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Marilyn Tavenner
Administrator
Centers for Medicare & Medicaid Services, Department of Health and Human Services
Room 445–G, Hubert H. Humphrey
200 Independence Avenue, SW
Washington, DC 20201

Cc: Patrick Conway, Chief Medical Officer and Director, Office of Clinical Standards and Quality
Louis Jacques, Director, Coverage and Analysis Group

Re: Coverage with Evidence Development Public Solicitation

Dear Ms. Tavenner,

We appreciate the opportunity to provide suggestions on how to improve Coverage with Evidence Development (CED) in the Medicare program. We believe that CED is a policy tool that is of vital importance to improve both the quality and efficiency of the program, and its use is consistent with the concept of the learning healthcare system. While Medicare’s experience with CED to date has fallen short of the expectations for this policy tool, we firmly believe that the lessons learned from this work can guide significant improvements. We therefore applaud the Agency for signaling its continuing interest in refining and applying CED, and for requesting perspectives and recommendations from the public on this promising policy tool.

It is our understanding that the primary motivation for CED was an effort to reconcile the tension between having rapid access to new, promising health interventions, while generating reliable information on the real world benefits and risks of those services. In many cases, health technologies are associated with important uncertainties about how they will perform under usual conditions of use, and in comparison to existing alternative interventions. CED offers a mechanism through which these technologies are made available to Medicare beneficiaries while these important additional questions are being answered. The evidence generated through this process should be useful for the Medicare program to reconsider
coverage policy when studies are completed, and provide patients and clinicians with reliable information to assist in making health care choices.

While reducing health care spending is not the primary or direct goal of CED, this policy tool should also help to reduce the frequency of broad dissemination of health technologies for which the risks and benefits are uncertain. Recent examples of this include proton beam therapy for prostate cancer, vertebroplasty for vertebral compression fracture, and revascularization therapy for chronic stable angina. For each of these technologies, substantial debate exists about whether they provide meaningful clinical benefits, yet each of them exposes Medicare beneficiaries to potential morbidity, and they result in significant Medicare spending. Thoughtful and deliberate use of CED at the time of introduction of such technologies could expedite the generation of evidence about the performance of these technologies, ensuring that they are more likely to be used widely when they provide meaningful improvements in health outcomes.

Several of us at the Center for Medical Technology Policy (CMTP) were involved in conceptualizing and implementing the early experiments with Medicare CED, and we have continued to follow CED-related activities closely. We are familiar with many of the statutory, financial, operational, and political challenges that CMS faces in developing a robust and effective approach to CED. ¹

Through recent work focused on developing CED initiatives in the private health insurance sector, we have gained further insight into obstacles and potential solutions to the implementation of CED that have some relevance to CMS efforts.² Several reports and publications summarizing this work are listed at the end of this letter.

Based on these experiences and analysis, we offer the following suggestions for developing a more systematic, effective and sustainable approach to CED.

**Develop a structured and transparent process for selecting and prioritizing topics for CED.**

Initiating a CED policy entails investing scarce public or private resources to support further data collection and analysis. As such, this policy tool should be applied where it is likely to produce the greatest public health benefit. Not all technologies are good candidates for CED. CMS’ experience to date with CED has been hampered by the lack of a well-defined and consistent approach to selecting topics, including criteria for determining which items and services would be appropriate. CED initiatives have been selected on an ‘ad hoc’ basis, often driven by specific policy urgencies in the absence of any overarching framework that would
focus CED efforts on issues with the greatest potential public health benefit. Some of the difficulties in implementing appropriate studies, such as occurred with the CED policy for off-label uses of colorectal cancer drugs, have been related to choice of topic.

The most critical element of the priority setting process would be to ensure that the perspectives and experience of patients, consumers and clinicians are meaningfully considered. To support a more transparent and formal topic selection process, Medicare could make use of the Medicare Coverage and Evidence Development Committee (MedCAC). Using the MedCAC, Medicare made an attempt to identify its own priorities in 2007, but the process could be improved. The panel and/or invited guests should be selected to include persons with a specific expertise in geriatrics or clinical specialties that could be most relevant to the Medicare population, as well as patients, healthcare systems administrators, and representatives from sister agencies, like the Agency for Healthcare Research and Quality (AHRQ), the National Institutes of Health (NIH), the Veterans Health Administration, etc. Such a panel should be selected to be uniquely qualified to understand Medicare programmatic and beneficiary needs.

We feel it is important for the agency to develop or commission a priority setting process that is specific to the elderly, chronically ill, and disabled populations it serves and where there is highest potential for improving efficiency in the Medicare program. Existing groups that could assist CMS with this activity would include AHRQ, IOM, and a variety of independent non-profit groups that work effectively with a range of experts and stakeholders.

As noted below, we also believe that Medicare CED policy would ultimately benefit from being linked to similar policy approaches of other payers, including Medicaid and private health plans. For many health interventions, the affected population is broader than the Medicare population, and CED studies would be more representative of the affected population if there was coordination with activities outside of Medicare. As this is pursued, it will be important to consider priority setting mechanisms that address public health needs beyond those of the Medicare population. It would be useful to coordinate with priority setting activities of other groups to the greatest extent possible, such as the NIH, AHRQ and eventually the Patient-Centered Outcomes Research Institute (PCORI).

Formal criteria for selection of topics should be established. Through our experience in setting priorities for CED in the private sector, we recommend the following:

- Market factors suggest that in the absence of a CED, relevant evidence would not become available until after the technology is already in wide use, if ever;
• The technology is at the right stage of the diffusion process so that the proposed research could be used to inform decision-makers determining coverage. It is politically difficult to rescind coverage, but may be important for protecting patient health, such as was the case for Autologous Bone Marrow Transplant (ABMT) for metastatic breast cancer (Technologies that are already in widespread use may not be the best candidates, unless there are strong signals of potential harms).

• Tentative study designs can be identified and are feasible, timely, and affordable (Topics that will require lengthy trials that would delay access for many years may not be good candidates.);

• If randomization is the only appropriate way to answer the research question, the technology should not be the sole treatment option for a serious condition that is also life-threatening;

• There is a high degree of pressure on payers to cover this technology, even with limited evidence;

• There are no technologies in development that are likely to substantially alter the potential value of a CED study for a particular technology.

As selecting technologies early in the diffusion process is important for the success of a CED initiative, CMS should develop or commission a horizon scanning function that actively looks for promising technologies that may be suitable candidates for CED. The AHRQ funded an external non-profit group (ECRI) to develop a horizon scanning function, and this may be useful in the early identification of potential CED topics. Early identification of potential topics is essential to the success of CED, as this allows the time necessary for a structured approach to selecting high priority topics, designing adequate studies, developing workable research implementation plans, and securing adequate funding. Perhaps the most important common flaw in CED efforts to date has been insufficient time allocated to these critical steps, which can only be addressed by early identification and topic selection – a proactive rather than reactive approach to CED.

Ensure that the design of CED studies achieves a balance of validity and feasibility.

It will be essential for future CED studies to be designed to ensure that they provide credible and relevant evidence, while being feasible to conduct in a reasonable period of time. It is difficult to achieve the optimal balance when these designs are negotiated in the context of an ongoing national coverage review. In some cases, the research design and study methods for CED studies initiated by CMS have fallen short of their potential to provide useful information for clinical decision making or reimbursement. For example, the study design for the National Oncologic PET Registry (NOPR) placed a heavy emphasis on feasibility, and on establishing a
reimbursement policy framework that allowed reimbursement for FDG-PET with limited inconvenience to patients or providers. The trade-off for this approach was a study design that had limited ability to determine the clinical utility of FDG-PET for many of the covered indications. For example, the initial version of NOPR collected physician self-reporting of primary outcomes with limited validation of reported data, and no collection of long term outcomes. Later refinements to the NOPR made substantial progress in addressing these limitations. The value of similar efforts will be substantially increased if the process for study design is more systematic, receives sufficient time and focus, and includes input from a broader range of experts and stakeholders than has been the case for a number of high profile CED initiatives.

Internationally, many CED schemes have failed to date when the original aim, research design, or data collection was changed as a result of competing aims in the political arena among stakeholders. To avoid similar experiences, it would be valuable to institute procedures that allow for independent review and public input on proposed CED research designs. The MedCAC would offer one potential forum in which such dialogue could take place, and this would be a very high value use of this CMS resource. Other options to consider would be to use multi-disciplinary advisory committees or working groups convened by AHRQ, IOM, PCORI or other trusted, independent organizations in the public or private sector that are able to convene a broad range of experts and stakeholders in study design and protocol development.

As a correlate to the development of robust study designs that meet the agency’s needs, independent reviewers can recommend clear decision criteria and stop dates for when a study has either met the intended aims or should be abandoned as it is deemed unlikely to meet the agencies needs. These criteria should ultimately be decided by CMS, but should be clearly spelled out for each specific CED initiative.

**Consider policy options and designs that allow for open access.**

Most Medicare CED policies have used randomized control trials (RCTs) for study design. This limits access of the technology only to specific participants enrolled in a trial. By contrast, most European initiatives have relied on observational study designs. Understandably, there is a tension between allowing for rapid access to a promising technology and the validity of the evidence produced.

One way to address this tension when RCTs are the most appropriate study method is to pay for the experimental technology for all beneficiaries under the condition that a study is being done. This approach to CED is known as ‘only with research’, as opposed to ‘only in research’ -
the approach that has been used predominantly to date where patients are required to participate in a study in order to gain access to a treatment.

CMS could also take advantage of natural or planned policy variation across its contractors to use cluster randomization or quasi-experimental designs.

Continue use of existing statutory authorities, considering need for regulations.

As you are well aware, the statutory authority referenced as the platform for CED is complex, and has evolved over time. The agency currently cites Medicare’s general coverage authority, as established by Section 1862(a)(1)(A) and the Agency for Healthcare Research and Quality’s (AHRQ’s) research authority as established by Section 1862(a)(1)(E). CMS has also successfully used its 1995 Interagency agreement with the FDA as a mechanism to pay for certain experimental devices if they were categorized as refinements to currently covered predicate devices (Category B Devices with an Investigation Device Exemption (IDE)).

While these authorities have proven to be adequate for CMS’s initial implementation of CED, the limitations of this legal framework are likely to slow further progress. As CMS moves forward with the implementation of a more clearly defined and structured approach to CED, the uncertainty regarding the appropriate statutory authority is likely to prompt continued debate, adding additional time and complexity to the discussions. Greater reliance on the AHRQ statutory authority has a number of advantages given the technical expertise available in that organization; however the significant economic and political considerations generally associated with CED projects may not be an ideal fit with AHRQ’s primary strategic focus on scientific approaches to quality and safety.

In our view, the creation of a robust and sustainable approach to CED in the Medicare program would benefit substantially from the pursuit of rulemaking that would formalize the statutory rationale for CED, and more explicitly integrate this program with related coverage policy issues such as the coverage of routine costs for services provided in clinical trials, the IDE category B reimbursement policy, and the definition of the “reasonable and necessary” clause in 1862(a)(1)(A). While important progress can be made by issuing new guidance on CED, a formalized approach that is included in regulation would be more effective and durable.

To the extent possible, invite collaboration with private payers.

One of the major challenges in the conduct of clinical trials is inadequate patient accrual. This results in delays in obtaining the final results, added costs, and sometimes abandonment of the
trial altogether, such as the Medicare CED for off-label use of anticancer drugs for colorectal cancer. While still being cognizant of enrolling a significant subgroup of Medicare beneficiaries, collaborative efforts between Medicare and private payers could accelerate completion of these studies. Coordinated initiatives can reduce redundancies in data collection efforts underway, and can assist technology developers as they have more consistent input across a broad array of payers about the type of study design that would meet the requirements for coverage. Private payers benefit from Medicare initiatives as they can use special codes Medicare generates to track new technologies for CED. Collaboration with private payers could also help to solidify CED as a viable and accepted policy tool by the public.

**Continue your efforts to align regulatory and reimbursement decision-making about study design.**

As discussed above, our experience with CED to date indicates that it is beneficial to identify technologies early in their life cycle. To this end, we encourage CMS to explore more opportunities to work closely with the FDA to identify promising new technologies for CED and coordinate study design requirements. The FDA-CMS parallel review pilot for devices takes important initial steps in this direction. Although, this pilot program can be a vehicle for coordination with the FDA, the construct for the pilot stops short of developing a comprehensive framework for data requirements over the life of a technology. Adaptive Licensing is a staged approach to regulatory decisions that links progressively greater access to new technologies with requirements for data collection. It is the regulatory corollary to CED that begins in the pre-launch phase. Elements of adaptive licensing may be found in existing programs such as US Accelerated Approval and EU Conditional Marketing Authorization and others. Comprehensive proposals for adaptive licensing have been advanced by groups such as Health Canada, the Institute of Medicine, the President’s Council of Advisors on Science and Technology, the European Medicines Agency, and the Singapore’s Health Sciences Agency. We encourage the agency to consider incorporating elements of this strategy into their revised CED policy.

**Open the possibility to broad participation in CED across the Medicare program.**

CED is currently implemented through the National Coverage Determination (NCD) process. Under the current policy guidance, there is no flexibility for the independent contractors to initiate a CED policy. This limits the use of the policy tool to the rare national coverage decisions that are made. As the vast majority of coverage determinations are made by local contractors, we encourage CMS to allow the Medicare Administrative Contractors (MACs) to also use this potentially powerful tool, either individually, or through collaborations. In addition, many CED
policies in other countries have focused on appropriate use of outpatient prescription drugs, which are outside the purview of the NCD process under Medicare. While we recognize some of the challenges private Medicare Part D plans may have in implementing CED with their existing authority, we encourage the agency to not shut down the potential for experimentation by these plans in a revised CED policy.

Allow a flexible approach to funding.

CMS does not have the budget to support clinical research and has limited capacity to implement a well-coordinated and comprehensive CED policy. Many CED policies have not succeeded as research funders such as the NIH were not forthcoming in a timely fashion to support the needed studies.

CMS should work proactively with AHRQ and NIH when they are selecting priority topics to identify potential studies that would meet their needs and funding as early as possible. It is expected that industry will continue to play a major role in providing funds to support the recommended studies. We believe that PCORI, AHRQ or Medicare should provide a designated pool of funds to support CED studies that are unlikely to be funded entirely by a sponsor of the technology.

Conclusions

Despite some setbacks in CMS’ early implementation of CED, we remain convinced that this is a critical policy tool to improve the quality and efficiency of the Medicare program. A recent example of how CED can prove beneficial is CMS’ policy on the use of percutaneous transluminal angioplasty and stenting for prevention of a second stroke in high-risk patients. That CED policy played an essential role in expediting enrollment in an NIH-funded trial. The trial was concluded early when it became clear that stent placement was more than doubling the rate of stroke or death as compared to medical management alone.\textsuperscript{14} Without this study, Medicare patients would likely have continued to be exposed to undue risks. We look forward to seeing a revised policy and welcome informal conversations if you would like any clarifications to the points that we made in this letter.

Sincerely,
Sean Tunis and Penny Mohr on behalf of the Center for Medical Technology Policy
References

1 Tunis SR, Pearson SD. Coverage options for promising technologies: Medicare’s ‘coverage with evidence development’. Health Aff (Millwood) 2006;25:1218-30. Available at: http://content.healthaffairs.org/content/25/5/1218.long


