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. 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.

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

---

1 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 Peter Cramton, University of Maryland, pcramton@gmail.com.

2 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. 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. 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.

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 www.cramton.umd.edu/health-care, 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.

7 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.]

Dilip Abreu
Princeton University
Nikhil Agarwal
Harvard University
Victor Aguirregabiria
University of Toronto
Anand Anandalingam
University of Maryland
Kenneth Arrow
Stanford University
Itai Ashlagi
MIT
Susan Athey
Harvard University
Lawrence M. Ausubel
University of Maryland
Chris Avery
Harvard University
Ian Ayres
Yale University
Kerry Back
Rice University
Patrick Bajari
University of Minnesota
Sandeep Baliga
Northwestern University
Michael Ball
University of Maryland
Ravi Bapna
University of Minnesota
Oleg Baranov
University of Colorado
David Baron
Stanford University
Johannes Bauer
Michigan State University
Michael R. Baye
Indiana University
Coleman Bazelion
Brattle Group
Damian Beil
University of Michigan
Dirk Bergemann
Yale University
<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
<th>Name</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terry Johnson</td>
<td>University of Notre Dame</td>
<td>John List</td>
<td>University of Chicago</td>
</tr>
<tr>
<td>John Kagel</td>
<td>Ohio State University</td>
<td>Shmuel Oren</td>
<td>University of California Berkeley</td>
</tr>
<tr>
<td>Charles Kahn</td>
<td>University of Illinois</td>
<td>Michael Ostrovsky</td>
<td>Stanford University</td>
</tr>
<tr>
<td>Ehud Kalai</td>
<td>Northwestern University</td>
<td>Marion Ott</td>
<td>RWTH Aachen University</td>
</tr>
<tr>
<td>Jakub Kastl</td>
<td>Stanford University</td>
<td>Erkut Ozbay</td>
<td>University of Maryland</td>
</tr>
<tr>
<td>Elena Katok</td>
<td>Penn State University</td>
<td>Ali Haydar Özer</td>
<td>Bogazici University</td>
</tr>
<tr>
<td>Sachin Katti</td>
<td>Stanford University</td>
<td>Marco Pagnozzi</td>
<td>University of Naples</td>
</tr>
<tr>
<td>Bret Katsman</td>
<td>Kennesaw State University</td>
<td>Mallesh Pai</td>
<td>University of Pennsylvania</td>
</tr>
<tr>
<td>Paul Kleindorfer</td>
<td>University of Pennsylvania</td>
<td>Ariel Pakes</td>
<td>Harvard University</td>
</tr>
<tr>
<td>Eiichiro Kazumori</td>
<td>The State University of New York</td>
<td>Thomas Palfrey</td>
<td>California Institute of Technology</td>
</tr>
<tr>
<td>Bryan Keating</td>
<td>Compass Lexecon</td>
<td>Minjing Park</td>
<td>University of California Berkeley</td>
</tr>
<tr>
<td>Paul Klementor</td>
<td>Stanford University</td>
<td>David Parkes</td>
<td>Harvard University</td>
</tr>
<tr>
<td>Scott Duke Kommer</td>
<td>Harvard University</td>
<td>Sasa Pekect</td>
<td>Duke University</td>
</tr>
<tr>
<td>Kala Krishna</td>
<td>Pennsylvania State University</td>
<td>Motty Perry</td>
<td>University of Warwick</td>
</tr>
<tr>
<td>John Lai</td>
<td>Harvard University</td>
<td>Nicola Persico</td>
<td>New York University</td>
</tr>
<tr>
<td>Michael Landsberger</td>
<td>University of Haifa</td>
<td>Martin Pesendorfer</td>
<td>London School of Economics</td>
</tr>
<tr>
<td>John Ledyard</td>
<td>California Institute of Technology</td>
<td>Michael Peters</td>
<td>University of British Columbia</td>
</tr>
<tr>
<td>William Lehr</td>
<td>MIT</td>
<td>Charles Plott</td>
<td>California Institute of Technology</td>
</tr>
<tr>
<td>Jonathan Levin</td>
<td>Stanford University</td>
<td>Dave Porter</td>
<td>Chapman University</td>
</tr>
<tr>
<td>David Levine</td>
<td>Washington University in St. Louis</td>
<td>Robert Porter</td>
<td>Northwestern University</td>
</tr>
<tr>
<td>Gregory Lewis</td>
<td>Harvard University</td>
<td>Andrew Postlewaite</td>
<td>University of Pennsylvania</td>
</tr>
<tr>
<td>Tracy Lewis</td>
<td>Duke University</td>
<td>Marek Pycia</td>
<td>UCLA</td>
</tr>
<tr>
<td>Kevin Leyton-Brown</td>
<td>University of British Columbia</td>
<td>Daniel Quint</td>
<td>University of Wisconsin</td>
</tr>
<tr>
<td>Yuanchuan Lien</td>
<td>Hong Kong Univ. of Science &amp; Tech.</td>
<td>S. Raghavan</td>
<td>University of Maryland</td>
</tr>
<tr>
<td>Barton Lipman</td>
<td>Boston University</td>
<td>Eric Rasmusen</td>
<td>Indiana University</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Letter from 244 Concerned Auction Experts on Medicare Competitive Bidding Program

Stephen Rassenti
Chapman University

Yoav Shoham
Stanford University

Steven R. Williams
University of Illinois

Philip J. Reny
University of Chicago

Martin Shubik
Yale University

Bart Wilson
Chapman University

John Riley
UCLA

Matthew Shum
California Institute of Technology

Robert Wilson
Stanford University

Michael Riordan
Columbia University

Andrzej Skrzypacz
Stanford University

Brad Wimmer
University of Nevada, Las Vegas

Jacques Robert
HEC Montreal

Joel Sobel
University of California San Diego

Catherine Walfram
University of California Berkeley

Donald Roberts
Stanford University

Tayfun Sonmez
Boston College

John Wooders
University of Arizona

James Roberts
Duke University

Jan Stallaert
University of Connecticut

Glenn Woroch
University of California Berkeley

Gregory Rosston
Stanford University

Richard Steinberg
London School of Economics

D.J. Wu
Georgia Tech

Marzena Rostek
University of Wisconsin

Steven Stoft
Global Energy Policy Center

Dennis Yao
Harvard University

Al Roth
Harvard University

Jeroen Swinkels
Northwestern University

Lixin Ye
Ohio State University

Harvard University

John Rust
University of Maryland

Steven Tadelis
University of California Berkeley

Pai-Ling Yin
MIT

Maher Said
Washington University in St. Louis

Robert J. Thomas
Cornell University

Jaime Zender
University of Colorado

David Salant
Toulouse School of Economics

Utku Unver
Boston College

academic institutions

Touloose School of Economics

Eric Van Damme
Yale University

William Samuelson
Boston University

Timonthy van Zandt
INSEAD

Margaret Virginia

William Samuelson
Carnegie Mellon University

S. Viswanathan
Duke University

Pallab Sanyal
George Mason University

Rakesh Vohra
Northwestern University

Northwestern University

Mark Satterthwaite
Michael Waldman

Cornell University

Scott Savage
University of Colorado

Mark Walker
University of Arizona

University of Colorado

Thomas C. Schelling
University of Maryland

Ruqu Wang
Queen's University

William Schulze
Cornell University

Robert Weber
Northwestern University

Cornell University

Alan Schwartz
Yale University

Gabriel Weintraub
Columbia University

Sean Schwartz
Kennesaw State University

Michael Wellman
University of Michigan

Ilya Segal
Stanford University

Marek Weretka
University of Wisconsin

Sven Seuken
Harvard University

Simon Wilkie
University of Southern California