Exhibit S

UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF MICHIGAN

UNITED STATES OF AMERICA and STATE OF MICHIGAN, *Plaintiffs,* v. HILLSDALE COMMUNITY HEALTH CENTER, W.A. FOOTE MEMORIAL HOSPITAL D/B/A ALLEGIANCE HEALTH, COMMUNITY HEALTH CENTER OF BRANCH COUNTY, and PROMEDICA HEALTH SYSTEM, INC., *Defendants*.	Case No. 5:15-cv-12311-JEL-DRG Judge Judith E. Levy Magistrate Judge David R. Grand

Expert Report of Dr. Tasneem Chipty

December 5, 2016

CONFIDENTIAL – SUBJECT TO PROTECTIVE ORDER
IN CASE NO. 5:15-cv-12311-JEL-DRG (E.D. MICH.)

need to consume."[59] Thus, one should not expect the Agreement to affect total inpatient discharges (or outpatient volumes) or insurance reimbursement rates. But that does not mean the Agreement had no effect on the health and welfare of Hillsdale County residents.

36. Given both the nature of healthcare markets and the nature of the conspiracy, many of the indicia Dr. Manning used to assess any market-wide impacts are irrelevant. Furthermore, given the market realities and the limitations of the available data, one should evaluate with care analysis purporting not to find evidence of effect. In situations like this, one often relies on other evidence that provides a more reliable basis for evaluating competitive effects. For this reason, I have framed my analysis around the economic principle that customer allocation agreements are almost always anticompetitive as well as documentary evidence that Allegiance and HCHC's behavior was inconsistent with independent action, residents of Hillsdale County had less access to free or subsidized giveaways of valuable health services, and there was no procompetitive justification for their behavior. In my opinion, this combination of economic principles and evidence raises serious concerns about Dr. Manning's analysis of the competitive effects of the Agreement.

A. Dr. Manning Looks at the Wrong Measure of Output

37. As a matter of economics, firms engage in profit maximizing behavior. In a traditional market, where firms set price and consumers make purchase decisions based on price, colluding firms attempt to sustain higher than competitive price levels and restrict market output to raise profits. As I have explained, healthcare services are different from many standard goods in important ways.[60] One of these is how to think of "output" in the second stage of competition, where the marketing restrictions affect patient choices.

38. Given the structure of the healthcare marketplace, the effects of Allegiance's marketing restrictions are likely to be a reduction in various types of access, including a reduction in health education and information, less informed healthcare choices, fewer diagnostic screenings, and lower quality of care. Of these, there is direct evidence that Allegiance offered fewer screenings and educational events to residents of Hillsdale County. At these events,

[59] Manning Report, ¶114.

[60] Chipty Report, ¶13-15.

Allegiance provides free or subsidized giveaways of valuable health services to attendees.[61] The data show that by this measure, there was likely an output reduction in Hillsdale County. Dr. Manning presents no evidence on the other likely effects on consumers. For example, without the marketing restrictions, patients would have been able to make more informed healthcare choices. In other words, they would be more likely to select a healthcare provider that better meets their medical and personal convenience needs. Thus, one measure of the effect of the conspiracy on output is the quality of the match between the hospital chosen and the hospital that would have been chosen absent the marketing restrictions. Dr. Manning presents no evidence on this.

39. Dr. Manning's discussion of output reduction focuses largely on hospital shares.[62] It is unclear how she relates these shares to relevant measures of output. Simply observing an increase in the share of patients going to Allegiance does not rule out the possibility that the Agreement harmed competition or reduced relevant measures of output. Even putting aside this predicate issue, there remain several problems with her share analysis which render them inappropriate and misleading.

1. Dr. Manning's Inferences Based on Allegiance's Market Share Are Inappropriate and Misleading

40. Dr. Manning studies trends in Allegiance's ability to capture patient volume from Hillsdale County, relative to other area-hospitals.[63] She produces a series of tables and charts showing that HCHC has generally lost inpatient volume beginning in 2008, and that Allegiance and other area-hospitals have picked up this volume.

41. As an example, I reproduce below Dr. Manning's Figure 9, which shows Hillsdale County discharges for overlap services from 2003 to early 2016.

[61] Chipty Report, ¶28.

[62] Manning Report, ¶¶110-119.

[63] Manning Report, ¶¶108-138.

49. Dr. Manning presents no analysis of price effects, even though there are obvious price effects from the fact that Hillsdale County residents were denied access to free or subsidized health screenings because of the Agreement. Dr. Manning says that: (a) I do not address price of healthcare services at HCHC; (b) I provide theoretical arguments for a price increase; and (c) any inferences I make from hospital consolidation are irrelevant.[75] To the contrary, I did address the likelihood and nature of price effects in my first report. I explained the widely-understood economic principle that conduct that suppresses competition always results in some form of a price increase to consumers, though not necessarily an increase in the insurance reimbursement. I explained that as a result of the marketing restrictions, some patients had to pay for health screenings they might have received for free or on a subsidized basis and some patients may have travelled significantly longer distances than they might have otherwise. I also explained that as a result of the marketing restrictions, HCHC faced less pressure to shorten the wait times that HCHC's Mr. Anderson acknowledged patients face at his hospital.[76] These effects translate directly to increases in the quality adjusted cost (or "price") borne by the patient to consume a healthcare service. Finally, I note that nowhere in my first report did I make inferences about price from hospital consolidation.

C. Relevant Quality Metrics Are Unavailable

50. Agreements to allocate customers through marketing restrictions will likely dampen competition and thereby likely result in lower quality of service.[77] There are specific relevant

[75] Manning Report, ¶149.

[76] Deposition of Duke Anderson, January 27, 2015, pp. 189-191 (In response to a question about why Allegiance is able to steal patients from Hillsdale County physicians, "A: One of the things -- one of the dynamics that Allegiance is doing more effectively that opened Hillsdale up for losing patients from local docs is we we've got a medical staff that is very set in their ways. They are very -- I would have thought that with, you know, backing off -- family practice, internal medicine, backing off from their hospital responsibilities, they want to get back to the office and maybe expand their hours, see more patients, and that really isn't occurring. And it's difficult for -- if I wanted to go in and see my own doctor, I need a physical, but I have to wait six weeks to see the doctor. Now, I can see a mid level tomorrow, but if I want a physical from a doctor, that's problematic. They haven't adjusted collectively to more of an urgent care mind-set. Allegiance, I perceive, has, as others."); *see also* Deposition of Duke Anderson, January 27, 2015, p. 192 ("Q: Is Allegiance more of a concern for Hillsdale physicians than other nearby hospitals? A: I would say right now, yes. Q: Why is that…[?] A: I think geography, but then some of the things I was just mentioning. You know, they've adapted and adopted some of the more current practices of getting patients, reduce the wait times, get people in quicker, and we [referencing HCHC] just haven't. We struggle.").

[77] Chipty Report, ¶20.

VIII. Other Responses to Dr. Manning's Analysis

A. Formal Market Definition is Not Required Here to Assess Competitive Effects

62. Dr. Manning says that "plaintiffs' experts do not define a relevant geographic market or a relevant product market in which to assess competitive effects"[107] or "at a minimum, the contours of the relevant product market in which Plaintiffs' experts are assessing competitive effects."[108] I disagree. I did describe the contours of the area in which competitive effects are likely to be felt. I stated in various places in my first report, including in the summary of opinions, that the Agreement has had the effect of suppressing competition for general acute care inpatient services needed by patients residing in Hillsdale County.[109] As an example, I said:[110]

> "Given these facts, economic principles indicate that residents of Hillsdale County are likely to be harmed by conduct, like the Agreement, that dampens competition between Allegiance and HCHC for general acute care inpatient services."

Furthermore, formal market definition is not always necessary for assessing competitive effects.

63. As described in the Merger Guidelines, from which the concept and role of market definition is best understood, there are many ways to evaluate the likely competitive effects of a merger or acquisition, only some of which rely on market definition:[111]

> "The Agencies' analysis need not start with market definition. Some of the analytical tools used by the Agencies to assess competitive effects do not rely on market definition, although

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107 Manning Report, ¶22.

108 Manning Report, ¶33.

109 Chipty Report, ¶6.

110 Chipty Report, ¶12.

111 U.S. Department of Justice and Federal Trade Commission Horizontal Merger Guidelines, issued August 19, 2010, available at https://www.justice.gov/atr/horizontal-merger-guidelines-08192010#4, site visited November 23, 2016 (hereafter "Merger Guidelines"), § 2, pp. 2-4.