A proposed design for Medicare DME auctions

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CMS design flaws
An efficient “clearing-price auction”: demand = 7; price = 8\textsuperscript{th} lowest bid

FIRST EXCLUDED BID

This is how markets work; it is the most common auction format.
Inefficient CMS auction:
demand = 7; price = 4\textsuperscript{th} lowest bid

This CMS design has never been used anywhere.
median pricing

+ non-binding bids

= low-ball bids
Lack of transparency

• Winners not disclosed until 1 year after bids taken in November 2009
• Unclear quality standards
• Unclear performance obligation
• Unclear how quantities are determined
Pricing is arbitrary, since bidder quantities determined in non-transparent way by CMS

Median = $7 when CMS does not discount quantities at all.
Pricing is arbitrary, since bidder quantities determined in non-transparent way by CMS.

Median = $12 when CMS discounts quantities by 50%.
Evidence of program failure

• Theory
• Experiment
• Field
Competitive bidding can result in large cost reductions without sacrificing quality, but it must be done right!
Proposed design addresses flaws

• Bids are binding commitments
  – Rigorous qualification one month before auction
  – Bid bond proportional to bidder’s capacity
  – Performance bond proportional to a winner’s capacity

• Auction establishes clearing price for each product in each region
Capacities based on historic supply

• Each qualified new provider is assigned a capacity of 1 block (about 1 percent)

• Any provider may supply more than its capacity, but its capacity is assumed in matching supply and demand and in setting performance obligations

• Capacities are determined in objective manner
Auction competition comes from new entrants

• Given relatively low entry costs, especially from providers supplying in other regions or other categories, ample new entry can be expected at prices above competitive levels

• Financial guarantees ensure bidders exit at prices below competitive levels
Winning bidders and prices

• As soon as supply falls to 100 blocks or less, the clearing price is set at the exit bid of the bidder that caused supply to fall to 100 or less

• Each bidder still “in” wins its capacity

• If supply is less than 100 blocks, the blocks won is scaled up to 100/Supply
Post-auction competition motivates quality

• After the auction, the winners compete for Medicare beneficiaries by offering quality products and services
• Medicare beneficiary choice is an important driver to motivate providers to provide high quality products and services
Prices of individual products are relative to price of lead product in category

- In qualification stage, for each category of interest, each bidder reports relative price of each product as a percentage of lead product’s price

- Auctioneer computes relative price index for category as the capacity-weighted average of bidder reports

- Auction determines price of each lead product in each category; other individual product prices are determined from the relative price index
Product categories, products, and regions should be re-optimized for new approach.

- Approach can easily accommodate more product categories, products, and regions.
- Optimization of categories, products, and regions is an essential task in the product design step with major input from HME providers.
Version 1: 100% auctioned on rotating basis

- Each year one-third of regions are auctioned with 3-year contracts
  - 3 groups of regions (West, Central, East)
  - 1 group auctioned each year
  - Establishes competitive prices in area for 3 years
  - Losers are excluded from supply in area
    - Provides incentive to stay in auction
Preferred variation:
Auction a representative 10% each year

• Approach does not disrupt market structure
  – Emphasis is on establishing competitive prices, rather than excluding suppliers

  Apply competitive bid-based prices to non-auctioned areas

  – Auction a representative 10% of regions each year
    • Auction establishes prices in remaining 80% with a simple econometric model based on the two most recent auctions
    • Each year a different 10% is used, so over 10 years each region is auctioned once

  – In auctioned regions, only winners can supply during the two-year commitment period
    • Winners still must compete within the region

  – Any certified supplier can supply in any non-auctioned region (80% of country)
Auction is easy for bidders

• Price process is easy for bidders to manage
  – Bidders interested in a particular category can focus on that category in all areas
  – Bidders interested in a particular region can focus on that area in all categories
  – Bidders with other interests can focus on the most relevant categories and areas for them

• Proxy bids allow small bidders to bid as in a sealed-bid auction
Auction is highly transparent

• Qualification and financial guarantees are reported publicly well in advance of the auction
• Capacities determined in objective manner
• Auction rules including product definitions, performance obligations, and penalties are known two months before auction
• Following each bidding round, excess supply at current prices as well as prices for next round are publicly announced
• Winners and quantity won are immediately announced at the conclusion of the auction
• An independent market monitor reports on auction outcome and any problems within two weeks of auction end
Proposed design based on proven methods

• Clearing price *approach used almost universally across all countries and industries*

• Simultaneous descending clock format has outstanding price discovery
  – *Approach proven in hundreds of auctions for spectrum, electricity, gas, diamonds, emission allowances, etc.*
Proposed design based on proven methods

• Bidders are bound by bid bonds and performance bonds to guarantee the integrity of the bidding, \textit{as in all well run auctions}

• \textit{Transparent auctions commonly used in highly successful government auctions}

• \textit{In sharp contrast, the CMS design with non-binding bids and the median pricing rule has never been used in any country or industry}