. These four mergers are United-PHP of Missouri, United-PHP of North Carolina, United-PHP of Texas, and United-John Deere. No information regarding premerger overlap, if any, for these mergers is readily available.

\textsuperscript{40} These are Aetna-US Healthcare, Aetna-NYLCare (shortly after this acquisition, Aetna divested substantial components of the former NYLCare business under the terms of the consent decree in Aetna-Prudential), United-Oxford, United-MAMSI, and HIP-GHI.

\textsuperscript{41} The \textit{Dose of Competition} report provides a useful explanation of the concept of monopsony power:

“Conceptually, monopsony power is the mirror image of monopoly power. A buyer has monopsony power when it can profitably reduce prices in a market below competitive levels by curtailing purchases of the relevant product or services . . . . When a monopsonist reduces purchases of inputs to reduce input prices, society foregoes the production of output whose value to consumers exceeds the resource costs of associated inputs, thereby creating a welfare loss to society. To be sure, a buyer’s post-merger ability to lower the cost of inputs is not necessarily an exercise of monopsony power.” \textit{Dose of Competition}, ch. 6, section III.

\textsuperscript{42} For example, in United-Oxford, DOJ analyzed post-merger shares of purchases of the services of hospital systems for those hospitals within relevant MSAs as well as for hospital systems as a whole. DOJ, “Background to Closing of Investigation of UnitedHealth Group’s Acquisition of Oxford Health Plans,” July 20, 2004, ¶ 7.
networks to local employers. Thus, the bulk of competition between insurers, both for customers and for providers, is predominantly local.\textsuperscript{43}

The AHA does not appear to take exception to DOJ’s general focus on the MSA as the relevant geographic market.\textsuperscript{44} Nevertheless, the AHA calls for “scrutiny” of the following:\textsuperscript{45}

- “[Whether] mergers of health plans with service areas that technically do not overlap because of license or other agreements still pose a risk of competitive harm and, therefore, should be challenged.”

- “[Whether] limited divestitures are ever likely to be an effective antidote for anticompetitive health plan mergers.”

The first demand is that DOJ investigate whether health plan mergers that do not lead to consolidation within any relevant geographic market can, nevertheless, result in anticompetitive effects. This is an unlikely proposition because, by hypothesis, the merging insurers do not operate in the same geographic areas and so the set of health plan alternatives available to customers in each area would be unaffected by the merger. As a result, there is no direct mechanism by which a merger of nonoverlapping insurers would result in anticompetitive price increases or output reductions.

Similarly, as a consequence of patients’ preference for receiving care locally, it is highly unlikely that providers within, for example, one MSA can attract patients from insurers active only in other MSAs. Such remote insurers will have negligible effects on provider reimbursement before the merger, and so competition could not be lessened as a result of the merger.

Where the specific facts of an investigation raise questions of competitive effects over a broader area than the MSA, DOJ has focused its investigation accordingly. Thus, in United-Oxford, DOJ looked both at MSAs and at hospital systems as a whole,\textsuperscript{46} and in United-PacifiCare DOJ

\textsuperscript{43} This logic may not apply to large multistate or national employers that prefer to choose from the set of insurers that offer nationwide networks. However, a preponderance of large employers self-fund their health plans (Kaiser/HRET 2008 Survey, 155) and can purchase administrative services from a health plan or an independent TPA, or can choose to self-administer.

\textsuperscript{44} “Geographic markets are typically defined as local areas, such as metropolitan areas, because that is where consumers and employers seek health care. Similarly, for physicians and hospitals seeking alternative sources of revenues to the merging plans, the health plans to which they can turn are those that cover patients in the local areas from which most of their patients are drawn.” “AHA White Paper,” 7.

\textsuperscript{45} AHA Letter, 2.

\textsuperscript{46} Here, DOJ considered whether hospital systems that had locations both inside and outside a given MSA could be adversely affected by the merger. DOJ concluded that “[f]or all MSAs and for the large majority of hospitals and hospital systems, the merged company will not account for a substantial percentage of provider revenues.” DOJ, “Background to Closing of Investigation of UnitedHealth Group’s Acquisition of Oxford Health Plans,” July 20, 2004, ¶ 8.
considered a relevant market consisting of the entire state of California.\textsuperscript{47} The current agency framework, as described in the \textit{Horizontal Merger Guidelines}, is fully sufficient to the task of analyzing potential competitive effects both within and across MSAs (or other geographic areas) as appropriate.

The AHA suggests another scenario in which a merger of nonoverlapping insurers could potentially lessen competition: when one of the merging parties is not an actual market participant but is a potential entrant.\textsuperscript{48} That is, the AHA suggests that competitive harm is possible from a merger of insurers that currently do not compete in any MSA, but that, absent the merger, might become competitors in the future.

With good reason, merger challenges rarely rest on theories of potential competition. If a potential competitor is to affect outcomes in a market that it has not yet entered, entry must be a realistic possibility. But entry by the potential competitor is a realistic possibility only if entry barriers are low, which usually indicates that other potential competitors also discipline market outcomes.\textsuperscript{49} Therefore, absent exceptional circumstances, at most one of the following statements can be true: (1) entry barriers are high and there is little competition from potential competitors to be lost or (2) entry barriers are low and competition will remain robust following a merger that does not significantly increase concentration among both active and potential competitors.\textsuperscript{50}

In other words, absent exceptional circumstances, it is logically inconsistent to simultaneously allege that entry barriers in insurance markets are high and that a merger between an insurer and one of its potential competitors is likely to lessen competition.\textsuperscript{51} Whichever applies, mergers of

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{47} Complaint, \textit{United States v. UnitedHealth Group, Inc.}, No. 1:05CV02436 (U.S.D.C. December 20, 2005) [hereinafter United-PacifiCare Complaint], ¶ 6.
\item \textsuperscript{48} “AHA White Paper,” 33–34. Taken to its logical conclusion, this line of reasoning could find objectionable even a merger of two potential entrants, neither of which is currently active in a market of interest.
\item \textsuperscript{49} “A merger is not likely to create or enhance market power or to facilitate its exercise, if entry into the market is so easy that market participants, after the merger, either collectively or unilaterally could not profitably maintain a price increase above premerger levels.” \textit{Horizontal Merger Guidelines}, § 3.0.
\item \textsuperscript{50} DOJ has claimed that there were significant barriers to entry in some insurance markets that it has previously examined. See, for example, Complaint, \textit{United States v. Aetna, Inc.}, No. 3-99 CV 398-H (N.D. Tex. June 21, 1999), ¶¶ 23–25 and Complaint, \textit{United States v. UnitedHealth Group, Inc.}, No. 1:08-CV-00322 (U.S.D.C. February 25, 2008), ¶¶ 25–26.
\item \textsuperscript{51} While this theory was not sufficient to lead to a DOJ challenge in the matter, the Pennsylvania Insurance Commissioner opposed the proposed merger of Independence Blue Cross (IBC) and Highmark largely on the allegation that “Blue” licensees are uniquely well suited potential entrants against other Blue licensees, at least in those areas where the BCBS Association’s licensing rules allow for such entry (in this case, BCBS Association rules would allow Highmark to use its Blue Shield product to enter IBC’s market area because IBC is not a Blue Shield licensee). See “Excerpts from the Philadelphia Hearing Blue-on-Blue Competition,” (July 15, 2008) (exchange between Commissioner Ario, and IBC and Highmark executives). In effect, the Commissioner’s theory was that entry barriers into IBC’s territory were high for all insurers save one, Highmark. As noted above, however, DOJ reviewed this merger twice and closed its investigation both times. “Justice Department Signs Off
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nonoverlapping insurers are unlikely to raise competitive concerns. Either they occur in markets in which entry barriers are low (in which case the merger is unlikely to harm competition), or they occur in markets in which entry barriers are high, and so there is no meaningful potential competition from nonoverlapping insurers.

The second area of scrutiny the AHA requests that DOJ investigate is whether “[l]imited divestitures are ever likely to be an effective antidote for anticompetitive health plan mergers.” Leaving aside the point that this question presumes there have been anticompetitive health plan mergers, the local nature of health plan markets suggests that divestiture generally should be limited, covering at most those markets in which nontrivial overlap exists. For example, at the time that United acquired PacifiCare, United “did not actively sell commercial health insurance in California,” which explains why divestiture was not necessary in that state. The divestures DOJ sought were “limited” to areas outside of California. But this is not evidence that divestitures were “limited” in the sense of being too small to prevent anticompetitive effects. Instead, focusing remedies on just those areas where a reduction in competition is more likely reflects the fact-intensive, market-by-market approach that DOJ routinely employs.

3.2.2. DOJ’s approach to product market definition is appropriately based on the application of its general framework to the specific, and evolving, nature of health insurance products

As with geographic market definition, DOJ applies the test provided in the Horizontal Merger Guidelines to define the relevant product market(s). The relevant product markets defined by DOJ in health plan merger investigations have varied over time according to contemporaneous industry conditions and the nature of the product offerings of the merging parties. It is true that the alleged relevant product markets related to the sale of commercial insurance have varied more over time than the alleged relevant product markets related to the purchase of provider

52 Complaint, United States v. UnitedHealth Group ¶ 45. Premerger, United had a contractual relationship with Blue Shield of California (BSC), one of PacifiCare’s competitors in that state. To avoid a reduction in competition between BSC and PacifiCare, the consent decree required initial firewalls followed by termination of the United-BSC relationship within one year (Competitive Impact Statement, United States v. UnitedHealth Group, 13–14).

53 The test is known as the SSNIP test. Under the SSNIP test, “[a] market is defined as a product or group of products and a geographic area . . . such that a hypothetical profit-maximizing firm . . . that was the only present and future producer or seller of those products in that area likely would impose at least a small but significant and nontransitory’ increase in price [SSNIP].” Horizontal Merger Guidelines, § 1.0. The intuition behind the SSNIP approach is that if even a monopolist would not raise prices significantly within a candidate market then the market is so narrowly defined that it excludes significant competitors. In this case, the candidate market is expanded until a hypothetical monopolist would impose a SSNIP. At that point, competition from outside the product and geographic market under consideration must be insufficient to render that price increase unprofitable.
services. Based on this difference in variation, the AHA implies that DOJ is comparatively uninformed about the effects of health plan mergers on providers.\footnote{“AHA White Paper,” 25.}

The information disclosed by DOJ in public documents surrounding its investigations of health plans reflects a degree of knowledge about the impact of those mergers on employers and consumers that vastly exceeds anything that has been disclosed about the impact on providers. For example, the Antitrust Division explored and adopted theories of competitive harm that distinguish among the types of health plans, considering whether HMOs, for example, compete in a separate product market from other forms of health care financing.

The AHA seems to equate more variation in DOJ’s approach with a higher degree of knowledge and less variation with less knowledge—i.e., the AHA presumes that less variation in DOJ’s approach to analyzing potential monopsony harm is a sign of a lack of information or understanding of the issue.\footnote{This claim by the AHA is also belied by the FTC’s and DOJ’s public statements on the subject of monopsony in general and in the context of health insurance. See section 3.8.} The more likely explanation for the comparative lack of variation in DOJ’s approach to analyzing potential monopsony harm is that the key competitive factors in markets for the purchase of provider services simply have not changed nearly as much. A review of the product markets that involve the purchase of provider services described in DOJ’s complaints and closing statements supports this explanation:

- \textit{Aetna-Prudential} (1999): “There are no purchasers to whom physicians can sell their services other than individual patients or the commercial and government health insurers who purchase physician services on their behalf . . . . Physicians’ services, therefore, also constitute an appropriate relevant product market within which to assess the likely effects of the proposed transaction.” (Complaint, ¶ 27).

- \textit{Anthem-WellPoint} (2004): “[T]he Division considered the possibility that this transaction could give a combined Anthem/WellPoint buyer-side market power (monopsony power) over health care providers. Both Anthem and WellPoint purchase physician and hospital services in the nine overlap states.” (Competitive Impact Statement, 1–2).

- \textit{United-Oxford} (2004): “For this buying-side analysis, the Division considered two product markets, physician services and hospital services. Physician services were analyzed in MSA geographic markets . . . hospital services were analyzed both with respect to MSAs and hospitals or hospital systems that bargain as a single unit.” (Closing Statement, 2).
• **United-PacifiCare** (2005): “There are no purchasers to whom physicians can sell their services other than individual patients or the commercial and governmental health insurers that purchase physician services on behalf of their patients . . . . Thus, the purchase of physician services is a relevant product market.” (Complaint, ¶ 33).

The physician services market alleged in United-PacifiCare in 2005 is functionally equivalent to the physician services product market alleged six years earlier in Aetna-Prudential. This consistency is unlikely to reflect DOJ’s simply not having revisited the issue; DOJ specifically sought and obtained divestiture on the grounds of monopsony harm in United-PacifiCare. Instead, this consistency most likely reflects the fact that the nature of negotiations and transactions between insurers and providers has remained qualitatively the same since selective contracting became widespread in the mid-1990s.

In contrast, the sale of commercial insurance has undergone substantial changes over the last decade, and DOJ’s merger investigations have reflected these changes. One clear change involves the convergence of HMO and PPO plan designs, discussed above. Thus, in Aetna-Prudential in 1999, DOJ reached the following conclusions:

> A small but significant increase in the price of HMO and HMO-POS products would not cause a sufficient number of customers to shift to other health insurance products to make such a price increase unprofitable. HMO and HMO-POS plans, therefore, are an appropriate relevant product market within which to assess the likely effects of the proposed acquisition.

Five years later in United–Oxford, DOJ concluded that “at least in this geographic area, the definitions of particular products (such as PPOs and POS plans) have blurred, and insurers compete to offer insurance solutions.” One year later, in the 2005 merger of United and PacifiCare, DOJ again did not make any distinction between HMOs, PPOs, and other plan types. This shows that DOJ, along with the industry, had stopped drawing a sharp line between HMOs and PPOs.

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56 Complaint, United-PacifiCare, ¶¶ 32–43.
57 See supra note 33 and the accompanying text, as well as Figure 2.
58 Complaint, Aetna-Prudential, ¶ 18.
59 Closing statement, United-Oxford, 2.
60 DOJ simply noted that “United and PacifiCare offer a variety of commercial health insurance products, such as health maintenance organizations (HMOs) and preferred provider organizations (PPOs).” Complaint, United-PacifiCare, ¶ 2.
61 Whether DOJ would conclude that a vertically integrated insurer such as Kaiser is in the same product market as nonintegrated insurers is an open question.
In the case of United-Sierra, DOJ had an even more compelling reason for analyzing a new relevant commercial insurance product market: the largest overlap between the two firms was in the sale of Medicare Advantage plans, which are private plans that participate in the Medicare program on a capitated basis. In that case, DOJ concluded that Traditional Medicare and Medicare Advantage are in distinct product markets. That is, DOJ accounted for new market conditions and analyzed the effects of this merger on the Medicare Advantage market, which had not existed prior to 2004. That DOJ has tailored its analyses of the sale of health insurance to evolving market conditions simply does not imply that DOJ has less understanding of, or takes less account of, competitive conditions in markets for the purchase of provider services.

DOJ has also drawn distinctions among different types of insurance products in analyzing markets for the sale of commercial insurance. As the AHA points out, in United-PacifiCare, DOJ analyzed the competitive options and the regulatory landscape and concluded that the sale of small group insurance was a relevant product market. Specifically, DOJ observed that “[s]mall businesses’ options for providing health care benefits are often more limited than those available to other employers” and that “[m]any state insurance commissions . . . have regulations applying exclusively to the sale of commercial health insurance to small employers.” This, again, reflects DOJ appropriately tailoring its investigation to the specific competitive conditions within the markets potentially affected by a health plan merger.

3.3. The AHA draws unsupported conclusions from limited data on health plan profit margins

The AHA offers data on pretax profit margins for 2003–2006 and asks DOJ to study whether increased profitability is the result of health plan consolidation. The AHA fails to account for

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63 Complaint, United-Sierra, ¶¶ 15–18. Under a product market that included both private and public forms of Medicare, the post-merger share would have been closer to 35%.

64 Complaint, United-PacifiCare, ¶ 3, 16.

65 DOJ adopted a similar product market in United-Oxford: “the Division concluded that the appropriate product market was no broader than the market for fully-insured health insurance products sold to employers that are largely located in the tri-state area.” Closing Statement, United-Oxford, 2. In 2005, 87% of covered employees in firms with 3–199 workers were covered by a fully-insured plan, while only about 20% of employees in firms with more than 1,000 or more workers were covered by a fully-insured plan (Kaiser/HRET, “Employer Health Benefits 2005 Annual Survey,” 2005, 127). Because most small firms purchase fully-insured plans and most large firms self-insure, the fully-insured/self-insured distinction is similar to the small group/large group distinction.

66 “AHA White Paper,” 24. The AHA table incorrectly states that “Profit margin = (Non-Interest Income - Non-Interest Expense)/Non-Interest Expense.” The margins calculated by the AHA are actually computed by dividing
the fact that health insurer margins were lower in 2008 than in any of the preceding five years.⁶⁷ Recent press accounts indicate that 2009 will also be a challenging year for health insurers.⁶⁸

Firm-wide margins are much more likely to reflect macroeconomic conditions than any effects of consolidation. Moreover, margins for Aetna and Cigna follow the same pattern as margins for UnitedHealth and WellPoint. Yet Cigna has not been party to a major health plan merger since at least 1993, and Aetna has not been involved in a major merger since it merged, subject to divestitures, with Prudential in 1999.⁶⁹

The AHA data on margins, therefore, provide no basis for concluding that health plan mergers have reduced competition in any relevant market or overall.⁷⁰

### 3.4. Empirical research rejects a direct, causal relationship between higher payments to providers and higher quality healthcare

The AHA letter and white paper presume in various ways that reductions in payments to providers lead to reductions in the quality of care.⁷¹ That might be a valid presumption if only it were true that higher healthcare spending necessarily and consistently results in higher quality healthcare. While that may be true in specific instances, it is not true as a general matter.⁷² Many researchers have failed to find evidence of a consistent relationship between the level of healthcare spending and quality.⁷³ OMB Director Peter Orzag illustrated this in stark fashion in a recent presentation before the Institute of Medicine.⁷⁴ As illustrated in Figure 3, which plots 2004

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⁷⁰ Extending the AHA’s own logic of equating higher margins with a lack of competition suggests that competition among health plans was greater in 2008 than in 2002.

⁷¹ E.g., DOJ should scrutinize whether “[m]erged or dominant health plans can wreak competitive harm in ways other than reducing prices below competitive levels, such as adversely affecting the development or adoption of quality protocols or technology” (AHA Letter, 2); “Abuse of purchasing power is described as the exercise of monopsony power…with the potential adverse effects of reduced quality or innovation” (“AHA White Paper,” 1–2); “[T]he development and/or execution of tailored hospital quality initiatives could be adversely impacted by the exercise of monopsony power” (“AHA White Paper,” 32).

⁷² For an engrossing if anecdotal account of high spending failing to result in high quality, see Atul Gawande, “The Cost Conundrum,” *New Yorker*, June 1, 2009.

⁷³ This of course does not imply that higher spending causes lower quality, but it should cast significant doubt on any simple presumption that higher total payments to providers will necessarily or generally increase quality.

state-level composite quality measures against per beneficiary spending, those states with the highest level of spending per Medicare beneficiary generally had *lower*, not higher, measured quality of care.

**Figure 3. Medicare spending per beneficiary is negatively correlated with quality**

A 2008 study by Sirovich, et al. summarized the health policy research on the relationship between healthcare spending and quality as follows (citations omitted):\(^{75}\)

> Health care spending in the United States is the highest in the world and continues to grow at a rate of 7 percent per year. Such liberal health care spending fails, however, to provide the country with the best health in the world. Even within the United States—where per capita spending varies more than twofold between the lowest- and highest-spending regions—**higher spending appears to result, if anything, in slightly lower quality and worse outcomes. U.S. regions with the highest spending levels do not achieve lower mortality, nor do they show greater improvements in mortality over time. Higher spending is also not**

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associated with better access to care, patient satisfaction, or physicians’ ability to provide high-quality care. (Emphasis added.)

Contrary to the position of the AHA, there can be no valid presumption that reductions in reimbursement levels or growth rates are anticompetitive. And in any case, the AHA offers no evidence that such reductions have occurred following any health plan merger.

3.5. The states that the AHA alleges are most concentrated actually have more—not fewer—people insured (as a fraction of the under-65 population)

If health plan mergers lead to increases in the price of insurance or reductions in the quality of insurance (as might be the case if health plans exercised monopsony power post-merger), then more concentrated markets should, all else being equal, have lower rates of insurance coverage—precisely because insurance would be less affordable and/or less attractive in such markets. Thus, it is possible to indirectly test the AHA’s premise of widespread insurer market power by examining whether rates of uninsurance among the under-65 population are higher in states with reportedly higher levels of health plan concentration. The data clearly reject the AHA’s premise.

To the contrary, the states that the American Medical Association’s Competition in Health Insurance study shows as having more concentrated insurance markets have higher, not lower, rates of insurance coverage (among the under-65 population). This is demonstrated in Figure 4, which compares state-level uninsurance rates to the “HMO+PPO HHI” measure of concentration reported in the 2008 AMA study. Controlling for income and unemployment (the economic factors most likely to affect insurance uptake) does not affect the basic conclusion that more concentrated states have lower, not higher, rates of uninsurance (see Appendix A).

76 “One overriding theme of the [AHA white] paper is that health plan merger enforcement has not properly accounted for the pervasive market or monopoly power health plans currently enjoy.” AHA Letter, 3.

77 “The HHI is a measure of concentration that takes into account both market share and the size distribution of firms. It is derived by calculating each firm’s share of the market, squaring it, and then summing the square of the shares. As a result, markets with fewer firms or markets with more firms but a few with very high shares will each be highly concentrated.” “AHA White Paper,” n. 7.

As a general matter, calculating market shares and concentration indices is only a starting point in the multi-step and fact-intensive process of antitrust review by the FTC and DOJ: “. . . market share and concentration data provide only the starting point for analyzing the competitive impact of a merger. Before determining whether to challenge a merger, the Agency also will assess the other market factors that pertain to competitive effects, as well as entry, efficiencies and failure.” Horizontal Merger Guidelines, § 2.0.

78 The two apparent outliers are Arkansas and Alabama; these states have both high rates of uninsurance and high reported HMO-PPO HHIs. The 2008 AMA Report does not contain data for Alaska, Connecticut, Delaware, the District of Columbia, Mississippi, Montana, North Dakota, Pennsylvania, or Wisconsin. See American Medical Association, “Competition in Health Insurance,” 2008 Update, 3.
Figure 4. State-level uninsurance rates are lower, not higher, in states where the AMA-reported HMO+PPO HHI is highest (2006)

The AMA study reports two other measures of concentration: the share of the largest insurer and the combined share of the two largest insurers in a state. As shown in Appendix A, the same pattern holds for these two measures; additionally, the result holds when examining the relationship between insurance coverage and the concentration measures reported in the Robinson (2004) study cited by the AHA.  

This analysis of state-level uninsurance rates and the AMA-reported concentration figures does not imply that higher concentration in the commercial health plan market causes higher rates of insurance coverage. It also does not establish that no health plan in any relevant market possesses market power. It does, however, strongly rebut any simple presumption that the HHI measures presented in the AMA reports give any support to the AHA’s claims that health plans

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80 The HHIs offered by the AMA may simply be inaccurate and unreliable. As detailed in the next section, the market share data that the American Medical Association (AMA) uses to construct HHIs have a number of significant and critical limitations.
possess “pervasive market or monopoly power.” And, absent evidence of market power resulting from health plan mergers, it would be inappropriate for DOJ to “revisit and revise its analytical framework for reviewing health plan mergers.”

An analysis of the relationship between state-level private healthcare spending and the concentration measures reported by the AMA further demonstrates that the AMA's concentration measures do not establish the existence of market or monopsony power and do not support the AHA's requests. Whereas a genuine exercise of monopsony power would lower healthcare expenditures (by lowering both the rates paid to providers and the quantity of provider services purchased), there is in fact no meaningful relationship between private healthcare spending and the AMA's state-level concentration measure. (Details of this analysis are in Appendix B.)

A useful and reliable source of information on the degree of concentration or competition in specific geographic areas and product markets should generate predictions that are both internally consistent and consistent with economic theory. The AMA's HHI data fail this test of validity, both with respect to markets for the sale of insurance and markets for the purchase of provider services. If the AMA's HHIs were reliable indicators of the existence of market power, states with higher reported HHIs would have lower rates of insurance coverage as a result of the ostensibly higher prices associated with market power. The data reviewed above clearly reject this premise: states with higher AMA-reported HHIs have higher, not lower, rates of insurance coverage. Similarly, the data also clearly reject the hypothesis that total payments to providers are lower in states with higher AMA-reported HHIs.

3.6. The AMA market share data, which the AHA relies upon, are plagued by a number of critical limitations

As the analyses in the preceding section demonstrate, the concentration metrics promulgated by the AMA and relied upon by the AHA fail basic empirical checks of their utility as measures of market or monopsony power: (1) rates of uninsurance are lower, not higher, in those states where the AMA's concentration measure is highest and (2) payments to providers are not lower in those states where the AMA's concentration measure is highest. These failings alone call into question the accuracy and reliability of the underlying data used by the AMA to construct its various health plan concentration measures. As the review in this section shows, the AMA data suffer from a number of additional severe limitations.
3.6.1. The AMA data do not account for self-funded customers who self-administer their plans or use a third-party administrator (TPA) that is not a health insurer

The AMA’s share measures do not include enrollment in self-funded plans when the plan sponsor either self-administers or uses a noninsurer TPA. The AMA also does not include enrollment in self-funded HMO plans, regardless of the administrator. As noted in section 2.2, more than half of the privately insured population is enrolled in a self-funded plan, and that portion has been increasing over time. Excluding this important segment almost certainly causes the shares and HHIs the AMA reports to substantially understate the true degree of competition faced by health plans.

Additionally, it appears that in 2008 the AMA began to ignore or incorrectly account for competition between the unbranded offerings of the Blue plans and the branded Blue plans, even in states where the two are not jointly owned (branded Blue plans are confined to the area in which they are licensed to operate by the BCBS Association; no such restriction applies to plans that do not use the “Blue” trademark). In areas where the branded Blue plan and the unbranded plan have distinct owners, treating the unbranded Blue plan as anything other than an independent competitor makes no economic sense. For example, Pennsylvania-based Independence Blue Cross (IBC) sells its unbranded plan, AmeriHealth, in Pennsylvania, New Jersey, and Delaware. In New Jersey and Delaware, AmeriHealth is one of the competitors to the local Blue plans (Horizon BCBS and BCBS of Delaware). The AMA presumably treats WellPoint’s unbranded product, UniCare, in the same fashion. Combining or ignoring enrollment in unbranded Blue plans in this fashion will also inflate the market shares and HHIs reported by the AMA.

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82 AMA Report, 2008 Update, n. 11.
83 No readily available data source identifies the extent to which self-funded employers choose to self-administer, use a noninsurer TPA, or use insurers as TPAs.
84 “Again, to avoid double-counting enrollees reported by two different BCBS insurers, we exclude these insurers from areas where they do not provide service.” AMA Report, 2008 Update, 3. This note is not entirely clear, but a review of the 2007 and 2008 AMA reports strongly suggests that in 2008 the AMA either combined unbranded enrollment with the enrollment of the local Blue plan or omitted the unbranded enrollment in its entirety. For example, in the 2007 AMA report, AmeriHealth is identified as the largest or second largest HMO in a number of MSAs in New Jersey. In the 2008 AMA report, Horizon BCBS has taken its place. (See AMA Report, 2007 Update, 19 and AMA Report, 2008 Update, 20.) AmeriHealth (owned by Independence Blue Cross of Pennsylvania) and Horizon BCBS (the BCBS licensee in New Jersey) are completely distinct entities with distinct owners and there is no reason to either combine their enrollment or omit AmeriHealth’s enrollment in New Jersey.
The AMA also excludes, with no economic justification, enrollment in FFS plans and consumer-driven health plans.\(^{85}\) To the extent that these products are offered by independent firms, this exclusion will also inflate market shares and HHIs.

### 3.6.2. The AMA data fail a basic check of accuracy and reliability

If the plan-level enrollments that the AMA uses to construct market shares and HHIs are accurate and reliable, summing the plan-level enrollments for all plans in a state should result in an estimated number of privately insured persons that at least approximately matches the true total enrollment in private plans.\(^{86}\) As shown in Figure 5, the AMA’s enrollment totals are within 80\% and 105\% of the true enrollment totals in only 14 states. In the other 36 states, the AMA’s enrollment totals either fail to capture a significant portion of the privately insured population or purport to show total private enrollment that substantially exceeds the true private enrollment. In light of the magnitude of these discrepancies, there is no basis to presume that the data are accurate even within those 14 states in which the AMA-reported enrollment is between 80\% and 105\% of the true enrollment.

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\(^{85}\) AMA Report, 2008 Update, n. 11.

\(^{86}\) While the AMA does not explicitly identify its source for the total insured population in each state, the most likely source is the Census Bureau’s Current Population Survey (CPS). The CPS does not identify specific health insurance plans and so can only be used to compute the total number of insured, not shares or HHIs.
Measurement errors of this magnitude likely have substantial effects on the AMA’s three measures of concentration. In its 2008 report, the AMA notes that “In 42 states, the data performed well in capturing the insured population. On average, the state-level data captured about 74% of the eligible insured population.” In fact, however, missing data covering 26% of the market can result in a significantly distorted view of the degree of concentration in a region. The bias is in the direction of incorrectly reporting higher levels of concentration than truly exists.

Figure 6 contains an illustration of this bias in a hypothetical scenario in which the AMA has accurately measured the enrollment levels of five insurers who collectively account for 74% of the enrollment in a state but has failed to capture the enrollment of a sixth insurer accounting for 26% of the enrollment in that state. As a result of this measurement error, the AMA would falsely report that the HHI in the state is 2,546 when in fact the true HHI would be 2,070—nearly 20% lower. In this example, the AMA would also substantially overstate the share of the largest

87 AMA Report, 2008 Update, 3.
insurer (38% rather than 28%) and the combined share of the two largest insurers (61% rather than 45%).

This example conservatively assumes that the entirety of the “missing” enrollment resides with a single omitted insurer. If that enrollment were dispersed among many unmeasured insurers, the true HHI would be lower still. For example, if the unmeasured enrollment were divided among 10 equally sized firms, the true HHI would be 1,462 (near the middle of the “moderately concentrated” range, as defined by the DOJ and FTC). ²⁸

Figure 6. Illustration of the magnitude of the potential bias due to unreliable and missing enrollment data

<table>
<thead>
<tr>
<th>Insurer</th>
<th>True enrollment and shares</th>
<th>AMA-reported enrollment and shares</th>
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<tr>
<td></td>
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</tr>
<tr>
<td>B</td>
<td>1,700,000</td>
<td>17%</td>
</tr>
<tr>
<td>C</td>
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</tr>
<tr>
<td>HHI</td>
<td>2,070</td>
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</tbody>
</table>

3.6.3. The changes in the HHIs reported by the AMA appear to be entirely unrelated to actual mergers among health plans

A comparison of the 2002 and 2008 versions of the AMA report, which contain data for 2001 and 2006, shows that the state-level HMO/PPO HHIs increased in many states and decreased in many other states (see Figure 7). Only three of the ten states with the largest HHI increase, as reported by the AMA, were affected by one of the health plan mergers identified in the AHA white paper. ²⁹ These are North Carolina (United-MAMSI), Missouri (WellPoint-RightCHOICE),

²⁸ This example assumes that the unmeasured enrollment is attributable to insurers and TPAs that are not captured in the numbers that the AMA uses. If instead the AMA had an accurate census of the providers of insurance administration and coverage in a state and simply had inaccurate enrollment data, the bias could be smaller. However, this is not the most likely explanation. As discussed in the preceding section, the AMA’s data source does not include enrollment in self-funded HMOs and does not include enrollment in self-funded plans that are not administered by health insurance companies. This is the more likely explanation for the “missing enrollment.” (There is no obvious explanation for the “extra enrollment” present in five states.)

²⁹ The states affected by a health plan merger identified in the AHA white paper between 2001 and 2006 are as follows: Arizona, California, Colorado, Connecticut, Delaware, Georgia, Illinois, Iowa, Maryland, Missouri,
and Texas (WellPoint-MethodistCare). These three mergers are not plausible explanations for the increases in HHIs reported by the AMA in these three states:

- MAMSI was active in North Carolina but its membership was concentrated in the District of Columbia, Maryland, and Virginia. The AMA reports indicate that HHIs in Maryland and Virginia decreased from 2001 to 2006. United’s acquisition of MAMSI is an unlikely explanation for the reported increase in the HHI in North Carolina.

- WellPoint had little if any presence in Missouri prior to its acquisition of RightCHOICE, so this acquisition does not explain the increase in the reported HHI in Missouri.

- MethodistCare had roughly 70,000 enrollees in Texas; this is a small fraction of the commercially insured population of 12.3 million (as of 2006) in Texas. This acquisition cannot explain the increase in the reported HHI in Texas.

Moreover, two of the states affected by a health plan merger, Virginia and Maryland, are among the 10 states with the largest decreases in HHIs from 2001 to 2006.

The changes in the HHIs reported by the AMA appear to be entirely unrelated to actual mergers among health plans. This is another reason why these HHIs are unlikely to be reliable measures of concentration or market power.

The most likely explanation for the high degree of volatility in the HHIs that the AMA reports is that the underlying data are so plagued by measurement error as to be unreliable. If, however, the volatility in the shares and HHIs reported by the AMA is genuine, that would indicate that market share frequently shifts from one insurer to another—a pattern more consistent with strong competition than a lack of competition.

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92 “On April 30, 2002, the Company completed its acquisition of MethodistCare, which served over 70,000 members in Houston, Texas, and surrounding areas at the time of acquisition. This acquisition was intended to enable UNICARE, WellPoint’s national operating unit, to expand its product line.” (WellPoint, Annual Report (Form 10-K), March 15, 2004, 4.) Note that HCSC, not WellPoint, is the BCBS plan in the state of Texas, so this acquisition brought WellPoint, through its unbranded UniCare product, into competition with HCSC in Texas.
Figure 7. The 2001–2006 changes in the AMA-reported HMO/PPO HHIs are not systematically related to health plan mergers

The 20 states with largest AMA-reported decrease:
Florida, Maryland, Nebraska, New Hampshire, Rhode Island, South Carolina, Utah, Virginia, West Virginia, Wyoming

The 20 states with largest AMA-reported increase:
Arkansas, Indiana, Kentucky, Massachusetts, Minnesota, Missouri, North Carolina, Ohio, South Dakota, Texas

Source: AMA Report, 2008 Update; AMA Report, 2002 Update

3.6.4. The AMA’s concentration measures are consistently and significantly higher than the same concentration measures calculated using data from the National Association of Insurance Commissioners

The National Association of Insurance Commissioners (NAIC) also collects state-level data on health plan market shares; NAIC data report total direct premiums rather than total enrollment.93

93 This comparison of AMA-reported HHIs and the HHIs implied by the NAIC data relies upon data from the NAIC’s 2008 Market Share Reports for the top 125 Accident and Health Insurers. Unfortunately, the NAIC provides minimal documentation of the sources and methods it uses to assemble its market share data and these data likely also have significant limitations. For example, the NAIC data report premium revenue for both accident and health insurers, and including non-health insurer revenue may bias health insurers’ shares downward (importantly, firms that are unambiguously health insurers typically account for roughly 90% of the premiums reported in the NAIC data and so this cannot account for the discrepancy between AMA-reported
A comparison of the HHIs reported in the most recent AMA report to the HHIs derived from the NAIC data shows that the AMA HHIs are consistently and significantly larger. These two HHIs are plotted in Figure 8. The 2006 AMA HMO/PPO HHI is on the vertical axis, and the HHI derived from the 2008 NAIC Market Share Report is on the horizontal axis. The diagonal line indicates points where the two HHI measures would be equal. As is plainly evident, the AMA’s HHIs are consistently above the NAIC-derived HHIs, generally by a substantial amount. This is likely a reflection of the various omissions and biases in the AMA data, as discussed above. (If both data sources were plagued with measurement error but unbiased, the scatter would show a “cloud” centered along the diagonal line.) That the AMA HHI is systematically greater than the NAIC-derived HHI strongly suggests that, in addition to suffering from measurement error, the AMA data are likely also biased upward.

HHIs and NAIC-derived HHIs). The NAIC data likely also include health insurer revenue from activities other than the sale of commercial health insurance (e.g., pharmacy benefits, Medicare Supplemental insurance, and various specialty products), which could bias the insurer shares reported in the NAIC data upward. The point of reviewing the NAIC data is not to definitively identify state-level health insurer market shares but rather to highlight the sensitivity of measured concentration to underlying data quality.
Figure 8. The HHIs reported by the AMA are consistently and significantly larger than the HHIs derived from NAIC data.

Even if the AMA data were reliable—and the review herein indicates they are not—computing an HHI is only the beginning, not the end, of an antitrust investigation. Indeed, the FTC and DOJ explicitly, and correctly, caution that market shares and concentration measures are only starting points in antitrust analysis of mergers. As noted in the DOJ and FTC Horizontal Merger Guidelines, “. . . market share and concentration data provide only the starting point for analyzing the competitive impact of a merger. Before determining whether to challenge a merger, the Agency also will assess the other market factors that pertain to competitive effects, as well as entry, efficiencies and failure.”\textsuperscript{94} Simple examination of concentration indices alone cannot substitute for the intensive, case-specific investigation that the agencies routinely undertake when reviewing mergers.

\textsuperscript{94} DOJ and FTC, \textit{Horizontal Merger Guidelines}, § 2.0.

3.7. Increased payments to providers explain all or nearly all of the premium increases over the last decade

Just as airline fares invariably increase when the price of fuel increases, health plan premiums increase when provider reimbursement rates increase. Premiums also increase if providers shift from less expensive to more expensive treatments or if providers increase the volume or intensity of patient interactions (e.g., longer hospital stays, more extensive testing, or more office visits).\(^95\)

As shown in Figure 9, payments to hospitals and physicians have been increasing at rates that substantially exceed overall inflation and the growth rate of workers’ earnings.\(^96\) From 1999–2007, payments to hospitals grew at a compound annual growth rate (CAGR) of 8.7% and payments for physician and clinical services grew at an average annual rate of 8.0%. Overall, total payments by private insurers for all categories of Personal Health Care (i.e., expenditures by insurers on benefits) grew at an average rate of 7.9% per year.\(^97\)

\(^{95}\) Depending on the circumstances, it could be entirely appropriate, medically and on a cost-benefit basis, for providers to select more costly technologies or to increase the volume of patient interactions. Regardless of the basis for any such changes, the result will be increased payments to providers and, therefore, higher insurance premiums.

\(^{96}\) The AHA white paper implies, inaccurately, that the excess of premium growth over workers’ earnings growth and inflation is the result of health plan mergers. (“During this period of increased concentration, health plan prices have increased well above the rate of inflation.” “AHA White Paper,” 22).

\(^{97}\) CMS itemizes Personal Health Care (PHC) expenditures into the following categories: Hospitals, Physician and Clinical Services, Other Professional Services, Dental Services, Other Personal Health Care, Home Health Care, Nursing Home Care, Prescription Drugs, Other Non-durable Medical Products, and Durable Medical Equipment.
As noted at the outset of this section, payments to providers are a direct cost to health insurers (and self-funded employers) and increases in such payments will be reflected in increased premiums. Figure 10 provides a comparison of the growth rate of payments to providers to the growth rate of premiums. Based on data on per enrollee premiums from the National Health Expenditures tables maintained by the Centers for Medicare and Medicaid Services (CMS), the growth rate of premiums is effectively identical to the growth rate of payments to providers of healthcare goods and services—premiums grew at an annual rate of 8.0% from 1999–2007, while payments by insurers for healthcare goods and services grew at a 7.9% annual rate. In other words, approximately 99% of the increase in premiums over this period is explained by increases in payments for healthcare goods and services. (From 1999–2007, hospitals, physicians, and clinical services accounted for approximately 70% of expenditures by insurers on healthcare goods and services.)

The AHA cites premium data from alternative sources, principally the Kaiser/HRET surveys. While the Kaiser/HRET data show larger increases in premiums, there are several reasons to give more credence to the NHE figures. In particular, the Kaiser/HRET figures only present the prices for individual and family plans and so do not fully reflect changes in the mix of plans purchased or changes in family size. Compared to the Kaiser/HRET data, the NHE data are also more

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98 Details of the analyses underlying the figures in this section are in Appendix C.
100 In the 2008 survey, Kaiser/HRET also changed the methodology it uses to compute the annual percentage premium increase. Kaiser/HRET 2008 Survey, 11, 20.
extensively sourced, researched, and validated.\textsuperscript{101} Notwithstanding these considerations, a comparison based on the Kaiser/HRET premium data shows that increased payments to providers account for 83\% of the increase in premiums from 1999–2007.

**Figure 10. Annual growth rates of (1) insurer payments to providers and (2) premiums**

<table>
<thead>
<tr>
<th>Year</th>
<th>Growth rate of insurer payments to providers\textsuperscript{[1]}</th>
<th>Growth rate of premiums</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Average premium</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Kaiser / HRET)\textsuperscript{[2]}</td>
</tr>
<tr>
<td>2000</td>
<td>8.6%</td>
<td>11.8%</td>
</tr>
<tr>
<td>2001</td>
<td>9.5%</td>
<td>9.3%</td>
</tr>
<tr>
<td>2002</td>
<td>9.4%</td>
<td>13.9%</td>
</tr>
<tr>
<td>2003</td>
<td>8.1%</td>
<td>11.7%</td>
</tr>
<tr>
<td>2004</td>
<td>7.5%</td>
<td>9.5%</td>
</tr>
<tr>
<td>2005</td>
<td>6.8%</td>
<td>9.1%</td>
</tr>
<tr>
<td>2006</td>
<td>6.5%</td>
<td>5.5%</td>
</tr>
<tr>
<td>2007</td>
<td>6.6%</td>
<td>5.5%</td>
</tr>
<tr>
<td>1999–2007 CAGR</td>
<td>7.9%</td>
<td>9.5%</td>
</tr>
</tbody>
</table>

Notes:

[1] 2007 National Health Expenditures Web Tables, Table 12. These annual growth rates reflect increases in expenditures by private insurers on “Personal Health Care,” as defined by CMS.


### 3.8. The public hearings called for by the AHA have already occurred, and repeating them would serve little purpose

In 2002 and 2003, the FTC and DOJ held a series of workshops on a wide array of antitrust topics related to healthcare; these workshops culminated in the release of the lengthy and detailed report, *Improving Health Care: A Dose of Competition*.\textsuperscript{102} Two chapters in that report focus on the insurance industry.\textsuperscript{103} The report and the underlying hearings specifically addressed, among other issues, the very topics highlighted in the AHA white paper: competitive effects in markets for the sale of commercial health insurance and competitive effects in markets for the purchase of provider services.\textsuperscript{104}

\textsuperscript{101} See Appendix C.

\textsuperscript{102} *Dose of Competition*, note 14.


\textsuperscript{104} *Dose of Competition*, ch. 6, section II addresses sell-side effects; section III addresses buy-side effects.
With respect to the creation of market power in the market for the purchase of provider services (the primary focus of the AHA white paper), the FTC and DOJ explicitly considered the issue of “buyer power” or monopsony harm. Their analysis and conclusions confirm the agencies’ vigilance in monitoring markets for the exercise of monopsony power in their standard case-specific and fact-intensive manner:

The Hearings confirmed two important, interrelated points with respect to monopsony power in the health insurance sector. First, under the right circumstances, monopsony power can be created or exercised in this [health insurance] industry. The Agencies consequently need to remain vigilant in monitoring the market for such situations. Second, properly ascertaining whether monopsony power has in fact been created or exercised in this industry typically will involve a case-specific, factually-intense assessment. As panelists pointed out, “‘low prices’ by themselves are not an indication or certainly not proof of monopsony power,” and correctly determining the presence of monopsony power is “tricky.” (Citations omitted.)

Then, from 2004–2006, the FTC and DOJ held additional hearings to address whether the Guidelines framework was “leading to appropriate enforcement decisions on proposed horizontal mergers” and “providing the antitrust bar and the business community with reasonably clear guidance.” This review included but was not limited to the efficacy of enforcement policy in the healthcare industry. The FTC and DOJ concluded that the Guidelines framework was “effective in yielding the right results in individual cases and in providing advice to parties considering a merger.”

As described in section 3.2, and consistent with the guidance in the Dose of Competition report as well as the conclusions reached in the “Guidelines Commentary,” DOJ has in fact given serious consideration to monopsony theories of harm, has conducted “case-specific, factually-intense” investigations, and has sought divestiture on monopsony grounds when it concluded that a proposed merger could lessen competition.

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105 Dose of Competition, ch. 6, section III.D.
106 “Guidelines Commentary,” v.
107 Id.
108 Antitrust analysis of monopsony issues invokes no unique analytic framework or analysis. Instead, as described in § 0.1 of the Horizontal Merger Guidelines, “[m]arket power also encompasses the ability of a single buyer (a ‘monopsonist’), a coordinating group of buyers, or a single buyer, not a monopsonist, to depress the price paid for a product to a level that is below the competitive price and thereby depress output. The exercise of market power by buyers (‘monopsony power’) has adverse effects comparable to those associated with the exercise of market power by sellers. In order to assess potential monopsony concerns, the Agency will apply an analytical framework analogous to the framework of these Guidelines.” (Emphasis added.)
4. The FTC undertook its hospital merger retrospective based on the antitrust history of hospital mergers and the extensive corresponding economic research

A health plan merger retrospective is, at best, unjustified and, at worst, a diversion of policy and agency resources and attention. In support of its request for retrospective study of insurer mergers, the AHA references the hospital merger retrospective launched by the FTC in 2002. However, the absence of evidence of anticompetitive effects resulting from DOJ either not challenging or not seeking sufficient remedy in any particular health plan merger stands in marked contrast to two key factors that ultimately led the FTC to undertake its hospital merger retrospective: (1) the unique antitrust history of hospital mergers and (2) the substantial body of economic research that suggests that hospital consolidation had resulted in anticompetitive effects. No parallel history or body of evidence exists that suggests that anticompetitive effects resulted from health plan mergers.

4.1. A significant legal history provided a foundation for the hospital merger retrospective

The hospital merger retrospective followed on the heels of an unusual case history that featured six consecutive failed attempts by the FTC or DOJ to block a hospital merger and a seventh failed attempt by the state of California. In six of these cases, the relevant geographic market in which the merging hospitals competed was a hotly debated issue. The merging hospitals prevailed in these six cases by arguing, on the basis of analyses of patient flows, that the relevant geographic market was large.

In these cases, both sides made reference to the market definition framework specified in the *Horizontal Merger Guidelines*:112

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111 In *FTC v. Butterworth Health Corp.*, the dispositive issue was not geographic market definition but rather the merging hospitals’ nonprofit status.

A market is defined as a product or group of products and a geographic area in which those products are produced or sold such that a hypothetical profit-maximizing firm, not subject to price regulation, that was the only present and future producer or seller of those products in that area likely would impose at least a “small but significant and nontransitory” increase in price [SSNIP], assuming the terms of sale of all other products are held constant. A relevant market is a group of products and a geographic area that is no bigger than necessary to satisfy this test.

In practice, merging hospitals relied either on Elzinga/Hogarty analysis or on Critical Loss analysis to approximate, rather than formally implement, the “SSNIP” or “hypothetical monopolist” test described above. Numerous economists, however, have questioned the application of both of these methods of analysis to hospital and other mergers. The agencies' belief or suspicion that, in a string of litigated cases, the courts had accepted invalid and overly large geographic markets and thereby allowed anticompetitive hospital mergers to proceed constituted one of the bases for the hospital merger retrospective.

4.2. Hospital ownership is very concentrated in many metropolitan statistical areas

Evidence of increased concentration, as measured by indices such as the Hirschman-Herfindahl Index (HHI), is not in itself enough to draw conclusions of competitive harm. Such evidence can, however, be a useful starting point. A 2006 study, sponsored by the Robert Wood Johnson Foundation (RWJF) and performed by economists Robert Town and William Vogt, summarized the extent of hospital consolidation during the 1990s. They report that, on average, the concentration of hospital ownership within metropolitan statistical areas (MSAs) increased by a substantial amount during the 1990s:

113 In a number of these cases, the government also used Elzinga/Hogarty or Critical Loss analyses but differed with hospitals’ experts over the appropriate way to implement the analysis or the correct thresholds to apply.


116 RWJF Synthesis Report, 1.
Over the 1990s the hospital industry underwent a wave of consolidation that transformed the inpatient hospital market place. By the mid-1990s, hospital merger and acquisition activity was nine times its level at the start of the decade . . . . In 1990, the typical person living in a metropolitan statistical area (MSA) faced a concentrated hospital market with an HHI of 1,576. By 2003, however, the typical MSA resident faced a hospital market with an HHI of 2,323. This change is equivalent to a reduction from six to four competing local hospital systems. (Citations omitted.)

More recent data verify that hospital ownership in most MSAs is highly concentrated.\(^{117}\) Figure 11 shows that in 2006, the HHI exceeded 2,000 in a majority of MSAs. Moreover, 75% of MSAs had an HHI over 2,500, and 50% had an HHI over 4,000 in 2006.\(^{118}\) (The relevant “antitrust” geographic market in which hospitals compete is likely to be smaller than an MSA in many cases. However, for the purpose of summarizing the scope of hospital ownership consolidation at a general level on a nationwide basis, the MSA is a reasonable unit of analysis.\(^{119}\))

\(^{117}\) While the data relied upon in the AMA’s study of insurer concentration are subject to significant limitations (see section 3.6), data for reliably measuring hospital system shares within specific geographic areas are readily available from sources such as the American Hospital Association’s *Annual Survey of Hospitals* and various state hospital discharge databases.

\(^{118}\) The HHI is computed on the basis of acute care inpatient hospitals only (including children’s hospitals and short-term specialty hospitals) and on the basis of shares of beds.

\(^{119}\) To the extent that the MSA is larger than the relevant geographic market, measuring shares at the MSA-level will tend to understate the degree of hospital ownership concentration.
4.3. Economic analyses of hospital competition and hospital mergers showing significant price increases provided a key foundation for the hospital merger retrospective

Over the course of the 1990s, many economists analyzed the relationship between hospital concentration and hospital pricing. In their 2006 RWJF study, Town and Vogt also surveyed the economic research into the effects of hospital consolidation on the price, quality, and cost of hospital care.\textsuperscript{120} In total, they reviewed 87 distinct studies. They summarize their conclusions regarding the price effects of hospital consolidation as follows:\textsuperscript{121}

The balance of the evidence indicates that the 1990–2003 consolidation in metropolitan areas raised hospital prices by at least five percent and likely by significantly more.

Of the 13 surveyed papers that analyzed market-level concentration and pricing, 10 found that prices were higher in areas where hospital ownership is more concentrated.\textsuperscript{122} Some of the other

\textsuperscript{120} RWJF Synthesis Report; RWJF Policy Brief.

\textsuperscript{121} RWJF Synthesis Report, 11.

\textsuperscript{122} Id. at 6. The economists who conducted these studies were generally not analyzing “markets” in the antitrust...
surveyed papers were based on “event studies” (e.g., before-and-after comparisons of price changes at merging hospitals relative to some benchmark change, such as price changes at nonmerging hospitals). Town and Vogt summarize these studies as follows: “The best event studies find that, relative to controls, hospital prices rose 10 percent and more after mergers.”

Following the FTC and DOJ’s 2002 and 2003 healthcare hearings, which covered a wide array of antitrust topics (including both insurer and hospital mergers), the agencies reached a very similar conclusion:

Most studies of the relationship between competition and hospital prices have found that high hospital concentration is associated with increased prices, regardless of whether the hospitals are for-profit or nonprofit.

Finally, Town and Vogt also summarized the literature on the quality and cost effects of hospital consolidation:

- “Although the results of the literature are mixed, a narrow balance of the evidence and the evidence from the best studies indicates that hospital consolidation more likely decreases quality than increases it.”
- “Although the results of the literature are mixed, the balance of the evidence indicates that hospital facility consolidation produces cost savings for the consolidated hospitals.”

In general, the economic literature reviewed by Town and Vogt shows that estimated price effects that result from hospital mergers that create or enhance market power are greater than the estimated cost savings from those mergers that do result in cost savings.

The compelling empirical evidence that many hospital mergers resulted in significant price increases called into question the methodologies—Elzinga/Hogarty and Critical Loss—relied upon by the courts in the 1990s. In a complementary line of research, economists also

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sense but were focusing on studying concentrations in geographic areas such as counties or healthcare referral regions.

123 RWJF Synthesis Report, 6.

124 Dose of Competition, Executive Summary.

125 RWJF Synthesis Report, 11.

126 Id. "Hospital facility consolidation” refers to instances in which merging hospitals combine licensing and integrate operations. Town and Vogt report that simple ownership consolidation without facility consolidation results in “modest cost savings.” RWJF Policy Brief, 1.


128 Eventually, even Kenneth Elzinga, cocreator of the Elzinga/Hogarty methodology, would testify that
began developing and empirically testing models of competition specifically designed to match the key economic characteristics of hospital markets, particularly selective contracting. These models allowed the researchers to formally implement the hypothetical monopolist test described in the *Horizontal Merger Guidelines*. Each analysis concluded that the relevant geographic markets in which hospitals compete are much smaller than the markets adopted by the courts in the 1990s.\(^{129}\)

5. No retrospective of health plan mergers or unique analytical framework for assessing health plan mergers is necessary

By the time the FTC undertook its hospital merger retrospective, an extensive and compelling body of economic research had emerged that showed that many hospital mergers had likely resulted in increased prices without offsetting efficiencies. In contrast to this history, the AHA offers no specific evidence of anticompetitive effects resulting from any health plan merger. Absent such evidence, launching new hearings or launching a retrospective analysis of health plan mergers would be a highly questionable use of DOJ and FTC resources.

Additionally, the analytic framework outlined in the *Horizontal Merger Guidelines* has already been revisited. In 2004, the agencies held a merger enforcement workshop and, building upon that workshop, issued their formal commentary on the *Horizontal Merger Guidelines* in 2006. The FTC and DOJ summarize the conclusions from that workshop and the subsequent commentary as follows:\(^{130}\)

> Workshop participants generally agreed that the analytical framework set out in the Guidelines is effective in yielding the right results in individual cases and in

Elzinga/Hogarty analysis is inappropriate in the context of defining geographic antitrust markets for hospitals:

[T]here is this silent majority, and if patient flow data show that a non trivial number of people travel to a distant hospital, the problem in the Elzinga-Hogarty Test, using patient flow data, is that one might assume from it—assume incorrectly—that the existence of those traveling patients protects and disciplines the prices paid by the silent majority who don’t travel, and these economists, Greg Werden and others and myself, are persuaded that in that regard, the Elzinga-Hogarty Test, using patient flow data, is misleading in trying to establish the contours of a relevant geographic market area.

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\(^{130}\) “Guidelines Commentary,” v. The agencies also revisited their analytic framework for assessing mergers in the healthcare arena in a set of hearings in 2002 and 2003 that culminated in the release of the lengthy and detailed report, *Improving Health Care: A Dose of Competition* (see supra note 14 and section 3.8).
providing advice to parties considering a merger. Thus, the Agencies concluded that a revamping of the Guidelines is neither needed nor widely desired at this time. Rather, the Guidelines’ analytic framework has proved both robust and sufficiently flexible to allow the Agencies properly to account for the particular facts presented in each merger investigation.

Even after losing six consecutive hospital merger cases between them and being informed by the economic research on the price effects of hospital mergers, the agencies did not recommend or adopt unique standards, analytic frameworks, or special presumptions for assessing hospital mergers. Instead, as the “Guidelines Commentary” makes clear, the agencies apply the standard framework in a fact-specific fashion that is tied to the evolving structure of the hospital industry.\textsuperscript{131} This approach is equally appropriate and sufficient for antitrust analysis of health plan mergers.\textsuperscript{132}

In summary, the American Hospital Association’s various requests for reinvigorated antitrust enforcement of health plan mergers are unwarranted and are not supported by the arguments in the AHA white paper. Despite the claims in that white paper, DOJ enforcement of health plan mergers is consistent, robust, and vigorous, and appropriately follows the time-tested analytic framework prescribed by the FTC and DOJ \textit{Horizontal Merger Guidelines}.

\textsuperscript{131} “The Agencies have used bargaining theory to analyze the effects of hospital mergers on the prices they charge managed care organizations” (“Guidelines Commentary,” 34). The “Commentary” goes on to describe one hospital case, a joint venture, that the FTC did not oppose and one hospital merger case that the FTC did oppose.

\textsuperscript{132} The FTC and DOJ explicitly considered whether the Guidelines were effective in analyzing both monopoly and monopsony harm: “The Agencies, therefore, consider the possibility that a merger would produce a significant anticompetitive effect by eliminating competition between the merging firms in a relevant market in which they compete for an input. By eliminating an important alternative for input suppliers, a merger can lessen competition for an input significantly.” “Guidelines Commentary,” 36.
Appendix A. Sensitivity analysis of the negative relationship between uninsurance rates and AMA-reported health plan concentration

The absence of a positive relationship between concentration and rates of uninsurance is robust across time, concentration measures, and data sources. For example, the AMA also reports statewide market shares for the largest and second largest insurer in each state. As shown in Figure 12 and Figure 13, markets with higher AMA-reported “largest insurer” and “largest two insurers” shares also generally have lower rates of uninsurance, not higher.

Figure 12. State-level uninsurance rates and the AMA-reported share of the largest plan, 2006

Figure 13. State-level uninsurance rates and the AMA-reported combined share of the two largest plans, 2006


As shown in Figure 14, the negative relationship between the AMA-reported HMO+PPO HHI and uninsurance rates also held in 2005.\(^{133}\)

\(^{133}\) The 2008 AMA report is based on HLIS data for 2006, and the 2007 AMA report is based on HLIS data for 2005.
Other factors, such as economic conditions, could cause some states to have both high levels of uninsurance and fewer health plans. As the regression in Figure 15 shows, controlling for income and the unemployment rate does not change the basic, negative relationship between the rate of uninsurance and the HHI measure reported by the AMA (i.e., the negative and statistically significant coefficient on “HMO/PPO HHI” indicates that, on average, rates of uninsurance are lower in states where AMA-reported concentration is higher).\footnote{The relationship between the AMA’s HHI measure and uninsurance is statistically insignificant when state fixed effects are included. This indicates that changes in the AMA’s HHI are not statistically correlated with changes in the rate of uninsurance. }
Figure 15. Regression of state-level uninsurance rates on AMA-reported HHI and control variables, 2005 and 2006

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMO/PPO HHI</td>
<td>-0.00133</td>
<td>0.00027</td>
<td>-4.86000</td>
<td>0.00000</td>
</tr>
<tr>
<td>Income</td>
<td>-0.00029</td>
<td>0.00006</td>
<td>-5.14000</td>
<td>0.00000</td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>-0.36707</td>
<td>0.42780</td>
<td>-0.86000</td>
<td>0.39300</td>
</tr>
<tr>
<td>2006 Dummy</td>
<td>0.42511</td>
<td>0.81114</td>
<td>0.52000</td>
<td>0.60200</td>
</tr>
<tr>
<td>Constant</td>
<td>36.19234</td>
<td>4.21225</td>
<td>8.59000</td>
<td>0.00000</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.3303</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of observations</td>
<td>86</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Finally, the AMA also cites insurer market share and HHI data from a study by Robinson (2004). The same negative relationship between uninsurance and the measured HHI holds based on data from that study. See Figure 16.

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Appendix B. There is no relationship between private health care spending and the AMA-reported measure of concentration

The AHA claims that the high health plan enrollment shares alleged by the AMA imply that health plans also have monopsony power in markets for the purchase of provider services. 136 This claim is unsupported for two reasons. First, the predicate that the AMA-reported HHIs constitute evidence of health plan market power (in markets for the sale of health insurance) is inconsistent with the analysis showing that rates of uninsurance are generally lower, not higher, in states with higher AMA-reported HHIs. 137 Second, available data on state-level private

137 If higher AMA-reported HHIs indicate that health plans have and exercise market power in many states, the price of commercial insurance should be higher—and insurance coverage rates lower—in more concentrated states. The data clearly reject this hypothesis. See section 3.5.
healthcare spending are also inconsistent with the AHA’s premise that "most health insurers have preexisting monopsony power." In particular, a monopsonist will purchase a lower quantity of the monopsonized inputs in order to reduce the price of those inputs. Because a monopsonist purchases fewer inputs at lower prices, total expenditures on inputs should be lower in a monopsonized market than in a competitive market. Therefore, if the AMA measures of concentration, which the AHA relies upon, are valid indicators of the presence and exercise of monopsony power then private healthcare spending should be lower in those states that the AMA report alleges are most concentrated.

As shown in Figure 17, however, there is in fact no meaningful relationship between private healthcare spending and the AMA’s measure of concentration. The vertical axis in Figure 17 contains 2004 state-level private healthcare spending per person under-65, and the horizontal axis contains the 2005 HMO+PPO HHI reported in the 2007 AMA study. Contrary to the hypothesis of monopsony power, per capita private healthcare expenditures are not systematically lower in states with higher AMA-reported HHIs. In fact, there is a visually apparent modestly positive (not negative) relationship between private healthcare spending and the AMA-reported HHI, though that relationship is statistically insignificant ($t = 0.69$).

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139 This is simply the mirror image of monopoly: where a monopolist reduces its output in order to increase the sale price relative to the competitive level, a monopsonist reduces its purchases of inputs in order to reduce the purchase price relative to the competitive level. See also, supra note 41.
140 Even though expenditures on inputs are reduced, genuine exercise of monopsony power is inefficient. As explained in the Dose of Competition report, “[w]hen a monopsonist reduces purchases of inputs to reduce input prices, society foregoes the production of output whose value to consumers exceeds the resource costs of associated inputs, thereby creating a welfare loss to society.” Dose of Competition, ch. 6, section III.
141 State-level private healthcare expenditures are calculated from the most recent year of itemized state-level data, 2004 (CMS, “Health Expenditures by State of Provider, 1980-2004”). Private expenditures per capita are computed as [(Total personal healthcare expenditures – Medicare and Medicaid personal healthcare expenditures) / 2005 Under-65 population]. Personal healthcare expenditures, as defined by CMS, do not include the costs of private health insurance (i.e., administrative expenses and profit).
142 CMS notes that the state-level data, which are calculated on the basis of provider rather than patient states, may be biased by travel across borders. A regression based just on the 25 largest states, which likely have less cross-border travel, also shows an insignificant relationship ($t = 0.49$). The same is true for a regression that includes region fixed effects, which controls for the fact that cross-border travel is most likely an issue in the Northeast ($t = 0.35$).
Figure 17. State-level private healthcare expenditures are unrelated to the AHA-reported HHI

![Graph showing the relationship between HMO+PPO HHI and private healthcare expenditures per person under-65.]


Appendix C. Statistical basis for cost and premium calculations

CMS maintains the National Health Expenditures (NHE) data, which are “the official estimates of total health care spending in the United States.”\(^{143}\) The most recent set of NHE tables contains highly detailed annual data for the period 1997–2007, as well as data for selected earlier years.\(^{144}\) In particular, Table 12 in the NHE tables contains data on the total dollar value of Private Health Insurance (PHI) payments for personal health care (i.e., expenditures on benefits) and the total dollar value of insurance premiums. Table 13 in the NHE tables contains data on premiums collected by private health insurers on a per enrollee basis.

\(^{143}\) [http://www.cms.hhs.gov/NationalHealthExpendData/02_NationalHealthAccountsHistorical.asp](http://www.cms.hhs.gov/NationalHealthExpendData/02_NationalHealthAccountsHistorical.asp)

From 1999–2007, the growth rate in total expenditures by private insurers on personal healthcare (i.e., payments by private insurers on behalf of enrollees) grew at an average rate of 7.9%. This is almost identical to the 8.0% growth rate in per enrollee premiums over the same period. If the difference between the figures 7.9% and 8.0% is meaningful, rather than the result of rounding, this indicates that 98.75% of the increase in per enrollee premiums since 1999 is explained purely by increased payments to healthcare providers, pharmaceutical companies, and medical equipment manufacturers.\(^{145}\)

The data on premiums from the Kaiser/HRET survey show an average increase in individual and family premiums that is approximately 19% larger than the increase implied by the per enrollee figures from the NHE. There are at least two explanations for this difference, and both suggest that the NHE data are the more reliable basis for assessing increases in premiums. First, Census estimates indicate that from 2000 to 2007, average family size increased from 3.14 to 3.19.\(^{146}\)

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\(^{145}\) The NHE tables itemize personal health care expenditures into 10 distinct categories: Physician and Clinical Services, Other Professional Services, Dental Services, Other Personal Health Care, Home Health Care, Nursing Home Care, Prescription Drugs, Other Non-durable Medical Products, and Durable Medical Equipment.

While this difference may appear trivial, it implies one additional insured person for every 20 families with family coverage. To the extent that increases in family premiums simply reflect increases in family size, the increase in family premiums will overstate the per enrollee increase in premium expenditures. An increase in premiums stemming from an increase in family size would reflect the costs of covering additional persons and would not constitute an actual price increase. Second, the NHE figures are constructed by combining the results of three data sources: (1) insurance industry data from A.M. Best and other sources, (2) provider and household survey data, and (3) surveys of employers and individuals. CMS also cross-checks its results against alternative sources, which include but are not limited to Kaiser/HRET. Because the NHE data are more extensively sourced, researched, and cross-checked, they are likely to be more accurate.

147 More than one-third of those who purchase insurance through their employers select family coverage. Kaiser/HRET 2008 Survey, Ex. 3.9.