TO: Kerry Weems  
Acting Administrator  
Centers for Medicare & Medicaid Services

FROM: Daniel R. Levinson  
Inspector General

SUBJECT: Memorandum Report: Medicare Part D Prescription Drug Plan Sponsor Internet Web Sites: Content and Accessibility, OEI-06-06-00340

In November 2006, we notified the Centers for Medicare & Medicaid Services (CMS) that we were beginning a study of “Medicare Part D Coverage Determinations” (OEI-06-06-00340). Shortly afterward, the Office of Inspector General (OIG) learned that the Government Accountability Office had undertaken a similar study. To avoid duplication, OIG decided not to pursue the study at that time. However, in preparing to perform the study, OIG identified issues with Medicare Part D Prescription Drug Plan (PDP) sponsors’ Internet Web sites that warranted further review.

This memorandum report provides information about Medicare Part D PDP sponsors’ Internet Web sites’ compliance with Federal regulations regarding content and accessibility. OIG examined the Web sites of all 84 PDP sponsors offering drug plans within the 50 States and the District of Columbia in 2007.¹

Federal regulations require that all PDP sponsors have Web sites that include specific content about receipt and use of Medicare benefits.² Further, each Federal department and agency is required to ensure that individuals with disabilities have comparable access to information as those individuals without disabilities.³ Additionally, the Medicare Marketing Guidelines require Part D Plans to maintain Web sites that are compliant with accessibility standards for people with disabilities.⁴

¹ We excluded PDP sponsors with service areas only in Puerto Rico and U. S. territories and we did not include Medicare Advantage Prescription Drug Plans.
² 42 CFR § 423.128(d)(2).
We found that 33 percent of the 84 PDP sponsors’ Web sites we reviewed did not contain all federally required content. The most commonly omitted information pertained to enrollee disenrollment rights and responsibilities, the potential for PDP contract termination, and information related to the formulary. Using two electronic tools that allow page-level testing of Web-based information and applications, we also found that 85 percent of sponsor Web sites did not meet at least one of the Federal requirements for Web site accessibility. These problems could affect access to content by Medicare beneficiaries.

BACKGROUND

Medicare Part D: Prescription Drug Benefit
The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 created the Part D program to provide access to prescription drug coverage for individuals eligible for Medicare.5 Beneficiaries have two options. The first option is to enroll in a PDP for their drug coverage and receive all other benefits through traditional Medicare fee-for-service. The second option is to enroll in a Medicare Advantage Prescription Drug Plan (MA-PD) and receive all Medicare benefits, including drug coverage, through managed care.6 Most of the beneficiaries enrolled in Medicare Part D as of May 2007 (17 million of 25.4 million) were enrolled in PDPs.7

Part D plan sponsors are nongovernmental entities under contract with CMS to offer prescription drug benefits through PDPs, MA-PDs, PACE plans, or cost plans offering qualified prescription drug coverage.8 9 In early 2007, there were 1,875 PDPs in the United States distributed among 84 plan sponsors.10 11 The number of Medicare beneficiaries enrolled in particular PDPs varies considerably. Four plan sponsors have more than a million enrollees each, 23 plan sponsors have between 100,000 and 999,999 enrollees each, and 57 plan sponsors have fewer than 100,000 enrollees each.12

Each Part D plan sponsor is required to have mechanisms for providing information to current and prospective enrollees. These mechanisms must include a toll-free customer

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8 A PACE is a Program of All-Inclusive Care of the Elderly. 42 CFR § 460.6.
9 42 CFR § 423.4.
11 A plan sponsor may have one contract and offer multiple plans or have several contracts and offer multiple plans.
12 See footnote 7.
call center, an Internet Web site, and the provision of information in writing, upon request.\textsuperscript{13} Our review focuses on one of the required mechanisms, Internet Web sites.\textsuperscript{14}

**Content Requirements for Web Sites**

Each Part D plan sponsor’s Web site must include the information listed below about prescription drug coverage under the PDP (see Appendix A for a more detailed description):\textsuperscript{15}

- service area;
- benefits;
- ways of obtaining more information on cost-sharing requirements;
- formulary;
- addresses of network pharmacies;
- out-of-network coverage;
- grievances, reconsideration, exceptions, coverage determination, and appeal rights and procedures;
- quality assurance policies and procedures;
- disenrollment rights and responsibilities; and
- potential for contract termination.

Additionally, Part D plan sponsors must submit all of their marketing materials (including Web sites) to CMS for review of content and approval for distribution.\textsuperscript{16} Part D plan sponsors must also demonstrate to CMS that a portion of marketing resources is allocated to marketing to the disabled and beneficiaries aged 65 and over.\textsuperscript{17}

**Accessibility Requirements for Web Pages**

Web pages that make up PDP sponsor Web sites must meet certain criteria to ensure that individuals with disabilities have comparable access to information about PDPs. Federal regulation establishes 16 specific accessibility requirements for Web-based information and applications (see Appendix B).\textsuperscript{18} These requirements focus on enabling assistive technology tools designed for persons with disabilities and are particularly critical for Web sites designed specifically for Medicare beneficiaries, such as PDP sponsor Web sites. In 2000, sensory disabilities, such as blindness, deafness, or a severe vision or

\textsuperscript{13} 42 CFR § 423.128(d).
\textsuperscript{15} 42 CFR § 423.128(b).
\textsuperscript{16} 42 CFR § 423.50.
\textsuperscript{17} 42 CFR § 423.50(f)(viii)(2)(i).
\textsuperscript{18} 36 CFR § 1194.22.
hearing impairment, affected approximately 14 percent of the civilian noninstitutionalized population aged 65 years and older.19 20

Compliance with 4 of the 16 accessibility requirements can be assessed automatically, using commercially available electronic tools.21 The four requirements are:

(1) **Text equivalents.** A nontext element conveys meaning through pictures (images, graphics) or sound (audio clips). Federal regulations require that text equivalents accompany every nontext element.22 For example, an image indicating a navigational action should also have appropriate text, such as “Move to the next screen.” This is necessary because speech synthesizers and Braille displays use the text description to explain the meaning of the image.24 25 When audio clips convey instructions or information, a text equivalent, such as a transcript, must be provided to ensure that the information is available to those with auditory impairments.26

(2) **Frames.** Frames must be titled with text that facilitates frame identification and navigation.27 Frames provide a way of dividing a computer screen into distinct areas. They also can be obstacles for users with disabilities if the frames are not easily identifiable to assistive technology. For example, one use of frames is to provide navigational bars that remain in a fixed position while the content is displayed on another

20 The Census Bureau determined disability status through responses to questions about the existence of long-lasting conditions such as blindness, deafness, severe vision or hearing impairment; physical, mental, or emotional conditions lasting more than 6 months; and conditions that substantially limit one or more basic physical activities. Available online at http://www.census.gov/acs/www/Downloads/2005/usedata/Subject_Definitions.pdf#page=31 and http://www.census.gov/dmd/www/pdf/d-61b.pdf. Accessed July 26, 2007.
21 The four requirements that can be checked automatically are 36 CFR § 1194.22(a), (i), (m), and (n). All other Federal requirements require manual checks.
22 36 CFR § 1194.22(a).
24 Ibid.
27 36 CFR § 1194.22(i).
area of the screen. Users with disabilities may have difficulty navigating the page if the different areas are not clearly defined by including text titles on the frames.  

(3) **Links to plug-ins or applets.** When a Web page requires an applet, a plug-in, or some other application to enable a user to interpret page content, the page must provide a link to the necessary plug-in or applet. Some PDP sponsors’ Web site home pages use file formats that require plug-ins or applets that are downloaded and installed on the enrollee’s computer. For example, a Web page containing links to materials in Adobe Acrobat’s® Portable Document Format (PDF) must also provide a link to the plug-in needed to read the PDF file. Some Web pages may use applets to create such design features as scrolling text. The user must be able to operate the applet either by mouse or by keyboard. If not, the information is inaccessible to persons with visual disabilities who rely upon a screen reader and keyboard to navigate the site. The lack of an applet link could also affect persons with motor disabilities who must rely upon assistive devices to navigate a keyboard.

(4) **Online forms.** Online forms must be designed so that people using assistive technology may access information, field elements, and functionality that are required for completion and submission of the forms. For example, if an input box on a form is intended for receiving a user’s last name, the words “last name” (or some similar text) should appear near that input box or should be associated with it.

**Internet Usage**
The use of the Internet by older adults and persons with disabilities as a mechanism to obtain health-related information has expanded in recent years. The most recent figures available on Internet usage indicate that about 8.5 million adults aged 65 years and older in the United States (25 percent of all seniors) report using the Internet to access

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29 36 CFR § 1194.22(m).


33 36 CFR § 1194.22(n).

information. Thirty-five percent of those seniors used the Internet as a source of information on health services or practices and thirty-two percent for information on government services or agencies.

According to one survey, approximately thirty-eight percent of persons with disabilities indicated that they used the Internet. Within this group, eighty-seven percent said that they had searched for at least one health-related topic. Prior to the implementation of Part D, persons living with disabilities were reportedly just as likely as other Americans to use the Internet to search for drug information, underscoring the importance of comparable access to Web-based information.

**METHODOLOGY**

We examined the Web sites of all eighty-four PDP sponsors offering drug plans within the fifty States and the District of Columbia in 2007. Each plan sponsor is required to have a Web site containing information about all of its PDPs. To identify Web site addresses for PDP sponsors, we used Medicare.gov, which lists each PDP and associated Web site. Additionally, we verified that the Web address provided on Medicare.gov was the same address that was included in information provided to enrollees by comparing online versions of the Summary of Benefits and Evidence of Coverage to the Medicare.gov address. We calculated the proportion of beneficiaries enrolled in each PDP using enrollment figures reported by CMS as of May 2007. We conducted the review during April and May 2007.

We reviewed each Web site to determine whether the required content was available. We began by reviewing the plan sponsor’s home page, which is the starting page or front page of a Web site. When required content was not available on the home page, we reviewed other documents available through links from the home page. We considered

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36 Ibid.


39 We excluded PDP sponsors with service areas only in Puerto Rico and U.S. territories and we did not include Medicare Advantage Prescription Drug Plans.


41 See footnote 7 on p. 2.

the content available if it was present on the home page or elsewhere on the Web site. We did not assess the quality of the information or the policies and procedures described on the Web site.

We also reviewed each sponsor’s home page to assess the Web site for compliance with Federal requirements regarding accessibility. We used two electronic tools that enable page-level testing of Web-based information and applications: WebXact™ and Cynthia Says™. Both tools determine compliance with the same four Federal accessibility requirements using automated procedures. Our assessment was limited to those four requirements (i.e., text equivalents, frames, links to plug-ins or applets, and online forms). The primary assessment tool was WebXact™. We used Cynthia Says™ when the structure or design of a page prohibited an assessment by WebXact™. Although neither of the programs measures the full range of accessibility and usability issues, both identify basic design errors that could impede access to Web page content. If either of the programs identifies errors, it is reasonable to conclude that accessibility problems exist.

In addition to examining the four accessibility requirements on the 84 PDP sponsors’ home pages, we examined specific Web pages that contained information related to grievances, coverage determinations, and appeal rights for each PDP sponsor. Many Web sites included this information only through links to files in PDF. For these sites, we used WebXact™ and Cynthia Says™ to determine whether the required link to the plug-in program was available on the page containing information on grievances, coverage determinations, and appeal rights.

To determine whether any change in accessibility occurred over time, we compared 2006 and 2007 PDP sponsor home pages. We found that 68 PDP plan sponsors within the 50 States and the District of Columbia had contracts in both 2006 and 2007. We conducted reviews of the 2006 home pages using WebXact™ and Cynthia Says™ between September and November 2006.

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43 WebXact™ is an updated version of the free online tool Bobby™, an accessibility evaluation tool used in many earlier studies on Web page accessibility. Cynthia Says™ functions in a similar fashion, although it may not identify as many Web page accessibility errors as WebXact™ (Ellison, 2004). The free online service WebXact™ is no longer available, as of July 15, 2007.
45 36 CFR § 1194.22(a), (i), (m), and (n).
This study was conducted in accordance with the “Quality Standards for Inspections” issued by the President’s Council on Integrity and Efficiency and the Executive Council on Integrity and Efficiency.
RESULTS

Thirty-Three Percent of Web Sites Reviewed Did Not Contain All Required Content

Twenty-eight of the 84 PDP sponsors’ Web sites did not contain all required content (see Table 1). These 28 plan sponsors serve 39 percent of all PDP enrollees. The most commonly omitted information pertained to enrollee disenrollment rights and responsibilities, the potential for PDP contract termination, and information related to the formulary.

<table>
<thead>
<tr>
<th>Content</th>
<th>Number of Web Sites Without Content (n = 84)</th>
<th>Percentage of Web Sites Without Content</th>
<th>Percentage of Enrollees in PDPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disenrollment rights and responsibilities</td>
<td>13</td>
<td>15%</td>
<td>23%</td>
</tr>
<tr>
<td>Potential for contract termination</td>
<td>13</td>
<td>15%</td>
<td>10%</td>
</tr>
<tr>
<td>Formulary</td>
<td>13</td>
<td>15%</td>
<td>8%</td>
</tr>
<tr>
<td>Quality assurance policies and procedures</td>
<td>7</td>
<td>8%</td>
<td>7%</td>
</tr>
<tr>
<td>Benefits</td>
<td>6</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>Addresses of network pharmacies</td>
<td>5</td>
<td>6%</td>
<td>7%</td>
</tr>
<tr>
<td>Out-of-network coverage</td>
<td>4</td>
<td>5%</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Service area</td>
<td>3</td>
<td>4%</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Grievance, reconsideration, exceptions, coverage determination, and appeal rights and procedures</td>
<td>3</td>
<td>4%</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>How to obtain more information on cost-sharing requirements</td>
<td>2</td>
<td>2%</td>
<td>&lt;1%</td>
</tr>
<tr>
<td><strong>Web sites that did not contain all federally required content</strong></td>
<td><strong>28</strong></td>
<td><strong>33%</strong></td>
<td><strong>39%</strong></td>
</tr>
</tbody>
</table>

Because PDP sponsors with larger plans serve more enrollees, the absence of required information from their Web sites potentially affects more enrollees. For example, the same number of Web sites (13) lacked information about both disenrollment and
formulary. However, because of differences in the number of enrollees among those plan sponsors, the proportion of enrollees in plans with Web sites that fell short of required disenrollment information and formulary information differed between disenrollment (23 percent) and formulary (8 percent).

One of the 84 Web sites contained only information about the PDP service area, lacking the other nine required content elements. When we contacted that PDP to verify the lack of content, a customer service representative confirmed that the information is not available on the Web site and offered to send a brochure with the information.

Eighty-Five Percent of Sponsor Web Sites Did Not Meet at Least One of the Four Federal Requirements Reviewed for Accessibility

Our review, using the electronic Web page assessment tools WebXact™ and Cynthia Says™, revealed that 71 of the 84 PDP sponsors’ Web site home pages had errors related to at least one of the accessibility requirements we reviewed (see Table 2). For enrollees who have specific disabilities, PDP information on their sponsors’ Web sites could be inaccessible.

<table>
<thead>
<tr>
<th>Web-Based Information and Application</th>
<th>Number of Home Pages With Accessibility Errors (n = 84)</th>
<th>Percentage of Home Pages With Accessibility Errors</th>
<th>Percentage of Enrollees in PDPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Text equivalents</td>
<td>53</td>
<td>63%</td>
<td>78%</td>
</tr>
<tr>
<td>Online forms</td>
<td>48</td>
<td>57%</td>
<td>23%</td>
</tr>
<tr>
<td>Links to plug-ins or applets</td>
<td>16</td>
<td>19%</td>
<td>9%</td>
</tr>
<tr>
<td>Frames</td>
<td>2</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Home pages with errors associated with at least one Federal requirement for accessibility</td>
<td>71</td>
<td>85%</td>
<td>98%</td>
</tr>
</tbody>
</table>

a 36 CFR § 1194.22(a), (i), (m), and (n).
b OIG analysis of Web sites, April 1–May 31 2007.

Additionally, we compared 2006 and 2007 PDP sponsors’ home pages for the 68 plan sponsors with contracts for both years. We found little change in Web page accessibility.
Eighty-seven percent of the home pages for 2006 had errors identified in at least one of the four Federal requirements we reviewed, compared to 85 percent of the 2007 home pages.

We also analyzed Web pages with content related to grievances, coverage determinations, and appeal rights. Forty-three percent of the Web pages devoted to coverage determination used plug-ins or applets to present information but did not provide links to the plug-ins or applets. This is significantly higher than the 19 percent of Web sites with problems identified on their home pages, demonstrating that accessibility problems are not limited to PDP sponsors’ Web site home pages.

CONCLUSION

Pursuant to Federal regulations, CMS must review and approve marketing materials for Part D prescription drug plans, including materials provided through Part D sponsors’ Web sites. Our review found that 33 percent of the 84 PDP sponsors did not provide all federally required content on their Web sites. We also found that 85 percent of the 84 PDP sponsors’ home pages we reviewed did not meet at least one of the four Federal requirements for Web site accessibility, potentially affecting access to content by Medicare beneficiaries.

The use of computers and the Internet is increasing among adults aged 65 and older and utilizing the Internet as a mechanism to provide information on prescription drug plans is vital. It is important that CMS oversee these Web sites to ensure that all Medicare beneficiaries, including beneficiaries with disabilities, have comparable access to federally required content to make informed decisions about their prescription drug coverage.

This report is being issued directly in final form because it contains no recommendations. If you have comments or questions about this report, please provide them within 60 days.

If you have any questions about this report, please do not hesitate to call me or one of your staff may contact Claire Barnard at (202) 205-9523 or through e-mail (Claire.Barnard@oig.hhs.gov). To facilitate identification, please refer to report number OEI-06-06-00340 in all correspondence.
### PDP Sponsor Web Site Content Requirements

<table>
<thead>
<tr>
<th>Content</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service area</td>
<td>Provides details of the plan’s service area.</td>
</tr>
<tr>
<td>Benefits</td>
<td>Provides a description of the benefits offered, including conditions and limitations, premiums, cost sharing (copayments, deductibles, coinsurance, and subsidy-eligible individuals), and any other conditions.</td>
</tr>
<tr>
<td>Ways of obtaining more information on cost-sharing requirements</td>
<td>Provides a description of how an individual may obtain more information on cost-sharing requirements, including tiered or other copayment levels applicable to each drug or class of drug.</td>
</tr>
<tr>
<td>Formulary</td>
<td>Provides information about the plan’s formulary, including a list of drugs, the manner in which the formulary functions (including any tiered formulary structure and utilization management procedures used), the process for obtaining an exception to a plan’s formulary or tiered cost-sharing structure, and a description of how a Part D-eligible individual may obtain additional information on the formulary.</td>
</tr>
<tr>
<td>Network pharmacies</td>
<td>Provides addresses of network pharmacies from which enrollees may expect to obtain covered drugs.</td>
</tr>
<tr>
<td>Out-of-Network coverage</td>
<td>Provides information regarding access to covered Part D drugs at out-of-network pharmacies.</td>
</tr>
<tr>
<td>Grievances, reconsideration, exceptions, coverage determination, and appeal rights and procedures</td>
<td>Provides information on the procedures for timely hearing and resolution for grievances, coverage determinations, and appeals.</td>
</tr>
<tr>
<td>Quality assurance policies and procedures</td>
<td>Provides a description of the quality assurance policies and procedures and the medication therapy management program.</td>
</tr>
<tr>
<td>Disenrollment rights and responsibilities</td>
<td>Provides information on enrollees’ disenrollment rights and responsibilities.</td>
</tr>
<tr>
<td>Potential for contract termination</td>
<td>Provides information on the fact that a Part D sponsor may terminate or decline to renew its contract or reduce the service area included in its contract and on the effect of any of these actions on enrollees.</td>
</tr>
</tbody>
</table>

Source: 42 CFR § 423.128(b).
### Federal Accessibility Requirements for Web Based Information

<table>
<thead>
<tr>
<th>36 CFR § 1194.22 Paragraph</th>
<th>Web-Based Information and Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)</td>
<td>A text equivalent for every nontext element shall be provided.</td>
</tr>
<tr>
<td>(b)</td>
<td>Equivalent alternatives for any multimedia presentation shall be synchronized with the presentation.</td>
</tr>
<tr>
<td>(c)</td>
<td>Web pages shall be designed so that all information conveyed with color is available without color.</td>
</tr>
<tr>
<td>(d)</td>
<td>Documents shall be organized so that they are readable without requiring an associated style sheet.</td>
</tr>
<tr>
<td>(e)</td>
<td>Redundant text links shall be provided for each active region of a server-side image map.</td>
</tr>
<tr>
<td>(f)</td>
<td>Client-side image maps shall be provided instead of server-side image maps except where the regions cannot be defined with an available geometric shape.</td>
</tr>
<tr>
<td>(g)</td>
<td>Row and column headers shall be identified for data tables.</td>
</tr>
<tr>
<td>(h)</td>
<td>Markup shall be used to associate data cells and header cells for data tables that have two or more logical levels of row or column headers.</td>
</tr>
<tr>
<td>(i)</td>
<td>Frames shall be titled with text that facilitates frame identification and navigation.</td>
</tr>
<tr>
<td>(j)</td>
<td>Pages shall be designed to avoid causing the screen to flicker with a frequency greater than 2 Hz and lower than 55 Hz.</td>
</tr>
<tr>
<td>(k)</td>
<td>A text-only page, with equivalent information or functionality, shall be provided to make a Web site comply with the provisions of this part when compliance cannot be accomplished in any other way. The content of the text-only page shall be updated whenever the primary page changes.</td>
</tr>
<tr>
<td>(l)</td>
<td>When pages utilize scripting languages to display content, or to create interface elements, the information provided by the script shall be identified with functional text that can be read by assistive technology.</td>
</tr>
<tr>
<td>(m)</td>
<td>When a Web page requires that an applet, a plug-in, or other application be present on the client system to interpret page content, the page must provide a link to a plug-in or an applet that complies with § 1194.21 (a) through (l).</td>
</tr>
<tr>
<td>(n)</td>
<td>When electronic forms are designed to be completed online, the form shall allow people using assistive technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.</td>
</tr>
<tr>
<td>(o)</td>
<td>A method shall be provided that permits users to skip repetitive navigation links.</td>
</tr>
<tr>
<td>(p)</td>
<td>When a timed response is required, the user shall be alerted and given sufficient time to indicate that more time is required.</td>
</tr>
</tbody>
</table>

Source: 36 CFR § 1194.22.