17 June 2011

President Barack Obama The White House 1600 Pennsylvania Avenue Washington DC 20500

Cc: Austan Goolsbee, Chairman, President's Council of Economic Advisors
Cass Sunstein, Administrator, White House Office of Information and Regulatory Affairs
Kathleen Sebelius, Secretary, Department of Health and Human Services

Dear President Obama,

We are economists, computer scientists and engineers with expertise in the theory and practice of auctions.<sup>1</sup> In September 2010, many of us signed a letter to Congressional leaders pointing out the numerous fatal flaws in the current Medicare competitive bidding program for durable medical equipment (DME). We also emphasized that the flaws could easily be fixed by adopting modern auction methods that have been developed over the last fifteen years and are now well-understood.

The flaws in the auctions administered by the Centers for Medicare and Medicaid Services (CMS) are numerous. The use of non-binding bids together with setting the price equal to the median of the winning bids provides a strong incentive for low-ball bids—submitting bids dramatically below actual cost. This leads to complete market failure in theory and partial market failure in the lab. Another problem is the lack of transparency. For example, bidder quantities are chosen arbitrarily by CMS, enabling a wide range of prices to emerge that have no relation to competitive market prices.

We write today, nine months later, to report that—much to our dismay—there are to date no signs that CMS has responded to the professional opinions of auction experts or taken any serious steps to fix the obvious flaws to the competitive bidding program. Rather CMS continues to recite the mantra that all is well and that CMS does not plan to make any changes to the program as it expands from nine pilots to the entire United States.<sup>2</sup>

We find this especially distressing and unreasonable given your Executive Order of 18 January 2011 on regulation. In that order, you lay out numerous sensible principles of regulation that administrative agencies must follow. The CMS competitive bidding program violates all of the principles, especially the principles of transparency and of basing regulations on the best available science. Indeed, the current program is the antithesis of science and contradicts all that is known about proper market design.

Since the writing of our letter in September, several of us have done further detailed scientific study to explore the properties of the CMS design and contrast it to modern efficient auctions. The

<sup>1</sup> The views expressed here are our own and do not represent the views of any organization. None of us are paid to provide our views; we provide our independent views as experts who understand the advantages and challenges of market methods. For additional information please contact <a href="Peter Cramton">Peter Cramton</a>, University of Maryland, pcramton@gmail.com.

<sup>&</sup>lt;sup>2</sup> For example, "Laurence Wilson, a Medicare official overseeing the bidding process, said his agency is `very pleased' with how the nine-city rollout has gone and has no major changes scheduled before the new system starts in large cities." (CaliforniaWatch.org, 26 May 2011, Christina Jewett)

findings are dramatic and illustrate the power of science to inform auction design. Specifically, auction theory was used to demonstrate the poor incentive properties of the CMS design and how these lead to poor outcomes.<sup>3</sup> Laboratory experiments were conducted at Caltech and the University of Maryland that demonstrate that these poor theoretical properties are observed in the lab. Moreover, simple efficient auctions perform extremely well in both theory and in the economic laboratory.<sup>4</sup> Finally, some of us have studied extensively the Medicare setting, speaking with hundreds of DME providers and beneficiaries, and have developed a modern auction design for the setting that is consistent with the best practice and market design methodologies.<sup>5</sup>

This design step was far from a theoretical exercise. On 1 April 2011, a Medicare auction conference was conducted at the University of Maryland to show how the modern auction methods work and to conduct a nearly full-scale demonstration of an efficient auction. Over 100 leaders in government and the DME industry attended the event. The results are documented at <a href="https://www.cramton.umd.edu/health-care">www.cramton.umd.edu/health-care</a>, including a complete video and transcript of the event. The mock auction achieved an auction efficiency of 97%. In sharp contrast, the CMS auction exhibited efficiencies well below 50% in the laboratory, even in simplified environments. Despite these sharp results, CMS continues to assert that all is well and that no significant changes are required.

The problems with the CMS auction grow worse upon closer inspection. The complete lack of transparency is inappropriate for a government auction. For example, we now know that CMS has almost complete discretion with respect to setting prices in a nontransparent way. CMS can and did manipulate the quantities reported by bidders during qualification. These quantities are essential to forming the supply curve, which ultimately sets the price in each product-region. To this date we know little about what quantities were used in the price determination. As a result of this lack of transparency, it is now clear that the CMS design is not an auction at all but an arbitrary pricing process.

Given that nine months have passed and given the disregard by CMS of the market design recommendations received from recognized experts, we call upon the executive branch to direct CMS to proceed otherwise. We also ask that you consider supporting new legislation that requires the Secretary of Health and Human Services to conduct efficient Medicare auctions, consistent with the best practice and the best science.

Maryland, June 2011. [pdf]

<sup>&</sup>lt;sup>3</sup> Cramton, Peter, Sean Ellermeyer, and Brett E. Katzman, "Designed to Fail: The Medicare Auction for Durable Medical Equipment," Working Paper, University of Maryland, March 2011. [pdf]

 <sup>&</sup>lt;sup>4</sup> Merlob, Brian, Charles R. Plott, and Yuanjun Zhang, "The CMS Auction: Experimental Studies of a Median-Bid Procurement Auction with Non-Binding Bids," Working Paper, California Institute of Technology, April 2011. [pdf]
 <sup>5</sup> Cramton, Peter, "Auction Design for Medicare Durable Medical Equipment," Working Paper, University of

<sup>&</sup>lt;sup>6</sup> Cramton, Peter, Ulrich Gall, and Pacharasut Sujarittanonta, "An Auction for Medicare Durable Medical Equipment: Evidence from an Industry Mock Auction," Working Paper, University of Maryland, April 2011. [pdf]

<sup>&</sup>lt;sup>7</sup> Tom Bradley, Chief of the Medicare Cost Estimates Unit at the Congressional Budget Office, describes this manipulation in his remarks at the Medicare Auction Conference at minute 49:13, "What they did was they selected bidders up to the quantity well over the amount needed to clear—to serve the given market, and then from that vastly expanded pool, they selected the median. Fundamentally, that's an arbitrary number. It's a number that bears no relationship to the market clearing price." [pdf]

There is much at stake. Unfunded Medicare expenses are estimated to be in the tens of trillions of dollars going forward. Medicare is unsustainable without the introduction of innovative market methods and other fundamental reforms. The DME auction program represents an important first step, especially since failures in homecare will inevitably lead to much more expensive care at the hospital.

We believe that proper design and implementation of market methods can bring gains to all interested parties: Medicare beneficiaries benefit from receiving the quality goods and services they need, Medicare providers benefit from being paid sustainable competitive prices for the quality goods and services they deliver, taxpayers benefit by paying the least-cost sustainable prices for these products, and CMS benefits from the numerous efficiencies that result from conducting an effective program, largely free of complaint, fraud, and corruption.

We believe that government plays an important role in establishing effective market rules. For the Medicare auctions, the impediments to reform are not special interests or a lack of knowledge, but bureaucratic inertia. This is an important setting and change of the prior administration's regulations is required to contain Medicare costs and assure quality services for Medicare beneficiaries. We are counting on your leadership to bring effective reform.

Many thanks for your thoughtful consideration of our concerns.

Sincerely,

[The following are economists, computer scientists, and engineers with expertise in the design of auctions and market mechanisms. Information on each of us, including our auction-related research, can be found with an Internet search of name and affiliation.]

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