FINAL REPORT SUMMARY OF METHODOLOGY AND APPROACH USP MEDICARE MODEL GUIDELINES v7.0

COOPERATIVE AGREEMENT

USP Medicare Model Guidelines Version 7.0

Award Authority: Congressional Earmark, Section 1860-D-4(b)(C)(ii) of the Medicare Prescription Drug

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M.S. Project Director: Donna Bohannon R.Ph.

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The statements contained in this report are solely those of the authors and do not necessarily reflect the views or policies of the Centers for Medicare & Medicaid Services (CMS). The grantee assumes responsibility for the accuracy and completeness of the information in this report. CMS only funds the development of Categories and Classes and not additional material.

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Introduction

In December 2003, the Medicare Prescription Drug Improvement and Modernization Act of 2003 (MMA) was signed into law. The United States Pharmacopeial Convention (USP) was named in Section 1860D-4(b)(3)(C)(ii) of the Act, which states:

MODEL GUIDELINES – The Secretary shall request the United States Pharmacopeia to develop, in consultation with pharmaceutical benefit managers and other interested parties, a list of categories and classes that may be used by prescription drug plans under this paragraph and to revise such classification from time to time to reflect changes in therapeutic uses of covered Part D drugs and the additions of new covered Part D drugs.

The USP Medicare Model Guidelines – the list of categories and classes – are a science-based, voluntary standard emanating from the USP Council of Experts, with USP Board of Trustees authorization. In creating the USP Medicare Model Guidelines in 2004, USP utilized a process that relied upon highly qualified experts and enabled all interested parties to participate. The resulting Model Guidelines supported CMS' efforts to provide high quality care to beneficiaries in a cost-effective manner.

As stipulated in the law, USP is also responsible for revising the Model Guidelines on a continuous basis, based on "changes in therapeutic uses of covered Part D drugs and the additions of new covered Part D drugs." Thus, in subsequent years, USP and CMS have entered into Cooperative Agreements that resulted in the revisions of the Model Guidelines and related deliverables, developed through a process that included comprehensive review of available information and evidence, public outreach and input, and deliberation and approval by the USP Council of Experts.

The USP Medicare Model Guidelines were updated annually from 2004 through 2007 and in 2008, CMS moved to a tri-annual revision cycle. The current revision, USP Medicare Model Guidelines v7.0, represents incorporation of three years of new therapeutic uses and new Part D drugs in the USP Categories and Classes, during a time of rapid evolution of the healthcare system in the United States. Both the maturation of the Part D benefit and the changing philosophies of formulary management offered additional insight into this revision cycle.

The Guiding Principles of the USP revision process are fundamentally unchanged from the original principles set forth by the 2004 USP Medicare Model Guidelines Expert Committee. The USP Categories and Classes are developed utilizing contemporary scientific information and expert evaluation, and aim to strike a balance of assuring Part D beneficiary access to safe and effective drugs that they need with the flexibility that Plans need to offer an affordable and effective benefit. This balance creates the taxonomy of the USP Medicare Model Guidelines, which are distinctly different in philosophy and structure than other taxonomy systems classifying drugs solely based upon either pharmacology or therapeutics.

Another important consideration is the stability of the USP Medicare Model Guidelines in order

to efficiently support the needs of the Part D benefit. While there are advances in patient-centered therapeutics for which formulary plans must account in their clinical programs, the overall structure of the USP Categories and Classes should remain sound and be adjusted judiciously.

In February 2016, USP entered into a Cooperative Agreement with CMS to revise the USP Medicare Model Guidelines for utilization during plan years 2018-2020 (Appendix I). The USP methodology and approach to revising the USP Medicare Model Guidelines drug categories and classes are outlined in this document, which is designed to accompany the final USP Medicare Model Guidelines v7.

Methodology and Approach

Update Categories and Classes

Summary

The methodology for the USP Medicare Model Guidelines Version 7.0 is focused on two objectives:

- 1) Conducting a clinically-based review and incorporation of Part D drugs (as defined in 42 CFR 423.100¹) approved since USP Medicare Model Guidelines v6.0, and
- 2) Updating the USP Categories and Classes as necessary to accommodate changes in therapeutic uses and the additions of new Part D drugs, as specified in §1860D-4(b)(3)(C)(ii) of the Social Security Act. ²

The revision of the USP Medicare Model Guidelines encompassed several key activities detailed in the subsequent sections. While the USP Medicare Model Guidelines were developed through an independent scientific process, the collaboration with CMS allowed a better understanding of the needs of CMS, the place of the USP Medicare Model Guidelines in Medicare policy, and the technical details associated with Part D coverage.

Under the Rules and Procedures of the USP Council of Experts, the Healthcare Quality and Safety Expert Committee (HQS EC) was charged with the task of reviewing and revising the USP Medicare Model Guidelines. Under the auspices of the HQS EC, the Medicare Model Guidelines subcommittee (MMG) was formed to make recommendations to the full HQS EC. The HQS EC developed Guiding Principles to provide consistency to the scientific review processes. The HQS EC went through structured deliberation to create the draft USP Medicare Model Guidelines v7.0, which underwent review by CMS and the USP public comment processes. The HQS EC deliberated on the comments from the public and CMS, and created a final draft. The final draft USP MMG v7.0 was reviewed and approved by formal ballot by the HQS EC to produce the final USP Medicare Model Guideline v7.0. Detailed description of these activities is included in the sections below.

⁴² CFR 423.100,, Part D drug definition:

⁽¹⁾ Unless excluded under paragraph (2) of this definition, any of the following if used for a medically accepted indication (as defined in section 1860D-2(e)(4) of the Act)—

⁽i) A drug that may be dispensed only upon a prescription and that is described in sections 1927(k)(2)(A)(i) through (iii) of the Act

⁽ii) A biological product described in sections 1927(k)(2)(B)(i) through (iii) of the Act.

⁽iii) Insulin described in section 1927(k)(2)(C) of the Act

⁽iv) Medical supplies associated with the injection of insulin, including syringes, needles, alcohol swabs, and gauze.

⁽v) A vaccine licensed under section 351 of the Public Health Service Act and for vaccine administration on or after January 1, 2008, its administration.

⁽vi) Supplies that are directly associated with delivering insulin into the body, such as an inhalation chamber used to deliver the insulin through inhalation.

⁽i) Drugs for which payment as so prescribed and dispensed or administered to an individual is available for that individual under Part A or Part B (even though a deductible may apply, or even though the individual is eligible for coverage under Part A or Part B but has declined to enroll in Part A or Part B); and

⁽ii) Drugs or classes of drugs, or their medical uses, which may be excluded from coverage or otherwise restricted under Medicaid under sections 1927(d)(2) or (d)(3) of the Act, except for smoking cessation agents

² §1860D-4(b)(3)(C)(ii)

⁽C) INCLUSION OF DRUGS IN ALL THERAPEUTIC CATEGORIES AND CLASSES.—

⁽i) IN GENERAL.—Subject to subparagraph (G), the formulary must include drugs within each therapeutic category and class of covered part D drugs, although not necessarily all drugs within such categories and classes.

⁽ii) MODEL GUIDELINES.—The Secretary shall request the United States Pharmacopeia to develop, in consultation with pharmaceutical benefit managers and other interested parties, a list of categories and classes that may be used by prescription drug plans under this paragraph and to revise such classification from time to time to reflect changes in therapeutic uses of covered part D drugs and the additions of new covered part D drugs.

Interactions Between USP and CMS

Start-up Meeting

In February 2016, USP had an initial conversation with CMS to discuss the general proposal, approach and methodology to the USP Medicare Model Guidelines v7.0. CMS issued a Cooperative Agreement on February 19, 2016 1C0CMS331494-01-00.

The CMS attendees included:

- Jeff Kelman, M.D., Chief Medical Officer; Centers for Medicare and Medicaid Services (HHS/CMS/OA/CM)
- Christian Bauer, Director, Division of Part D Policy, Medicare Drug Benefit and C&D Data Group (DHHS/CMS/OA/CM/MDBG/DPDP)
- LT. Marie Manteuffel, Project Officer, Pharmacist, Division of Part D Policy (DHHS/CMS/OA/CM/MDBG/DPDP)
- Craig Miner, Deputy Director, Division of Part D Policy (DHHS/CMS/OA/CM/MDBG/DPDP)
- Brian Martin, Pharm.D., Director, Division of Formulary and Benefit Operations (DHHS/CMS/OA/CM/MDBG/DFBO)

The USP attendees included:

- Shawn C. Becker, M.S., B.S.N., Senior Director, Healthcare Quality and Safety;
- Donna Bohannon, Scientific Liaison, HQS EC

The meeting concluded with agreement on the basic principles of USP's approaches, methodology and deliverables for the revised USP Medicare Model Guidelines, as outlined in the March proposal submitted to CMS and incorporated into the cooperative agreement.

CMS Attendance at Expert Committee Meetings

CMS Project Officer LT. Marie Manteuffel participated as the invited CMS liaison observer at the meetings of the MMG SC, including the face-to-face meetings on March 22, 2016 and November 1, 2016. In addition, LT Tamei Cho, Pharmacist from the Division of Formulary and Benefit Operations, attended one of the Expert Committee meetings, and presented at the face-to-face meeting on March 22, 2016.

USP-CMS Staff Meetings

CMS Project Officer LT. Marie Manteuffel was in communication with the USP staff throughout the revision process, and provided input regarding Part D eligibility of drugs, CMS policies, and other Medicare legislative considerations.

Submission of Written Materials

USP submitted a draft version of the Model Guidelines for CMS review on October 3 and corrected draft with noted omissions on October 4, 2016, with the final draft submitted on January 17, 2016 USP provided the opportunity for CMS to provide additional technical comments from January 17 through January 31, 2016.

Healthcare Quality and Safety Expert Committee

In accordance with the Rules and Procedures of the 2015-2020 USP Council of Experts, Section 5 (Appendix II), the Chairperson of the Council of Experts, formed the Healthcare Quality and Safety Expert Committee (Appendix III). The HQS EC then charged the Medicare Model guidelines expert subcommittee to conduct a clinically-based review and to revise the USP Medicare Model Guidelines to incorporate Part D drugs³ approved since USP Medicare Model Guidelines v6.0 was issued, and to update the USP Categories and Classes as necessary to accommodate changes in therapeutic uses and the additions of new Part D drugs, as specified in §1860D-4(b)(3)(C)(ii) of the Social Security Act.⁴

While the expert subcommittee performed the preliminary placements of Part D drugs, the full Expert Committee received periodic updates on the progress of the subcommittee for purposes of review and preparation for ballot of the proposed placement. The individuals appointed to the Expert Committee and subsequent to the expert subcommittee comprised a range of expertise, including pharmacologists, clinical pharmacists, other health care practitioners, academicians, formulary specialists, providers, beneficiaries, drug information experts, and healthcare policy experts. Approximately one-third of the Expert Committee were previously USP Model Guidelines Expert Committee members, another one-third served on previous USP Information Expert Committees, and the remaining one-third were new experts to USP.

According to Section 2 of the USP Rules and Procedures, Expert Committee members serve USP as individual experts, and do not serve any outside interest. Expert Committee members shall not use their membership in any way that is, or appears to be, motivated by private gain or any outside interest. Expert Committee members must adhere to the Code of Ethics, Conflict of Interest, Disclosure and Confidentiality provisions set forth in USP Rules and Procedures. Through a formal process managed by the USP Executive Secretariat, the HQS EC members declared their Conflicts of Interest and signed confidentiality forms as described in the Rules and Procedures of the USP Council of Experts (Appendix II).

⁴² CFR 423.100,, Part D drug definition:

⁽¹⁾ Unless excluded under paragraph (2) of this definition, any of the following if used for a medically accepted indication (as defined in section 1860D–2(e)(4) of the Act)—

⁽i) A drug that may be dispensed only upon a prescription and that is described in sections 1927(k)(2)(A)(i) through (iii) of the Act

⁽ii) A biological product described in sections 1927(k)(2)(B)(i) through (iii) of the Act.

⁽iii) Insulin described in section 1927(k)(2)(C) of the Act

⁽iv) Medical supplies associated with the injection of insulin, including syringes, needles, alcohol swabs, and gauze.

⁽v) A vaccine licensed under section 351 of the Public Health Service Act and for vaccine administration on or after January 1, 2008, its administration.

⁽vi) Supplies that are directly associated with delivering insulin into the body, such as an inhalation chamber used to deliver the insulin through inhalation

⁽i) Drugs for which payment as so prescribed and dispensed or administered to an individual is available for that individual under Part A or Part B (even though a deductible may apply, or even though the individual is eligible for coverage under Part A or Part B but has declined to enroll in Part A or Part B); and

⁽ii) Drugs or classes of drugs, or their medical uses, which may be excluded from coverage or otherwise restricted under Medicaid under sections 1927(d)(2) or (d)(3) of the Act, except for smoking cessation agents

⁴ §1860D-4(b)(3)(C)(ii)

⁽C) INCLUSION OF DRUGS IN ALL THERAPEUTIC CATEGORIES AND CLASSES.—

⁽i) IN GENERAL.—Subject to subparagraph (G), the formulary must include drugs within each therapeutic category and class of covered part D drugs, although not necessarily all drugs within such categories and classes.

⁽ii) MODEL GUIDELINES.—The Secretary shall request the United States Pharmacopeia to develop, in consultation with pharmaceutical benefit managers and other interested parties, a list of categories and classes that may be used by prescription drug plans under this paragraph and to revise such classification from time to time to reflect changes in therapeutic uses of covered part D drugs and the additions of new covered part D drugs.

Reporting of Conflict of Interest

Per the Bylaws of the USP Convention and the Rules and Procedures of the USP Council of Experts, USP Experts are required to disclose Conflicts of Interest (Appendix II). Conflicts of Interest do not bar participation in a USP Expert Committee, provided that the member timely and adequately discloses such conflicts. At the beginning of the revision cycle, and at every live meeting, the HQS EC members update their Conflicts of Interest on a written disclosure form maintained with the USP Executive Secretariat.

Deliberation of the Expert Committee

The Expert Committee met six (6) times during the deliberation process from November 2015 through December 2016. Their work extended into several distinct areas of deliberation:

- 1) Review and refinement of the USP Medicare Model Guidelines Guiding Principles, to ensure continuity of processes from previous revisions and to provide consistency within the current revision cycle (Appendix IV).
- 2) Independent scientific review of new Part D drugs or Part D drugs with new FDA approved indications (Appendix V). There are four main sources of input for this process:
 - a. FDA actions related to new and existing drugs in the US market (new drug approvals, new labeling, removal of approvals)
 - b. CMS Policies and Procedures, including the CY17 Formulary Reference File
 - c. Federal Medicare Legislation
 - d. Clinical and scientific information related to drugs and their therapeutic use, including experience and expertise of Expert Committee members
- 3) Review of information provided by public comment mechanisms, including Manufacturer Consultations (Appendix VI), Open Microphone Web Meetings (Appendix VII), and written Public Comment received in response to public posting of the draft USP Medicare Model Guidelines v7.0 (Appendix VIII).

The Expert Committee utilized a consensus approach in making changes to the USP Medicare Model Guidelines, and abstentions were recorded. The deliberation of the Expert Committee concluded on December 07, 2016.

Balloting of the HQS Expert Committee

According to the Rules and Procedures of the USP Council of Experts, the HQS EC approved the USP Medicare Model Guidelines v7.0 by official ballot. The balloting occurred between January 2 and 10, 2016. The USP Medicare Model Guidelines were balloted on individual USP Categories to allow for the members to abstain from therapeutic areas in which they had conflicts of interest. Sixteen (16 of 18) HQS EC members voted and all USP Categories passed by majority vote. With respect to individual categories, one (1) member abstained from the *Respiratory Tract/ Pulmonary Agents*. There was one (1) abstention from all of the categories.

CMS met with USP on January 24, 2017 to provide final comments. The final version of the USP Medicare Model Guidelines v7.0, an aligned CY17 Formulary Reference File—USP MMGv7.0, and the "Summary of Approach and Methodology" were delivered to CMS on February 6, 2017. These final documents incorporate an accounting for new drugs and new therapeutic uses of existing drugs, and the recommended changes resulting from updated guidance from CMS.

Guiding Principles of Model Guidelines Expert Committee

Building upon the fundamental concepts developed by the first and second USP Medicare Model Guidelines Expert Committees (2004-2007), the HQS EC revised the Guiding Principles through their deliberations (Appendix IV). USP acknowledges that exceptions to the Guiding Principles have arisen in previous revisions of the USP Medicare Model Guidelines, but no known exceptions arose in this revision cycle.

Identification of New Part D Drugs and New Therapeutic Uses

USP staff utilized a comprehensive approach in identifying Part D drugs for evaluation by the USP Model Guidelines subcommittee for revisions to USP Medicare Model Guidelines v7.0. The identification process included: 1) review of FDA actions since the last USP Medicare Model Guidelines revision, 2) comparison of CMS Formulary Reference File (FRF) and USP Medicare Model Guidelines v6.0, and 3) review of new Medicare legislation. In cases where Part D eligibility of a particular drug was in question, CMS provided direct consultation to the Expert Committee. A total of 100 drugs were added to the USP Medicare Model Guidelines v7.0, and 10 drugs were removed (10 discontinued by manufacturer, removed from CMS FRF). There were 6 new Part D eligible drugs as a result.

Table 1: Additions to the USP Medicare Model Guidelines v6.0, Creating USP Medicare Model Guidelines v7.0

New FDA-approved drugs	94
New approved FDA indications, generating a second position on the USP Medicare Model Guidelines	1
New Part D eligible drugs—CMS FRF	6
TOTAL:	101

Review of FDA actions

USP conducted a review of FDA actions and biologic approvals between December 1, 2013 and December 07, 2016. This time frame was defined by the end of the last revision cycle and the end of the HQS EC deliberation period in the current revision cycle. The sources of data for the drug review included the online published actions for FDA Center for Drug Evaluation and Research (CDER) available through Drugs@FDA

(http://www.accessdata.fda.gov/scripts/cder/drugsatfda/index.cfm). The data source for FDA actions related to Vaccines, Biologics, and Blood Products was the online published actions of the FDA Center for Biologics Evaluations and Research (CBER)

(http://www.fda.gov/BiologicsBloodVaccines/NewsEvents/WhatsNewforBiologics/default.htm).

FDA actions were reviewed and assessed for potential impact on the USP Model Guidelines 6.0, as defined by new FDA approval or changes in therapeutic use. Changes in therapeutic use were defined as new FDA approved indications, significant product labeling changes, or removal of drugs from the US market. An additional assessment was made to determine if drugs were Part D eligible, based on the CY17 CMS Formulary Reference File and with verification from CMS. This process yielded 94 new drug approvals and 1 drug with new FDA indication. Ten (10) drugs removed from the US market by the manufacturer, were subsequently removed from the USP MMG.

Comparison of CMS Formulary Reference File and USP Medicare Model Guidelines v6.0.

The additions of new Part D eligible drugs could also arise from existing drugs that were not previously included on the Model Guidelines v6.0, but included in the CY17FRF. To identify these drugs, USP compared the associated drug list from the USP Medicare Model Guidelines v6.0 to the CMS Formulary Reference File (FRF) at various times in the revision cycle, and identified drugs which were current on the FRF, but not assessed by the previous Model Guidelines Expert Committee. While the CMS FRF does not guarantee reimbursement through Part D, it does represent a probable universe of Part D eligible drugs, and was considered the best proxy according to CMS liaisons supporting this revision cycle. A total of 6 drugs were identified and integrated into the USP Medicare Model Guidelines v7.0 after the final integration exercise, which utilized the CMS CY2017 Formulary Reference File (06262016 date version).

The data source for the FRF alignment activities were CMS-FRF spreadsheets provided by Centers for Medicare and Medicaid Service. In addition, drugs removed from the CMS-FRF from were checked against the data sources of the FDA Structured Product Labeling at DailyMed (http://dailymed.nlm.nih.gov/dailymed/about.cfm), and the Drugs@ FDA (http://www.accessdata.fda.gov/scripts/cder/drugsatfda/).

Review of New Medicare Legislation

Legislative changes in the Part D benefit may also affect the USP Medicare Model Guidelines Categories and Classes. A panel review proposal to lift the protected class status for antidepressants, antipsychotics, and immunosuppressants was not enacted. All protected classes were retained.

Development of Drug Information Resources to Support Expert Committee Deliberation

Drug Summary Files

To facilitate the independent Expert Committee review of candidate drugs, a Master Drug List

was developed which included all new FDA approved drugs (Appendix V). For Part D eligible drugs, Drug Summary Files were developed for new drugs, new indications, and drugs with significant product labeling changes that were assessed as potentially impacting the categories or classes of the USP Medicare Model Guidelines. For drugs similar to other agents on the market, or otherwise excluded by the Guiding Principles (e.g., combination products), no Drug Summary Files were produced unless requested by the Expert Committee.

The Drug Summary Files were developed specifically for the HQS EC focusing on key issues that would inform about placement of drugs within the existing category and class structure. The drug information included FDA regulatory information, approved FDA labeling, FDA Established Pharmacologic Class, therapeutic monographs, and applicable CMS regulations (e.g., protected class status). As requested by the Expert Committee, specific drug class reviews were prepared. When applicable, primary peer-reviewed scientific articles and treatment guidelines were included in the Drug Summary Files. Therapeutic monographs were obtained from Facts and Comparisons Formulary Monograph Service (http://www.factsandcomparisons.com/formulary-monograph-service-loose-leaf.aspx), the American Hospital Formulary Service Drug Information (http://www.ahfsdruginformation.com/), and from the Veterans Affairs Pharmacy Benefit Management Services (http://www.pbm.va.gov/). Existing manufacturer AMCP-style dossiers were also included.

During Expert Committee meetings, drug information resources were made available to clarify additional concepts. In circumstances where immediate information was not available, the drug information consultants provided written documentation in time for the next Expert Committee deliberations.

USP Management and Personnel

As stipulated in the Cooperative Agreement, Special Terms and Conditions, USP identified and provided skilled professional personnel to support: 1) the revision of the list of categories and classes in the USP Medicare Model Guidelines to account for new drugs and new therapeutic uses of existing drugs, 2) the process of obtaining and addressing issues raised by external and internal parties, and 3) the documentation of the processes and outcomes.

USP Staff

The HQS EC was overseen by the following USP staff:

Jaap Venema CSO and Chair of the Council of Experts
Shawn C. Becker, M.S., B.S.N., Senior Director, Healthcare Quality and Safety
Donna Bohannon, R.Ph., Scientific Liaison, Healthcare Quality and Safety

Drug Information Support

Additional personnel contracted by USP to provide drug information support to the TIFS EC included the following:

Independent Consultants

William Heath, Pharm.D., Drug Information Consultant

Pharmacy Interns

Maggie Fung, Pharm. D Candidate (2018), University of Maryland School of Pharmacy Samuel Fu, Pharm.D. Candidate (2018), University of Kentucky College of Pharmacy

Addressing Issues

Public Comment Mechanisms

USP conducted outreach for public input into the USP Medicare Model Guidelines v7.0 through a variety of methods. Information related to each of these methods was made available through the USP public website (www.usp.org), through USP Press Releases, and direct communication with USP member organizations and other trade associations. The public comment mechanisms was designed to ensure that the Expert Committee received appropriate input from beneficiaries, providers, drug manufacturers, healthcare plans, and other concerned stakeholders.

Stakeholder 1:1 Consultations

Interested stakeholders and manufacturers were afforded the opportunity to request a one-on-one consultation with USP in order to provide information for the HQS EC. Manufacturers were notified that an independent scientific review would be conducted prior to their consultation, and information they provided would be used to supplement that independent review. Only scientific or clinical personnel could participate in the consultation. A total of 33 Stakeholder Consultations were conducted, and the Expert Committee was provided full access to recorded consultations. Detailed notes from each consultation were reviewed by Expert Committee members, and a summary document was developed reflecting the actions of the Expert Committee (Appendix VI).

Open Microphone Web Meetings

USP hosted four (4) open microphone meetings during the Public Comment Period of USP Medicare Model Guidelines v7.0. These open microphone web meetings were designed to solicit specific feedback on the structural content and organization of the USP Medicare Model Guidelines v7.0. These public meetings did not discuss health plan coverage, plan design, treatment algorithms, or specific formulary product requirements for Part D health plans. Each session included a brief review of the proposed USP Medicare Model Guidelines v7.0, a description of the Guiding Principles, and considerations for revisions. Participants were encouraged to ask questions and provide specific feedback on the proposed USP Medicare Model Guidelines v7.0. A summary of the open microphone web meetings was provided to the Expert Committee, which reviewed the content during their deliberation process (Appendix VII).

Comments

Public Comments

A draft version of the USP Medicare Model Guidelines v7.0 was presented on the USP website (www.usp.org) for public comment October 3 to November 4, 2016. A total of 1,158 comments were received during this period. The HQS EC reviewed all written public comments, and deliberated on the identified public issues during the November 1, 2016 and December 7, 2016 meetings. Consideration was given to each comment, based upon the Guiding Principles and

that available scientific information. A summary document was prepared by the Expert Committee, reflecting their actions resulting from these comments (Appendix VII).

CMS Comments

CMS provided USP with written comments twice during the USP MMG revision period. On November 1, 2016, CMS provided comments on USP Medicare Model Guidelines v7.0, Draft, which was available for public comment from October 1 to November 4, 2016. On November 1, 2016 CMS provided written comments to USP, regarding the USP Medicare Model Guidelines v7.0 Public Comment Draft.

HQS Expert Committee Deliberations on Public Comments

In total, the Expert Committee utilized two (2) of the six meetings in this revision cycle to deliberate on public comments including those submitted by CMS. Some of the public comments were directly related to the USP Medicare Model Guidelines v7.0 and provided additional information to the Expert Committee. Some of the comments were considered to be more appropriately addressed by the Centers for Medicare and Medicaid Services as administrator of the Medicare benefit.

Comments Directed to CMS from External Parties

As a result of the public comment process for the USP Model Guidelines v7.0, several key issues have been brought to the attention of USP that are beyond the purview of USP's cooperative agreement, and appear to be within scope for the Centers of Medicare and Medicaid Services (CMS). USP is presenting these issues to CMS in adherence to the cooperative agreement.

- Interested parties are requesting that CMS produce a transparent record of drugs that potentially may fall within the Part D benefit. The public is requesting that drugs that may also be eligible for medical benefit (Part B) be clearly marked in the USP Medicare Model Guidelines.
- A number of interested parties are requesting annual revisions of the USP Medicare Model Guidelines. They expressed concern that the three-year revision cycle does not meet the intent of the Medicare Prescription Drug, Improvement and Modernization Act of 2003 (P.L. 108-173) statute, which calls for 'time to time' revision. There is public concern that collective CMS policies have created a substantial barrier for patients to have timely access to new drugs.
- Interested parties are also requesting that USP broaden and adapt the USP Medicare Model Guidelines to more appropriately serve as the national benchmark.
 for essential prescription drug benefits under the Affordable Care Act.

Comments Directed to CMS from USP

The USP HQS EC creates categories and classes based on scientific and clinical data derived from FDA regulatory filings for new drugs and new therapeutic uses, peer-reviewed scientific literature, and applied expert knowledge. The HQS EC addresses issues of stakeholder perception through its stakeholder consultations and public comment processes. It is through the Expert Committee processes of integrating these two elements, under the provision of the Law, which creates the USP Medicare Model Guidelines designed specifically for the Medicare population and consistent with Medicare benefit regulations.

There is a critical data element that has not been available to support the Expert Committee decision making process—specifically, data directly related to Medicare Part D implementation and real-world patient access to medications offered through Part D formularies.

According to sound formulary principles, pharmacy and therapeutics review committees must seek and be attentive to clinical issues arising from implementation of formulary policy. USP has not been in a position to evaluate such data directly related to implementation of the USP MMG, as the data resides within CMS and is not publicly available. USP is obligated by principle to seek data that will inform the ongoing revision of the formulary model. USP will continue dialogue with CMS, to determine the information that CMS could provide that would be helpful to the Expert Committee.

Comments from USP: Interagency Communication and Stakeholder Input

As the USP MMG formulary standard is adopted for other public health uses, it is important that USP's efficient, effective, and unbiased process benefit all stakeholders affected by the model guidelines. This requires open and transparent communications between all parties—USP, CMS Part D and CCIIO-- to meet the public health need of national formulary model categories and classes. USP will seek ongoing communication with parties that are utilizing the USP Medicare Model Guidelines.

In addition, USP will continue to seek public input from patients, providers, and other stakeholders affected by the implementation of USP standards. To date, the public input on the USP Medicare Model Guidelines has been limited and focused to Part D stakeholders, as the scope of revision has been defined by Medicare Part D utilization. USP recognizes with the additional public health application of its formulary standard, namely the ACA Essential Health Benefit benchmark for prescription drugs, that additional stakeholder input will be necessary.

⁵ AMCP Principles of a Sound Formulary System (2000), http://www.amcp.org/WorkArea/DownloadAsset.aspx?id=9280, Accessed January 6, 2014

 $^{^{\}rm 6}$ American Society of Health System Pharmacists (ASHP) Principles of a Sound Drug Formulary (1992),

http://www.ashp.org/DocLibrary/BestPractices/FormEndPrinciples.aspx, Accessed January 6, 2014.

Medicare Modernization Act Final Guidelines-- Formularies, CMS, http://www.cms.gov/Medicare/Prescription-Drug-

Coverage/PrescriptionDrugCovContra/downloads/FormularyGuidance.pdf , Accessed January 6, 2014

OMS 2011 Program Audit and Best Practices (2012).

http://www.ncpanet.org/pdf/leg/feb12/2011_program_audit_findings_best_practices.pdf, Accessed January 6, 2014

Summary of Revisions, USP Medicare Model Guidelines v7.0

USP Categories and Classes

Stability of USP Categories and Classes

The HQS EC recognized the need for stability in the USP Medicare Model Guidelines in order for the efficiency of use by administrators of the Part D benefit. USP Medicare Model Guidelines v7.0 reflects a high conservation of the USP Categories and Classes represented in USP MMG v6.0. The following section outlines the changes.

In total, the USP Medicare Model Guidelines v7.0 has:

- 48 USP Categories
- 154 USP Classes
- 169 Unique USP Categories or Classes
- 2 renamed Categories, 4 new classes and 5 renamed Classes

Table 2: USP Medicare Model Guidelines V1.0-V7.0

	v1.0 (2005)	v2.0 (2006)	v3.0 (2007)	v4.0 (2008)	v 5.0 (2011)	v6.0 (2014)	V7.0 (2017)
USP Categories	41	49	50	50	50	49	48
USP Classes	137	117	119	119	146	151	154
Unique Categories and Classes*	133	133	138	138	161	167	169
Formulary Key Drug Types - Total	141	141	193	192	Retired	Retired	Retired

^{*}Unique Categories and Classes is the sum of the number of USP Classes and the number of USP Categories that have no associated classes.

Revision Summary

Two (2) USP Categories were renamed (*Electrolytes/Minerals/Metals/Vitamins and Genetic or Enzyme Disorder: Replacement, Modifiers*) to more accurately reflect inclusion of treatments in the existing USP Categories. There were 5 classes (Monoclonal Antibodies/ Antibody-Drug Conjugate, Hemostasis Agents Electrolyte/Metals/Mineral Modifiers, Anti-hepatitis C (HCV) Agents First Generation and Angioedema Agents) that were renamed to more accurately reflect inclusion of treatments in the existing classes. There were four (4) new USP Classes and five (5) nomenclature changes for USP Classes. The revisions are described in detail in this section. (See Table 3)

Table 3: Summary of Revised USP Categories and Classes in order of appearance in the USP MMG v7.0 (Text in red designates changes from USP MMG v6.0)

MMG v.6.0	MMG v7.0	Revision
Therapeutic Nutrients/Minerals/Electrolytes	Electrolytes/Minerals/ Metals/Vitamins	Renamed USP Category
Hormonal Agents, Suppressant (Parathyroid)	Hormonal Agents, Parathyroid	Renamed USP Category
Enzyme Replacement/Modifiers	Genetic or Enzyme Disorder: Replacement, Modifiers, Treatment	Renamed USP Category
	Treatment Adjunct	New USP Class
	Anti-hepatitis C (HCV) Direct Acting Agents	New USP Class
	Pulmonary Fibrosis Agents	New USP Class
Monoclonal Antibodies	Monoclonal Antibody/Antibody-Drug Conjugate	Renamed USP Class
Coagulants	Hemostasis Agents	Renamed USP Class
Angioedema (HAE) Agents	Angioedema Agents	Renamed USP Class
Electrolyte/ Heavy Metal Modifiers	Electrolyte/Metals/Mineral Modifiers	Renamed USP Class
Anti-hepatitis C (HCV) Agents	Anti-hepatitis C (HCV) Agents ,Other	Renamed USP Class
Phosphate Binders	Phosphate Binders	Class removed from Genitourinary Agents Category moved to Electrolyte/Minerals/Metals/Vitami ns Category

Revised USP Categories

Renamed USP Categories

Therapeutic Nutrients/Minerals/Electrolytes/Vitamins

The category Therapeutic Nutrients/Minerals/Electrolytes was renamed to be more specific to the classes that are included in the specified category.

Genetic or Enzyme Disorder: Replacement, Modifiers, Treatment

The category, Enzyme Replacement/Modifiers, did not reflect new drug products that were specifically for genetic disorders and/or can be used as a treatment.

USP Classes

The Expert Committee determined the addition of 3 new classes and renamed 5 classes.

New Classes

Anti-hepatitis C (HCV) Direct Acting Agents and Anti-hepatitis C (HCV) Agents, Other

The Expert Committee reviewed the therapeutic uses within the new treatment guidelines and determined that it was appropriate to divide the Anti-hepatitis C class of drug products to reflect changes in the treatment guidelines that gives preference to Direct Acting Agents, therefore the Anti-hepatitis C class was divided into two classes: Anti-hepatitis C (HCV) Direct Acting Agents and Anti-hepatitis C (HCV) Agents, Other. This resulted in a net increase of one USP Class.

Treatment Adjuncts

In response to the Formulary Reference File inclusion of rasburicase, HQS EC evaluated it as an eligible Part D drug product. While not an antineoplastic, the product is used to prevent a complication of antineoplastic therapy and it was challenging to categorize based on disease rather than pharmacology. There were two other products, mesna (FRF 06262016) and allopurinol (Antigout class), that were also included in the new class, Treatment Adjuncts.

Pulmonary Fibrosis Agents

In response to the FDA approval of Nintedanib, the Expert Committee reviewed the USP Class, Respiratory Tract, Other. The committee noted that this was the second drug indicated for the treatment of idiopathic pulmonary fibrosis, Pirfenidone. Considering the FDA labeling and therapeutic uses of both nintedanib and pirfenidone, the Expert Committee created the new USP Class, Pulmonary Fibrosis Agents.

Renamed USP Classes

Monoclonal Antibody/Antibody Drug Conjugate

In response to the emergence and therapeutic use of Antibody-Drug Conjugates, the Expert Committee renamed the Class, Monoclonal Antibodies/ Antibody-Drug Conjugates.

Anti-hepatitis C (HCV) Agents renamed to Anti-hepatitis C (HCV) Agents, Other

As a result of new treatment guidelines, the Anti-hepatitis C (HCV) Agents class was renamed to reflect this change to Anti-hepatitis C (HCV) Direct Acting Agents.

Hemostasis Agents

The USP Class, Coagulants was renamed to more accurately reflect the therapeutics of the included agent.

Angioedema Agents

The Expert Committee reviewed the class and determined that the parenthetical designation (HAE) – Hereditary Angioedema may be too narrow and removed the parenthetical to be more inclusive for future drug products.

Electrolyte/Metals/ Mineral Modifiers

The Expert Committee reviewed the class and determined that the term "heavy metal" was too granular and not totally representative of all drug products in this class.

Relocated Class

Phosphate Binders

In response to the FDA Approval of Ferric Citrate, the Phosphate Binder Class was reviewed and it was determined that Phosphate Binders in general are more appropriately classified in the Electrolytes/Minerals/Metals/ Vitamins Category.

Single-Drug USP Categories or Classes

In the USP Medicare Model Guidelines v7.0, there are 13 unique positions where there is only one available Part D drug. Twelve (12) of these positions are retained from the USP Medicare Model Guidelines v6.0; one (1) is new in this revision cycle.

Table 4: Single-Drug USP Categories and Classes (Text in red designates new USP Categories and Classes)

USP Category	USP Class	Comment
Electrolytes/Minerals/ Metals/ Vitamins	Vitamins	New in USP MMG v7.0
Anti-Addiction/Substance Abuse Treatment Agents	Opioid Reversal Agents	USP MMG v6.0
Antidementia Agents	Antidementia Agents, Other	USP MMG v5.0
Antidementia Agents	N-methyl-D-aspartate (NMDA) Receptor Antagonist	USP MMG v5.0
Antipsychotics	Treatment-Resistant	USP MMG v5.0
Blood Products/Modifiers/Volume Expanders	Hemostasis Agents	Renamed USP MMG v7.0
Hormonal Agents, Stimulant/Replacement/Modifying (Sex Hormones/Modifiers)	Anabolic Steroids	USP MMG v6.0
Hormonal Agents, Stimulant/Replacement/Modifying (Sex Hormones/Modifiers)	Progesterone Agonists/Antagonists	USP MMG v5.0
Hormonal Agents, Suppressant (Adrenal)	No USP Class	USP MMG v6.0
Hormonal Agents, Parathyroid	No USP Class	Renamed in USP MMG v7.0
Inflammatory Bowel Disease Agents	Sulfonamides	USP MMG v6.0
Otic Agents	No USP Class	USP MMG v5.0
Respiratory Tract/Pulmonary Agents	Mast Cell Stabilizers	USP MMG v5.0

Alignment of USP Medicare Model Guidelines with CMS Formulary Reference File

After the completion of the USP Medicare Model Guidelines v7.0, the USP Categories and Classes were mapped onto the CMS CY17 Formulary Reference File (20160626). For combination products included in the USP MMG v7.0 example list, both USP Category and Class were mapped. For other combination drugs on the CMS FRF, only a USP Category was mapped, and the USP Class was designated as "No USP Class (Combination Product)". This was to allow drugs to be mapped to therapeutic areas, but designating that they do not officially fall into the USP Medicare Model Guidelines. A similar approach was taken for Part B drugs and other drugs that may not have been placed as example drugs on the USP MMG v7.0. This occasionally occurs as a result of older drugs being included in the updates to the CMS FRF. These drugs which were not evaluated by the Expert Committee are mapped to a USP Category and designated as "No USP Class", and are not included in the example list.

The combined data will reside on the USP Web site (www.usp.org) in Microsoft Excel format. The combined file is a static resource and will be updated with the next revision cycle of the USP Medicare Model Guidelines.

Appendix

Appendix I: Excerpts from Cooperative Agreement 1C0CMS331232-01-00

There was a single objective included in the Cooperative Agreement 1C0CMS331232-01-00 *USP Medicare Model Guidelines Version 7.0*, which included four sub-headings.

Task 1: Update Model Guidelines for Drug Categories and Classes

The recipient agreed to update the list of categories and classes in the model guidelines to reflect changes in therapeutic used of covered Part D drugs and the addition of new covered Part D drugs. The recipient agrees that CMS will have full rights and privileges with respect to this revised list and that the final product will be in the public domain.

a) Update Categories and Classes.

- a. USP agreed to participate in an annual meeting with CMS to discuss the methodology for revision the model guidelines
- b. USP agreed to submit a "Summary Methodology and Approach" document describing the approach and methodology for making any revisions to the list and any sources of data used in the process. The report will include a section justifying the creation of any new categories or classes, detailing why proposed single-drug classes or categories are distinct from Version 6.0 Categories and Classes.
- c. USP agreed to submit complete "Revised Model Guidelines' for the Medicare Prescription Drug Benefit which incorporates all recommended changes resulting from updates to the guidance in the maintenance phase, including accounting for new drugs and new therapeutic uses of existing drugs

b) Address Issues.

a. USP agreed to address issues raised by external and internal parties as the 'Revised Model Guidelines' are developed and finalized

c) Draft and Final Report.

- a. USP agreed that in addition to the 'Revised Model Guidelines' and 'Summary Methodology and Approach' documents described above in 1.a), USP agreed to submit a draft and final report, which fully explains and provides all details on the methodology used to develop the 'Revised Model Guidelines'.
- b. USP agreed to reference criteria and "guiding principles" used to revise the list as appropriate and to describe any exceptions to the criteria.
- c. USP agreed to include a report summarizing issues raised by external and internal parties as the "Revised Model Guidelines" are developed, changed and/or finalized, and also, the manner in which such issues have been incorporated in the final "Revised Model Guidelines', or the reasons why this was not feasible.
 - i. USP agreed to incorporate CMS comments and requested revisions into the draft report and finalize the report
 - ii. USP agreed to use the description "Change made consistent with Part D requirements" to capture CMS directed changes from the draft to final version of the Model Guidelines.

d) Recipient Statement

a. USP agreed that the model categories and classes including revisions, as well as the assignment of any drug to any category or class, that result from this agreement, is made only for the purpose of supporting Part D formulary development and does not affect other activities. USP agreed to include this disclaimer in all communications and on all publicly available documents concerning the model guidelines.

Appendix II: Excerpts from Rules and Procedures of the 2015-2020 USP Council of Experts

2. STANDARDS OF CONDUCT

2.01 Code of Ethics

Members of the Council of Experts, Expert Committees (COE/EC Expert) and Expert Panels shall be required to adhere to the USP Code of Ethics, which is available on USP's website.

2.02 Representation

COE/EC Expert members serve USP as individual experts; they do not serve any outside interest. A member of an Expert Panel may serve an outside interest provided such interest is disclosed pursuant to Section 6.05 of these Rules. A CoE/EC Expert or Expert Panel member shall not use his or her membership in any way that is, or appears to be, motivated by private gain or any outside interest.

2.03 Conflict of Interest

- (a) General. Pursuant to Article VIII, Section 1, of the Bylaws and the Conflict of Interest Policy in the Code of Ethics, all CoE/EC Expert members shall adhere to the Conflict of Interest provisions set forth in this section. Expert Panel members are subject to the Conflict of Interest requirements contained in Section 5.05(a) of these Rules. As used in these Rules "Conflict of Interest" includes, but is not limited to, any matter in which an Expert has a direct financial interest or any other personal interest of any kind which would preclude or appear to preclude such individual from exercising impartial judgment or otherwise acting in the best interest of the USP.
- (b) <u>Recusal</u>. No CoE/EC Expert shall vote nor take part in the final discussion or deliberation of any matter in which he or she has a Conflict of Interest. An Expert Panel member may participate in deliberations or recommendations regarding matters in which he or she has a Conflict of Interest provided disclosure of a Conflict of Interest is made pursuant to Section 5.05(a) of these Rules.
- (c) <u>Assignment of Work</u>. No CoE/EC Expert shall be assigned the primary responsibility to work on an issue or question in which he or she has a Conflict of Interest. He or she may, however, provide relevant scientific information and may participate in discussions regarding such issue or question; providing, however, that final discussion, deliberation and vote on such issue or question shall be conducted without such member present in person or by phone. Expert Panel members who have a Conflict of Interest may be assigned work on matters in which they have a Conflict of Interest provided disclosure of such Conflict of Interest is made pursuant to Section 5.05(a) of these Rules.
- (d) Conflict of Chair. In the case where the chairperson of an Expert Committee has a Conflict of Interest, the vice chairperson will serve. If the vice chairperson also is conflicted, a designated non-conflicted member shall lead the discussions. The chairperson of an Expert Panel that has a Conflict of Interest may continue to serve in that capacity provided disclosure of such Conflict of Interest is made pursuant to Section 5.05 (a) of these Rules.

2.04 Disclosure Statements

- (a) Requirement. Each CoE/EC Expert and Expert Panel member shall submit to USP a Disclosure Statement disclosing all employment, professional research, organizational memberships, and other relevant interests. The Disclosure Statement shall be updated by the member as necessary to keep it current or as requested periodically by USP. Except as specified in Section 2.05 below, the information provided in Disclosure Statements shall be kept confidential.
- (b) <u>Failure to Submit Statement</u>. If a CoE/EC Expert or Expert Panel member fails to submit a Disclosure Statement, that member will not be allowed to participate in CoE/EC or Expert Panel activities until such statement is submitted to USP.

2.05 Identification and Resolution of Conflict Issues.

- (a) USP Responsibility. USP staff, together with the chairperson of an Expert Committee or Expert Panel shall review Disclosure Statements on a periodic basis identify potential Conflicts of Interest and to ensure that all interests disclosed on the Disclosure Statements are disclosed to the other members of the Expert Committee or Expert Panel. Where an apparent or potential Conflict of Interest is identified by a CoE/EC Expert and cannot be resolved through voluntary recusal and/or intervention by the EC chair, the matter shall be referred to the Chair of the Council of Experts (CoE Chairperson) and the USP Executive Secretariat for resolution. The CoE Chairperson shall have final authority for resolving matters involving Conflicts of Interest. The minutes of any meeting at which a Conflict of Interest issue has been identified shall reflect disclosure and resolution of such issue, including any recusal of a CoE/EC Expert due to Conflict of Interest..
- (b) Expert Responsibility. Any CoE/EC Expert Expert Panel member who believes or should have reason to believe that he or she may have an apparent or potential Conflict of Interest shall notify USP staff and the chairperson of the Expert Committee or Expert Panel, as applicable, prior to any work on or discussion of the matter in question. Conflict of Interest issues identified by a CoE/EC Expert shall be resolved as described in Section 2.05(a) above.

2.06 Confidentiality

- (a) Obligation to Maintain Confidentiality. Each CoE/EC member shall maintain the confidentiality of all information gained in the course of his or her activities as a CoE/EC Expert, and shall not use or disclose such information for any purpose, unless such information is already publicly available. In case of doubt as to whether information is deemed confidential, the information shall be treated as confidential until otherwise indicated by the USP Executive Secretariat or USP Secretary. Expert Panel members are obligated to maintain confidentiality of materials in accordance with Section 5.05(b) of these Rules. CoE/EC Experts and Expert Panel members should receive and send any confidential electronic communications (i.e. all communications in the case of Expert Committee members) from a private email address, not shared with or accessible to their employer or any other 3rd party.
- (b) <u>Confidentiality Agreement</u>. Each CoE/EC Expert and Expert Panel member shall sign a confidentiality agreement reflecting the confidentiality obligations set forth in Section 2.06(a). If a CoE/EC Expert or Expert Panel member fails to submit a confidentiality agreement, that member will not be allowed to receive any confidential information or participate in the Council of Experts, Expert Committee or Expert Panel activities until such agreement is submitted.

5. EXPERT PANELS

5.01 Formation

The CoE Chairperson may form an advisory Expert Panel to provide additional expertise and perform an assigned task for a particular Expert Committee or Expert Committees. The CoE Chairperson shall appoint the members of the Expert Panel, who may be removed by the CoE Chairperson at any time. USP will seek the most qualified experts on a particular topic, and will work to assure broad and diverse membership. At least one member of the Expert Committee to which the Expert Panel reports shall be a member of the Expert Panel. Any Expert Committee member that becomes a member of an Expert Panel or participates at an Expert Panel meeting may do so only as a representative of USP. An Expert Panel will continue until its assigned task has been completed or until dissolved by the CoE Chairperson.

5.02 Chairperson, Charge and Scope

The CoE Chairperson shall appoint, and may remove at any time, the chairperson of an Expert Panel. The CoE Chairperson shall provide an Expert Panel with a specific charge, including scope of work (advisory only), deliverables, and timelines for completion of work, and dissolve such Expert Panel at the conclusion of the specified work. The task performed by the Expert Panel shall be consistent with the Expert Committee's Work Plan, unless the Expert Panel's task is deemed by the CoE Chairperson to be critical or a public health emergency.

5.03 Reporting Requirements.

The chairperson of the Expert Panel shall report on its progress as needed or as requested by the Expert Committee chairperson or the CoE Chairperson. The Expert Panel shall issue advisory recommendations to the Expert Committee upon the completion of its task, which shall

be accompanied by a disclosure of Conflicts of Interest information identified under Section 6.05(a) below. Expert Panel members will strive to reach consensus on their compendial topic and are expected to complete their task within the specified timeframe, but are not required to achieve unanimity. Dissenting views of Expert Panel members may be expressed in writing and accompany the Expert Panel's advisory recommendations to the Expert Committee.

5.04 Joint Expert Panels

A Joint Expert Panel advisory to two or more Expert Committees may be established. However, the CoE Chairperson shall designate a lead Expert Committee responsible for the oversight of such Joint Expert Panel. In selecting members of a Joint Expert Panel and appointing a Chairperson, the CoE Chairperson shall consider the advice of the chairs of each involved Expert Committee. The formation, charge and reporting for the Joint Expert Panel shall be the responsibility of the lead Expert Committee.

5.05 Conflict of Interest and Confidentiality.

- (a) Conflicts. Conflicts of Interest, as defined in Section 2.03, will not be a bar to participation on an Expert Panel or in any deliberations or recommendations of the Expert Panel, including voting, provided the Expert Panel member timely and adequately discloses any Conflict of Interest as required by Sections 2.03, 2.04 and 2.05 of these Rules to other members of the Expert Panel including the chairperson.
- (b) <u>Confidentiality</u>. Expert Panel members are not necessarily obligated to maintain confidentiality of materials obtained and issues discussed during the course of the panel's task. However, confidentiality may be required in certain instances as identified by the Expert Panel Chairperson and USP staff including, but not limited to, protecting third party confidentiality obligations, preventing the premature disclosure of a standard, or maintaining the confidentiality of proprietary, business, or trade secret information

Appendix III: Members of the USP Healthcare Quality and Safety Expert Committee

Chair

Dennis Doherty, M.D.

Professor of Medicine University of Kentucky College of Medicine Lexington, KY

Vice Chair

Duane M. Kirking, Pharm.D. Ph.D.

Research Scientist Emeritus, Professor Emeritus
College of Pharmacy
University of Michigan
Ann Arbor, MI

Expert Committee Members

*Denotes members of the Medicare Model Guidelines Subcommittee

Timothy Eugene Albertson, Ph.D*

Professor of Internal Medicine, Anesthesiology, Pharmacology/Toxicology and Clinical Professor UCSF School of Pharmacy Davis, CA

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Chief, Clinical Pharmacy Services Mississippi Baptist Medical Center Jackson, MS

Danial Edwin Baker, Pharm.D.*

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Raymond Hohl, M.D.*

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William Albert Hess, B.S. Pharm*

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USP Scientific Staff

Donna Bohannon, R. Ph. Diana Kwan, Pharm. D.

Appendix IV: Guiding Principles



Guiding Principles USP Medicare Model Guidelines v7.0 Medicare Model Guidelines Subcommittee March 22, 2016

- The Healthcare Quality Expert Committee and the Medicare Model Guidelines Subcommittee retain the goal of the original Model Guidelines Expert Committee (2004) to strike a balance of assuring beneficiary access to the safe and effective drugs that they need with the flexibility that Part D sponsors need to offer effective benefits.
- The USP Medicare Model Guidelines utilize pharmacotherapeutic evidence for an FDA approved agent to create categories and classes. The USP Medicare Model Guidelines are composed of two organizational levels—USP Categories and USP Classes—which characterize the statutory requirement for Medicare Part D plan benefit design to include drugs from each category and class.^{1,2}
- USP Categories and USP Classes are defined as follows:
 - A USP Category is the broadest classification of the USP Medicare Model Guidelines, and provides a high level formulary structure designed to include all potential therapeutic agents for diseases and conditions of Part D beneficiaries.
 - A USP Class is a more granular classification, occurring within a specific USP Category in the
 USP Model Guidelines, which provides for therapeutic or pharmacologic groupings of FDA
 approved medications, consistent with current U.S. healthcare practices and standards of care.
- USP Medicare Model Guidelines v7.0 includes a list of associated drug examples that aligns with the Part D drugs on the Centers for Medicare & Medicaid Services (CMS) Formulary Reference File (FRF).
 - A drug in the associated list may appear in more than one USP Category or USP Class if there is a scientifically-valid and clinically-meaningful patient care issue.
 - Combination products and specific dosage forms/formulations/delivery systems, are generally not listed, but may be included in the associated list if there is a scientifically-valid and clinically-meaningful patient care issue.
- USP will advise CMS on issues it discovers during the revision process that are relevant to implementing the USP Medicare Model Guidelines.

¹ The Law states in Section 1860D-4(b)(3)(C) that: (D) Plan design.—(i) In general.—The Secretary does not find that the design of the plan and its benefits (including any formulary and tiered formulary structure) are likely to substantially discourage enrollment by certain part D eligible individuals under the plan. (ii) Use of categories and classes in formularies.—The Secretary may not find that the design of categories and classes within a formulary violates clause (i) if such categories and classes are consistent with guidelines (if any) for such categories and classes established by the United States Pharmacopeia.

² The Law states in Section 1860D-11(e)(2)(D) that (C) Inclusion of drugs in all therapeutic categories and classes.—(i) In general.—Subject to subparagraph (G), the formulary must include drugs within each therapeutic category and class of covered part D drugs, although not necessarily all drugs within such categories and classes.(ii) Model guidelines.—The Secretary shall request the United States Pharmacopeia to develop, in consultation with pharmaceutical benefit managers and other interested parties, a list of categories and classes that may be used by prescription drug plans under this paragraph and to revise such classification from time to time to reflect changes in therapeutic uses of covered part D

drugs and the additions of new covered part D drugs.(iii) Limitation on changes in therapeutic classification.—The PDP sponsor of a prescription drug plan may not change the therapeutic categories and classes in a formulary other than at the beginning of each plan year except as the Secretary may permit to take into account new therapeutic uses and newly approved covered part D drugs.

Appendix V: Drugs Reviewed by the HQS EC

	Drug Name and FDA Appl. #	Active Ingredients	Manufacturer	Approval Date	Indication
1	ANORO ELLIPTA (NDA #203975)	UMECLIDINIUM BROMIDE; VILANTEROL TRIFENATATE	GLAXO GRP LTD	12/18/2013	ANORO ELLIPTA is a combination anticholinergic/long-acting beta2-adrenergic agonist (anticholinergic/LABA) indicated for the long-term, once-daily, maintenance treatment of airflow obstruction in patients with chronic obstructive pulmonary disease (COPD), including chronic bronchitis and/or emphysema. Important Limitations of Use: ANORO ELLIPTA is NOT indicated for the relief of acute bronchospasm or for the treatment of asthma.
2	FARXIGA (NDA #202293)	DAPAGLIFLOZIN	ASTRAZENECA AB	1/8/2014	FARXIGA (dapagliflozin) is indicated as an adjunct to diet and exercise to improve glycemic control in adults with type 2 diabetes mellitus. Limitation of Use: FARXIGA is not recommended for patients with type 1 diabetes mellitus or for the treatment of diabetic ketoacidosis. MOA: Dapagliflozin is an inhibitor of SGLT2. By inhibiting SGLT2, dapagliflozin reduces reabsorption of filtered glucose and lowers the renal threshold for glucose, and thereby increases urinary glucose excretion
3	HETLIOZ (NDA #205677)	TASIMELTEON	VANDA PHARMS INC	1/31/2014	HETLIOZ (TASIMELTEON) is indicated for the treatment of Non-24-Hour Sleep-Wake Disorder (Non-24). The precise mechanism by which tasimelteon exerts its therapeutic effect in patients with Non-24 is not known. Tasimelteon is an agonist at melatonin MT1 and MT2 receptors. These receptors are thought to be involved in the control of circadian rhythms.
4	NORTHERA (NDA #203202)	DROXIDOPA	CHELSEA THERAPS INC	2/18/2014	NORTHERA is indicated for the treatment of orthostatic dizziness, lightheadedness, or the "feeling that you are about to black out" in adult patients with symptomatic neurogenic orthostatic hypotension (NOH) caused by primary autonomic failure [Parkinson's disease (PD), multiple system atrophy, and pure autonomic failure], dopamine beta-hydroxylase deficiency, and non-diabetic autonomic neuropathy. Effectiveness beyond 2 weeks of treatment has not been established. The continued effectiveness of NORTHERA should be assessed periodically. MOA: The exact mechanism of action of NORTHERA in the treatment of neurogenic orthostatic hypotension is unknown. NORTHERA is a synthetic amino acid analog that is directly metabolized to norepinephrine by dopa-decarboxylase, which is extensively distributed throughout the body. NORTHERA is believed to exert its pharmacological effects through norepinephrine and not through the parent molecule or other metabolites. Norepinephrine increases blood pressure by inducing peripheral arterial and venous vasoconstriction. NORTHERA in humans induces small and transient rises in plasma norepinephrine.
5	MYALEPT (BLA #125390)	METRELEPTIN	AMYLIN PHARMS LLC	2/24/2014	MYALEPT (metreleptin) for injection is indicated as an adjunct to diet as replacement therapy to treat the complications of leptin deficiency in patients with congenital or acquired generalized lipodystrophy

6	OTEZLA (NDA #205437)	APREMILAST	CELGENE	3/21/2014	OTEZLA (Apremilast) is indicated for the treatment of adult patients with active psoriatic arthritis. MOA: Apremilast is an oral small-molecule inhibitor of phosphodiesterase 4 (PDE4) specific for cyclic adenosine monophosphate (cAMP). PDE4 inhibition results in increased intracellular cAMP levels. The specific mechanism(s) by which apremilast exerts its therapeutic action in psoriatic arthritis patients is not well defined.
7	TANZEUM (BLA #125431)	ALBIGLUTIDE	GLAXOSMITHKLINE LLC	4/15/2014	TANZEUM (albiglutide) is indicated as an adjunct to diet and exercise to improve glycemic control in adults with type 2 diabetes mellitus. TANZEUM is an agonist of the GLP-1 receptor and augments glucose-dependent insulin secretion. TANZEUM also slows gastric emptying
8	ZYKADIA (NDA #205755)	CERITINIB	NOVARTIS PHARMS CORP	4/29/2014	ZYKADIA (ceritinib)is indicated for the treatment of patients with anaplastic lymphoma kinase (ALK)-positive metastatic non-small cell lung cancer (NSCLC) who have progressed on or are intolerant to crizotinib. This indication is approved under accelerated approval based on tumor response rate and duration of response [see Clinical Studies (14)]. An improvement in survival or disease-related symptoms has not been established. Continued approval for this indication may be contingent upon verification and description of clinical benefit in confirmatory trials
9	INCRUSE ELLIPTA (NDA #205382)	UMECLIDINIUM BROMIDE	GLAXO GRP ENGLAND	4/30/2014	INCRUSE® ELLIPTA® (umeclidinium) is an anticholinergic indicated for the long-term, once-daily, maintenance treatment of airflow obstruction in patients with chronic obstructive pulmonary disease (COPD), including chronic bronchitis and/or emphysema.
10	ZONTIVITY (NDA #204886)	VORAPAXAR SULFATE	MERCK SHARP DOHME	5/8/2014	ZONTIVITY TM (vorapaxar) is indicated for the reduction of thrombotic cardiovascular events in patients with a history of myocardial infarction (MI) or with peripheral arterial disease (PAD). ZONTIVITY has been shown to reduce the rate of a combined endpoint of cardiovascular death, MI, stroke, and urgent coronary revascularization (UCR).
11	ENTYVIO (BLA #125476)	VEDOLIZUMAB	TAKEDA PHARMS USA	5/19/2014	ENTYVIO (Vedolizumab) is an integrin receptor antagonist indicated for Adult ulcerative colitis and adult Crohn's Disease.
12	DALVANCE (NDA #021883)	DALBAVANCIN HYDROCHLORID E	DURATA THERAPEUTICS	5/23/2014	DALVANCE TM (dalbavancin) for injection is indicated for the treatment of adult patients with acute bacterial skin and skin structure infections (ABSSSI) caused by susceptible isolates of the following Gram-positive microorganisms: Staphylococcus aureus (including methicillin-susceptible and methicillin-resistant strains), Streptococcus pyogenes, Streptococcus agalactiae and Streptococcus anginosus group (including S. anginosus, S. intermedius, S. constellatus).
13	JUBLIA (NDA #203567)	EFINACONAZOL E	DOW PHARM	6/6/2014	JUBLIA (efinaconazole) topical solution, 10% is an azole antifungal indicated for the topical treatment of onychomycosis of the toenail(s) due to Trichophyton rubrum and Trichophyton mentagrophytes

14	SIVEXTRO (NDA #205435)	TEDIZOLID PHOSPHATE	CUBIST PHARMS INC	6/20/2014	SIVEXTRO TM is an oxazolidinone-class antibacterial indicated for the treatment of acute bacterial skin and skin structure infections (ABSSSI) caused by susceptible isolates of the following Gram-positive microorganisms: Staphylococcus aureus (including methicillin-resistant [MRSA] and methicillin-susceptible [MSSA] isolates), Streptococcus pyogenes, Streptococcus agalactiae, Streptococcus anginosus Group (including Streptococcus anginosus, Streptococcus intermedius, and Streptococcus constellatus), and Enterococcus faecalis.
15	SIVEXTRO (NDA #205436)	TEDIZOLID PHOSPHATE	CUBIST PHARMS INC	6/20/2014	SIVEXTRO (tedizolid phiosphate) is an oxazolidinone-class antibacterial indicated for the treatment of acute bacterial skin and skin structure infections (ABSSSI) caused by susceptible isolates of the following Gram-positive microorganisms: Staphylococcus aureus (including methicillin-resistant [MRSA] and methicillin-susceptible [MSSA] isolates), Streptococcus pyogenes, Streptococcus agalactiae, Streptococcus anginosus Group (including Streptococcus anginosus, Streptococcus intermedius, and Streptococcus constellatus), and Enterococcus faecalis.
16	KERYDIN (NDA # 204427)	TAVABOROLe	ANACOR PHARMS INC	7/7/2014	KERYDIN is an oxaborole antifungal indicated for the tolpical treatment of onychomycosis of the toenails due to Trichophytonrubrum or Trichophyton mentagrophytes.
17	ZYDELIG (NDA #205858)	IDELALISIB	GILEAD SCIENCES INC	7/23/2014	Zydelig (Idelalisib) is indicated, in combination with rituximab, for the treatment of patients with relapsed chronic lymphocytic leukemia (CLL) for whom rituximab alone would be considered appropriate therapy due to other co-morbidities. Zydelig is indicated for the treatment of patients with relapsed follicular B-cell non-Hodgkin lymphoma (FL) who have received at least two prior systemic therapies. Zydelig is indicated for the treatment of patients with relapsed small lymphocytic lymphoma (SLL) who have received at least two prior systemic therapies. MOA: Idelalisib is an inhibitor of PI3K δ kinase, which is expressed in normal and malignant B-cells. Idelalisib induced apoptosis and inhibited proliferation in cell lines derived from malignant B-cells and in primary tumor cells. Idelalisib inhibits several cell signaling pathways, including B-cell receptor (BCR) signaling and the CXCR4 and CXCR5 signaling, which are involved in trafficking and homing of B-cells to the lymph nodes and bone marrow. Treatment of lymphoma cells with idelalisib resulted in inhibition of chemotaxis and adhesion, and reduced cell viability.
18	ZYDELIG (NDA #206545)	IDELALISIB	GILEAD SCIENCES INC	7/23/2014	Zydelig (idelasib) is a kinase inhibitor indicated for the treatment of patients with: • Relapsed chronic lymphocytic leukemia (CLL), in combination with rituximab, in patients for whom rituximab alone would be considered appropriate therapy due to other co-morbidities. (1.1) • Relapsed follicular B-cell non-Hodgkin lymphoma (FL) in patients who have received at least two prior systemic therapies. (1.2) • Relapsed small lymphocytic lymphoma (SLL) in patients who have received at least two prior systemic therapies. (1.3) Accelerated approval was granted for FL and SLL based on overall response rate. Improvement in patient survival or disease related symptoms has not been established. Continued approval for these indications may be contingent upon verification of clinical benefit in confirmatory trials.

19	Striverdi Respimat (NDA #203108)	Olodaterol Respimat	BOEHRINGER INGELHEIM	7/31/2014	LABA; STRIVERDI RESPIMAT (olodaterol respimat) is a long-acting beta2-agonist indicated for long-term, once-daily maintenance bronchodilator treatment of airflow obstruction in patients with chronic obstructive pulmonary disease (COPD), including chronic bronchitis and/or emphysema.
20	JARDIANCE (NDA #204629)	EMPAGLIFLOZIN	BOEHRINGER INGELHEIM	8/1/2014	JARDIANCE(Empagliflozin) is indicated as an adjunct to diet and exercise to improve glycemic control in adults with type 2 diabetes mellitus. Empagliflozin is an inhibitor of SGLT2. By inhibiting SGLT2, empagliflozin reduces renal reabsorption of filtered glucose and lowers the renal threshold for glucose, and thereby increases urinary glucose excretion.
21	ORBACTIV (NDA #206334)	ORITAVANCIN DIPHOSPHATE	MEDICINES CO	8/6/2014	Antibacterial; ORBACTIV TM (Oritavancin) for injection is indicated for the treatment of adult patients with acute bacterial skin and skin structure infections (ABSSSI) caused by susceptible isolates of the following Gram-positive microorganisms:Staphylococcus aureus (including methicillin-susceptible and methicillin-resistant isolates), Streptococcus pyogenes, Streptococcus agalactiae, Streptococcus dysgalactiae, Streptococcus anginosus group (includes S. anginosus, S. intermedius, and S. constellatus), and Enterococcus faecalis (vancomycin-susceptible isolates only).
22	BELSOMRA (NDA #204569)	SUVOREXANT	MERCK AND CO INC	8/13/2014	BELSOMRA® (suvorexant) is indicated for the treatment of insomnia characterized by difficulties with sleep onset and/or sleep maintenance. MOA: The mechanism by which suvorexant exerts its therapeutic effect in insomnia is presumed to be through antagonism of orexin receptors. The orexin neuropeptide signaling system is a central promoter of wakefulness. Blocking the binding of wakepromoting neuropeptides orexin A and orexin B to receptors OX1R and OX2R is thought to suppress wake drive. Antagonism of orexin receptors may also underlie potential adverse effects such as signs of narcolepsy/cataplexy. Genetic mutations in the orexin system in animals result in hereditary narcolepsy; loss of orexin neurons has been reported in humans with narcolepsy
23	PLEGRIDY (BLA #125499)	PEGINTERFERON BETA-1A	BIOGEN IDEC INC	8/15/2014	PLEGRIDY (peginterferon beta-1a) is indicated for the treatment of patients with relapsing forms of multiple sclerosis
24	CERDELGA (NDA #205494)	ELIGLUSTAT	GENZYME CORP	8/19/2014	CERDELGA(eliglustat) is indicated for the long-term treatment of adult patients with Gaucher disease type 1 (GD1) who are CYP2D6 extensive metabolizers (EMs), intermediate metabolizers (IMs), or poor metabolizers (PMs) as detected by an FDA-cleared test
25	AKYNZEO (NDA #205718)	NETUPITANT; PALONOSETRON HYDROCHLORID E	HELSINN HLTHCARE	10/10/2014	AKYNZEO is a fixed combination of netupitant, a substance P/neurokinin 1 (NK1) receptor antagonist, and palonosetron, a serotonin-3 (5-HT3) receptor antagonist indicated for the prevention of acute and delayed nausea and vomiting associated with initial and repeat courses of cancer chemotherapy, including, but not limited to, highly emetogenic chemotherapy. Oral palonosetron prevents nausea and vomiting during the acute phase and netupitant prevents nausea and vomiting during both the acute and delayed phase after cancer chemotherapy

HARVONI (NDA #205834)	LEDIPASVIR; SOFOSBUVIR	GILEAD SCIENCES INC	10/10/2014	HARVONI is a fixed-dose combination of ledipasvir, a hepatitis C virus (HCV) NS5A inhibitor, and
				sofosbuvir, an HCV nucleotide analog NS5B polymerase inhibitor, and is indicated in the treatment of chronic hepatitis C (CHC) genotype 1 infection in adults
ESBRIET (NDA #022535)	PIRFENIDONE	INTERMUNE INC	10/15/2014	ESBRIET (pirfenidone)is a pyridone indicated for the treatment of idiopathic pulmonary fibrosis (IPF)
OFEV (NDA #205832)	NINTEDANIB	BOEHRINGER INGELHEIM	10/15/2014	OFEV (nintedanib) is a kinase inhibitor indicated for the treatment of idiopathic pulmonary fibrosis (IPF)
LYNPARZA (NDA #206162)	OLAPARIB	ASTRAZENECA LP	12/19/2014	Lynparza (olaparib) is a poly (ADP-ribose) polymerase (PARP) inhibitor indicated as monotherapy in patients with deleterious or suspected deleterious germline BRCA mutated (as detected by an FDA-approved test) advanced ovarian cancer who have been treated with three or more prior lines of chemotherapy. (1.1)The indication is approved under accelerated approval based on objective response rate and duration of response. Continued approval for this indication may be contingent upon verification and description of clinical benefit in confirmatory trials.
VIEKIRA PAK (NDA #206619)	OMBITASVIR; PARITAPREVIR; RITONAVIR; DASABUVIR	ABBVIE INC	12/19/2014	VIEKIRA PAK with or without ribavirin is indicated for the treatment of patients with genotype 1 chronic hepatitis C virus (HCV) infection including those with compensated cirrhosis. VIEKIRA PAK includes ombitasvir, a hepatitis C virus NS5A inhibitor, paritaprevir, a hepatitis C virus NS3/4A protease inhibitor, ritonavir, a CYP3A inhibitor and dasabuvir, a hepatitis C virus non-nucleoside NS5B palm polymerase inhibitor.
SAVAYSA (NDA #206316)	EDOXABAN	DAIICHI SANKYO	1/8/2015	SAVAYSA is a factor Xa inhibitor indicated: 1) To reduce the risk of stroke and systemic embolism (SE) in patients with nonvalvular atrial fibrillation (NVAF); 2) SAVAYSA is indicated for the treatment of deep vein thrombosis (DVT) and pulmonary embolism (PE) following 5 to 10 days of initial therapy with a parenteral anticoagulant
COSENTYX (BLA #125504)	SECUKINUMAB	NOVARTIS PHARMS CORP	1/21/2015	COSENTYX is a human interleukin-17A antagonist indicated for the treatment of moderate to severe plaque psoriasis in adult patients who are candidates for systemic therapy or phototherapy. (PATIENT SELF INJECTION)
NATPARA (BLA #125511)	PARATHYROID HORMONE	NPS PHARMS INC	1/23/2015	NATPARA is a parathyroid hormone indicated as an adjunct to calcium and vitamin D to control hypocalcemia in patients with hypoparathyroidism.
PREZCOBIX (NDA #205395)	COBICISTAT; DARUNAVIR ETHANOLATE	JANSSEN PRODS	1/29/2015	PREZCOBIX is a two drug combination of darunavir, a human immunodeficiency virus (HIV-1) protease inhibitor and cobicistat, a CYP3A inhibitor and is indicated for the treatment of HIV-1 infection in adult patients.
EVOTAZ (NDA #206353)	ATAZANAVIR SULFATE; COBICISTAT	BRISTOL MYERS SQUIBB	1/29/2015	EVOTAZ is a combination human immunodeficiency virus (HIV-1) protease inhibitor and CYP3A inhibitor indicated for use in combination with other antiretroviral agents for the treatment of HIV-1 infection.
	#206316) COSENTYX (BLA #125504) NATPARA (BLA #125511) PREZCOBIX (NDA #205395) EVOTAZ (NDA	#206316) COSENTYX (BLA #125504) NATPARA (BLA PARATHYROID HORMONE PREZCOBIX (NDA #205395) COBICISTAT; DARUNAVIR ETHANOLATE EVOTAZ (NDA ATAZANAVIR #206353) SULFATE;	#206316) COSENTYX (BLA #125504) SECUKINUMAB NOVARTIS PHARMS CORP NATPARA (BLA PARATHYROID HORMONE PREZCOBIX (NDA #205395) DARUNAVIR ETHANOLATE EVOTAZ (NDA ATAZANAVIR BRISTOL MYERS #206353) SULFATE; SQUIBB	#206316) COSENTYX SECUKINUMAB NOVARTIS PHARMS 1/21/2015 (BLA #125504) NATPARA (BLA PARATHYROID NPS PHARMS INC 1/23/2015 #125511) PREZCOBIX COBICISTAT; JANSSEN PRODS 1/29/2015 (NDA #205395) DARUNAVIR ETHANOLATE EVOTAZ (NDA ATAZANAVIR BRISTOL MYERS 1/29/2015 #206353) SULFATE; SQUIBB

36	IBRANCE (NDA #207103)	PALBOCICLIB	PFIZER INC	2/3/2015	IBRANCE (palbociclib)is a kinase inhibitor indicated in combination with letrozole for the treatment of postmenopausal women with estrogen receptor (ER)-positive, human epidermal growth factor receptor 2 (HER2)-negative advanced breast cancer as initial endocrine-based therapy for their metastatic disease. (1) This indication is approved under accelerated approval based on progression-free survival (PFS). Continued approval for this indication may be contingent upon verification and description of clinical benefit in a confirmatory trial.
37	LENVIMA (NDA #206947)	LENVATINIB	EISAI INC	2/13/2015	LENVIMA (lenvatinib) is a kinase inhibitor indicated for the treatment of patients with locally recurrent or metastatic, progressive, radioactive iodine-refractory differentiated thyroid cancer
38	FARYDAK (NDA #205353)	PANOBINOSTAT	NOVARTIS PHARMS CORP	2/23/2015	FARYDAK (panobionostat), a histone deacetylase inhibitor, in combination with bortezomib and dexamethasone, is indicated for the treatment of patients with multiple myeloma who have received at least 2 prior regimens, including bortezomib and an immunomodulatory agent. This indication is approved under accelerated approval based on progression free survival. Continued approval for this indication may be contingent upon verification and description of clinical benefit in confirmatory trials.
39	OPDIVO (BLA #125527)	NIVOLUMAB	BRISTOL MYERS SQUIBB	3/4/2015	OPDIVO (nivolumab) is a programmed death receptor-1 (PD-1) blocking antibody indicated for the treatment of patients with:1) unresectable or metastatic melanoma and disease progression following ipilimumab and, if BRAF V600 mutation positive, a BRAF inhibitor. 2) metastatic squamous non-small cell lung cancer with progression on or after platinum-based chemotherapy.
40	ZARXIO (BLA #125553)	FILGRASTIN- SNDZ	SANDOZ, INC	3/6/2015	ZARXIO (filgrastim -SNDZ) is a leukocyte growth factor indicated to: Decrease the incidence of infection, as manifested by febrile neutropenia, in patients with nonmyeloid malignancies receiving myelosuppressive anti- cancer drugs associated with a significant incidence of severe neutropenia with fever. Reduce the time to neutrophil recovery and the duration of fever, following induction or consolidation chemotherapy treatment of patients with acute myeloid leukemia (AML). Reduce the duration of neutropenia and neutropenia-related clinical sequelae, e.g., febrile neutropenia, in patients with nonmyeloid malignancies undergoing myeloablative chemotherapy followed by bone marrow transplantation (BMT). Mobilize autologous hematopoietic progenitor cells into the peripheral blood for collection by leukapheresis. (e.g. fever, infections, oropharangeal ulcers) in symtomatic patients with congenital neutropenia, cyclic neutropenia or idiopathjic neutropenia.
41	CRESEMBA (NDA #207500)	ISAVUCONAZON IUM SULFATE	ASTELLAS	3/6/2015	Isavuconazonium Sulfate Capsules approved for the treatment of invasive aspergillosis and invasive mucormycosis
42	UNITUXIN (BLA #125516)	DINUTUXIMAB	UNITED THERAP	3/10/2015	Unituxin (dinutuximab) is indicated, in combination with granulocyte-macrophage colony-stimulating factor (GM-CSF), interleukin-2 (IL-2) and 13-cis-retinoic acid (RA), for the treatment of pediatric patients with high-risk neuroblastoma who achieve at least a partial response to prior first-line multiagent, multimodality therapy.

43	CHOLBAM (NDA # 205750)	CHOLIC ACID	ASKLEPION PHARMACEUTICALS LLC	3/15/2015	CHOLBAM (Cholic Acid) capules indicated for the treatment of bile acid synthesis disorders to single enzyme defects and as adjunctive treatment of peroxisomal disorders includingZellweger spectrum disorders in patients who exhibit manifestations of liver disease as complications from decreased fat soluble vitamin absorption.
44	JADENU (NDA #206910)	DEFERASIROX	NOVARTIS PHARMS CORP	3/30/2015	JADENA (deferasirox) is indicated in the tretment of Chronic Iron Overload Due to Blood Transfusions (Transfusional Iron Overload). Exjade is indicated for the treatment of chronic iron overload due to blood transfusions (transfusional hemosiderosis) in patients 2 years of age and older. This indication is based on a reduction of liver iron concentrations and serum ferritin levels [see Clinical Studies. An improvement in survival or disease-related symptoms has not been established. Treatment of Chronic Iron Overload in Non-Transfusion-Dependent Thalassemia Syndromes. Exjade is indicated for the treatment of chronic iron overload in patients 10 years of age and older with non-transfusion-dependent thalassemia (NTDT) syndromes and with a liver iron concentration (LIC) of at least 5 milligrams of iron per gram of liver dry weight (mg Fe/g dw) and a serum ferritin greater than 300 mcg/L. This indication is based on achievement of an LIC less than 5 mg Fe/g dw. An improvement in survival or disease-related symptoms has not been established.
45	STIOLTO RESPIMAT (NDA #206756)	TIOTROPIUM BROMIDE;OLOD ATEROL	BOEHRINGER INGELHEIM	5/21/2015	STIOLTO RESPIMAT is a combination of tiotropium and olodaterol indicated for long-term, once-daily maintenance treatment of airflow obstruction in patients with chronic obstructive pulmonary disease (COPD), including chronic bronchitis and/or emphysema. Important Limitations of Use: STIOLTO RESPIMAT is not indicated to treat acute deteriorations of COPD. STIOLTO RESPIMAT is not indicated to treat asthma. The safety and effectiveness of STIOLTO RESPIMAT in asthma have not been established.
46	VIBERZI (NDA # 206940)	ELUXADOLINE	FURIEX PHARMA, INC.	5/27/2015	VIBERZI (eluxadoline) is a mu-opioid receptor agonist, indicated in adults for the treatment of irritable bowel syndrome with diarrhea (IBS-D).
47	ORKAMBI (NDA # 206038)	IVACAFTOR, LUMACAFTOR	VERTEX PHARMS INC	7/2/2015	ORKAMBI is a combination of lumacaftor and ivacaftor. A cystic fibrosis transmembrane conductance regulator (CFTR) potentiator, indicated for the treatment iof cystic fibrosis (CF) in patients age 12 and older who are homozygous for the f508del mutation in the CFTR gene.
48	ENTRESTO (NDS # 207620)	SACUBITRIL; VALSARTAN	NOVARTIS PHARMS CORP	7/7/2015	ENTERSTO is a combination of sacubitril, a neprilysin inhibitor, and valsartan, an angiotension II receptor blocker, indicated to reduce the risk of cardiovascular death and hopsitalization for heart failure in patients with chronic heart failure (NYHA Class II-IV) and reduced ejection fraction . ENTRESTO is usually administered in conjunction with other heart failure therapiies, in place of an ACE inhibitor or other ARB.
49	REXULTI (NDA # 205422)	BREXPIPRAZOLE	OTSUKA PHARM CO	7/10/2015	REXULTI is an atypical antipsychotic indicated for : Use as an adjunctive tgherapy to antidepressants for the treament of major depressive disorder (MDD); and also indiocated for the treatment of schizophrenia.

50	ODOMZO (NDA # 205266)	SONIDEGIB PHOSPHATE	NOVARTIS PHARMS CORP	7/24/2015	ODOMZO is a hedgehog [pathway inhibitor indicated for the treatment of adult patients with locally advanced basal cell carcinoma (BCc) that has recurred following surgery or radiation therapy; or who are not candidates for surgery or radiation.
51	DAKLINZA (NDA # 206843)	DACLATASVIR DIHYDROCHLOR IDE)	BRISTOL-MYERS SQUIBB	7/24/2015	DAKLINZA is a hepatitis C virus (HCV) NS5A inhibitor indicated for use with sofobuvir for the treatment of chronic HCV genotype 3 infection.
52	PRALUENT (BLA # 125559)	ALIROCUMAB	SANOFI AVENTIS US	7/24/2015	PRALUENT is a PCSK9 (Proprotein Convertase Subtilisin Kexin Type 9) inhibitor antibody indicated as adjunct to diet and maximally tolerated statin therapy for the treatment of adults with heterozygous familial hypercholesterolemia or clinical atherosclerotic cardiovascular disease, who require additional lowering of LDL-cholesterol (LDL-C).
53	ADDYI (NDA # 022526)	FLIBANSERIN	SPROUT PHARMS	8/18/2015	ADDYI is indicated for the treatment of premenopausal women with acquired, generalized hyopoactive sexual desire disoprder (HSDD) as characterized by low sexual desire that casuses marked distress or interpersonal difficulty and is NOT due to: a co-existing medical or psychiatric condition, problems within the reklationship, or the effects of a medication or other drug substance,.
54	REPATHA (BLA # 125522)	EVOLOCUMAB	AMGEN	8/27/2015	REPATHA is a PCSK9 (proprotein convertase subtilisin kexin type 9) inhibitor antibody indicated as an adjunct to diet and: Maximally tolerated statin therapy for treatment of adults with heterozygous familial hypercholesterolemia (HeFH) or clinical atherosclerotic cardiovascular disease (CVD), who require additional lowering of low density lipoprotein cholesterol (LDL-C). Other LDL-lowering therapies (e.g., statins, ezetimibe, LDL apheresis) in patients with homozygous familial hypercholesterolemia (HoFH) who require additional lowering of LDL-C.
55	VARUBI (NDA# 206500)	ROLAPITANT HYDROCHLORUI DE	TESARO INC	9/1/2015	VARUBI is a subnstance P/neurokinin 1 (NK 1) receptor antagonist indicated in combination with other antiemetic agents in adults for the prevention of delayed nausea and vomiting associated with initial and repeat courses of emetogenic cancer chemotherapy.
56	XURIDEN (NDA # 208169)	URIDINE TRIACETATE	WELLSTAT THERAP	9/4/2015	XURIDEN is a pyrimidine analog for uridine replacement indicated for the treatment of hereditary orotic aciduria.
57	SPIRIVA RESPIMAT (NDA # 207070)	TIOTROPIUM BROMIDE	BOEHRINGER INGELHEIM	9/15/2015	SPIRIVA RESPIMAT is an anticholinergic indicated for: Te long-term, once-daily, maintenance treatment of bronchospasm associated with chronic obstructive pulmonary disease (COPD), and for reducing COPD exacerbations. The long-term, once-daily, maintenance treatment of asthma in patients 12 years of age and older
58	VRAYLAR (NDA # 204370)	CARIPRAZINE HYDRIOCHLORI DE	FOREST RES INST INC	9/17/2015	VRAYLAR is an atypical antipsychotic indicated for the treatments of : schizophrenia, and acute treatment of manic mixed episodes associated with biploar I disorder.

59	LONSURF (NDA # 207981)	TIPRACIL HYDROCHLORID E; TRIFLURIDINE)	TAIHO ONCOLOGY	9/22/2015	LONSURF is a combination of trifluridine, a nuceloside metabloic inhibitor and tipiracil, a thymidine phosphorylase inhibitor, indicated for the btreatment of patients with metastaic colorectal cancer who have been previously treated with fluoroprrimidine, oxaliplatin, and irinotecan-based chemotehrapy.
60	ARISTADA (NDA # 207533)	ARIPIPRAZOLE LAUROXIL	SALKERMES INC	10/5/2015	ARISTADA is an atypical antipsychotic indicated for the treatment of schizphrenia.
61	VELTASSA (NDA # 205739)	PATIROMER SORBITEX CALCIUM	RELYPSA INC	10/21/2015	VELTASSA is a potassium binder indicated for the treatment of hyperkalemia.
62	NUCALA (BLA # 125526)`	MEPOLIZUMAB	GLAXOSMITHKLINE	11/4/2015	NUCALA is an interlueken-5 antagonist monoclonal antibody (IgG1 Kappa) for add-on maintenance treatment of patients with severe asthma (age 12 or older), and with an eosinophilic phenotype
63	GENVOYA (NDA #207561)	COBICISTAT; ELVITEGRAVIR; EMTRICITABINE; TENOFOVIR ALAFENAMIDE FUMARATE	GILEAD SCIENCES INC	11/5/2015	GENVOYA is a four-drug combination of elvitegravir, an HIV-1 integrase strand transfer inhibitor (INSTI), cobicistat, a CYP3A inhibitor, and emtricitabine and tenofovir alafenamide (TAF), both HIV1 nucleoside analog reverse transcriptase inhibitors (NRTIs) and is indicated as a complete regimen for the treatment of HIV-1 infection in adults and pediatric patients 12 years of age and older who have no antiretroviral treatment history or to replace the current antiretroviral regimen in those who are virologically-suppressed (HIV-1 RNA less than 50 copies per mL) on a stable antiretroviral regimen for at least 6 months with no history of treatment failure and no known substitutions associated with resistance to the individual components of GENVOYA.
64	COTELLIC (NDA # 206192)	COBIMETINIB FUMARATE	GENENTECH INC	11/10/2015	COTELLIC is a kinase inhibitor indicated for the treatment of patients with unresectable or metastatic melanoma with a BRAF V600E or V600K mutation, in combination with vemurafenib.
65	TAGRISSO (NDA # 208065)	OSIMERTINIB MESYLATE	ASTRAZENECA	11/13/2015	TAGRISSO is a kinase inhibitor indicated for the treatment of patients with metastatic epidermal growth factor receptor (EGFR) T790M mutation-positive non-small cell lung cancer (NSCLC), as detected by an FDA-approved test, who have progressed on or after EGFR TKI therapy. (1) This indication is approved under accelerated approval based on tumor response rate and duration of response. Continued approval for this indication may be contingent upon verification and description of clinical benefit in confirmatory trials.
66	NINLARO (NDA # 208462)	IXAZOMIB CITRATE	MILLENIUM PHARMS	11/20/2015	NINLARO is a proteasome inhibitor indicated in combination with lenalidomide and dexamethasone for the treatment of patients with multiple myeloma who have received at least one prior therapy.

67	VISTOGARD (NDA # 208159)	URIDINE TRIACETATE	WELLSTAT THERAP	12/11/2015	VISTOGARD® is a pyrimidine analog indicated for the emergency treatment of adult and pediatric patients: following a fluorouracil or capecitabine overdose regardless of the presence of symptoms, or who exhibit early-onset, severe or life-threatening toxicity affecting the cardiac or central nervous system, and/or early-onset, unusually severe adverse reactions (e.g., gastrointestinal toxicity and/or neutropenia) within 96 hours following the end of fluorouracil or capecitabine administration.
68	ALECENSA (NDA # 208159)	ALECTINIB HYDROCHLORID E	ROCHE	12/11/2015	ALECENSA is a kinase inhibitor indicated for the treatment of patients with anaplastic lymphoma kinase (ALK)-positive, metastatic non-small cell lung cancer (NSCLC) who have progressed on or are intolerant to crizotinib. This indication is approved under accelerated approval based on tumor response rate and duration of response. Continued approval for this indication may be contingent upon verification and description of clinical benefit in confirmatory trials.
69	EMEND (NDA # 207865)	APREPITANT	MERCK	12/17/2015	EMEND® is a substance P/neurokinin 1 (NK1) receptor antagonist. EMEND for oral suspension is indicated in combination with other antiemetic agents, in patients 6 months of age and older for prevention of: o acute and delayed nausea and vomiting associated with initial and repeat courses of highly emetogenic cancer chemotherapy (HEC) including high-dose cisplatin nausea and vomiting associated with initial and repeat courses of moderately emetogenic cancer chemotherapy (MEC)
70	UPTRAVI (NDA # 207947)	SELEXIPAG	ACTELION PHARMS LTD	12/21/2015	UPTRAVI® is a prostacyclin receptor agonist indicated for the treatment of pulmonary arterial hypertension (PAH, WHO Group I) to delay disease progression and reduce the risk of hospitalization for PAH.
71	ZURAMPIC (NDA # 207988)	LESINURAD	ARDEA BIOSCIENCES	12/22/2015	ZURAMPIC is a URAT1 inhibitor indicated in combination with a xanthine oxidase inhibitor for the treatment of hyperuricemia associated with gout in patients who have not achieved target serum uric acid levels with a xanthine oxidase inhibitor alone.
72	ZEPATIER (NDA # 208261)	ELBASVIR; GRAZOPREVIR	MERCK	1/28/2016	ZEPATIER is a fixed-dose combination product containing elbasvir, a hepatitis C virus (HCV) NS5A inhibitor, and grazoprevir, an HCV NS3/4A protease inhibitor, and is indicated with or without r bavirin for treatment of chronic HCV genotypes 1 or 4 infection in adults.
73	BRIVIACT (NDA # 205836)	BRIVARACETAM	UCB INC	2/18/2016	BRVIACT is indicated as adjunctive therapy in the treatment of partial onset seizures in patients 16 years or older with epilepsy.
74	TALTZ (NDA # 125521)	IXEKIZUMAB	ELI LILLY AND CO	3/22/2016	TALTZ is a humanized interleukin-17A antagonist indicated for the treatment of adults with mopderate to severe plaque psorasis who are candidates for systemic therapy or phototherapy.

75	CINQAIR (BLA # 761033)	RESLIZUMAB	TEVA	3/23/2016	CINQAIR is indicated for use with other asthma medications for the maintenance treatment of severe asthma in opatients 18 years or older. Approved for patients who have a history of severe asthma attacks (exacerbations) despite receiving their currents asthma medications. Adminsuitered q 4 weeks via IV infusion.
76	VENCLEXTA (NDA # 208573	VENETOCLAX	ABBVIE, INC	4/11/2016	VENCLEXTA is a BCL-2 inhibitor indicated for the treatment of patients with chronic lymphcytic leukemia (CLL) with the 17 p deletion, as detected by an FDA approved test, who have received at least one prior therapy. This indication is approved by the FDA under accelerated approval based on overall response rate.
77	CABOMETYX (NDA# 208692)	CABOZANTINIB (S) -MALATE	EXELIXIS, INC	4/25/2016	CABOMETYX is a kinase inhibitor indicated for treatment of patients with advanced renal cell carcinoma (RCC) who have received prior antiangiogenic therapy.
78	NUPLAZID (NDA # 207318)	PIMAVANSERIN	ACADIA PHARMA	4/29/2016	NUPLAZID is an atypical antipsychotic indicated for the treatment of hallicunations and delusions associated with Parkinson's disease psychosis.
79	OCALIVA (NDA # 207999)	OBETICHOLIC ACID	INTERCEPT PHARMACEUTICALS, INC	5/27/2016	OCALVIA, a gfarnesoid X receptor (FXR) agonist, is indicated for the treatment of primary biliary cholangitis (PBC) in combination withursodeoxtcholic acid (UDCA) in adults with an inadequate response to UDCA, or as montherapy in adults unable to tolerate UDCA.
80	ZINBRYTA (BLA # 761029)	DACLIZUMAB	BIOGEN IDEC INC	5/27/2016	ZINBRYTA is an interleukin-2 blocking antibody indicated for the treatment of adult patients with relapsing forms of multiple sclerosis (MS). Because of the safety profile, the use of ZINBRYTA should generally be reserved for patients who have had an inadequate response to two or more drugs indicated for the treatment of MS.
81	RAYALDEE (NDA # 208010)	CALCIFEDIOL	OPKO IRELAND GLOBAL	6/17/2016	RAYALDEE is a vitamin D1 analog indicated for the treatment of secondary hyperparathyroidism in adults with stage 3 or 4 chronic kidney disease.
82	EPCLUSA (NDA # 208341)	Sofosbuvir, Velpatsavir	GILEAD SCIENCES INC	6/28/2016	EPCLUSA is a fixed-dose combination of sofosbuvir, a hepatitis C virus (HCV) nucleotide analog NS5B polymerase inhibitor, and velpatasvir, an HCV NS5A inhibitor, and is indicated for the treatment of adult patients with chronic HCV genotype 1, 2, 3, 4, 5 or 6 infection • without cirrhosis or with compensated cirrhosis • with decompensated cirrhosis for use in combination with ribavirin
83	XIIDRA (NDA # 208073)	LIFITEGRAST	SHIRE DEV LLC	7/11/2016	XIIDRA is a lymphocyte function- associated antigen (LFA-1) antagonist indicated for the treatment of the signs and symptoms of dry eye disease (DED).

84	ADLYXIN (NDA # 208471)	LIXISENATIDE	SANOFI-AVENTIS	7/27/2016	ADLYXIN is a glucagon-like peptide-1 (GLP-1) receptor agonist indicated as an adjunct to diet and exercise to improve glycemic control in adults with type 2 diabetes mellitus. Limitations of Use: • Has not been studied in patients with chronic pancreatitis or a history of unexplained pancreatitis. Consider other antidiabetic therapies in patients with a history of pancreatitis. • Not for treatment of type 1 diabetes or diabetic ketoacidosis. • Has not been studied in combination with short acting insulin. • Has not been studied in patients with gastroparesis and is not recommended in patients with gastroparesis.
85	TECENTRIQ (BLA # 761041)	ATEZOLIZUMAB	GENENTECH INC	5/18/2016	Atezolizumab is a programmed death-ligand 1 (PD-L1) blocking antibody indicated for the treatment of patients with locally advanced or metatstatic urothelial carcinoma who: Have disease progression during or following platinum containing chemptherapy.
86	BELEODAQ (NDA # 206256)	BELINOSTAT	SPECTRUM PHARMS	7/3/2014	BELEODAQ is a histone deactylase inhibitor indicated for the treatment of patients with relapesd or refractory peripheral T-cell lymphoma
87	JEVTANA (NDA # 201023)	CABAZITAXEL	SANOFI AVENTIS US	5/17/2010	JEVTANA is a microtubule inhibitor indicated in combination with prednisone for treatment of patients with hormone-refractory metastatic prostate cancer previously treatd with docetaxel-containing treatment regimen.
88	EMPLICITI (BLA # 761035)	ELOTUZUMAB	BRISTOL MYERS SQUIBB	11/30/2015	EMPLICITI is a SLAM Family Member 7-directed immunostimulatory antibody indicated in combination with lenalidomide and dexamethasone for the treatment of patients with multiple myeloma who have received on to thre prior therapies.
89	CYRAMZA (BLA #125477)	RAMUCIRUMAB	ELI LILLY AND CO	4/11/2014	CYRAMZA is a human vascular endothelial growth factor receptor 2 antagonist indicated as a single agent or in combination with paxitaxel, for treatment of advanced gastric or garto-esophageal junction adenocarcinoma, with disease progression on or after prior fluoropyrimidine or plati num containing chemotherapy.
90	IRESSA (NDA # 206995)	GEFITINIB	ASTRAZENECA PHARMS	7/13/2015	IRESSA is a tyrosine kinase inhibitor indicated for first-line treatment of patients with metastatic non-small cell lung cancer whose tumors have epidermalgrowth factor receptor exon 19 deletions or exon 21 (L858R) substitution mutations as detected by an FDA approved test.
91	ONCASPAR (BLA # 103411)	PEGASPARGASE	SIGMA TAU	7/24/2006	ONCASPAR is an asparagine sepcific enzyme indicated as a component of a multi-agent chemotherapeutic regimen for treatment of patients with first line acute lymphoblastic leukemia and acute lymphoblastic leukemia and hypersensitivity to asparaginase.
92	YONDELIS (NDA # 207953)	TRACECTEDIN	JANSSEN PRODS	10/23/2015	YONDELIS is analkylating drug indicated for the treatment of patients with unresectable or metastatic liposarcoma or leiomyisarcoma who received a prior anthrcycline- containing regimen.

93	EPANOVA (NDA #205060)	OMEGA-3 CABOXYLIC ACIDS	ASTRAZENECA PHARMS	5/5/2014	EPANOVA is a fish oil-derived mixture of free fatty acids primarily composed of EPA and DHA, is indicated as an adjunct to diet to reduce triclyceride (TG) levels in adult patients with severe (>500 mg/dL) hypertriclyceridemia.
94	VIMIZIM (BLA #125460)	ELOSULFASE ALFA	BIOMARIN PHARMS	2/14/2014	VIMIZIM is a hrdrolytic lysosomal glycosaminoglycan (GAG)- specific enzyme indicated for patients with mucopolysaccharidosis type IVA (MPS IVA; Morquio A syndrome).
95	EXONDYS 51 (NDA # 206488)	ETEPLIRSEN	SAREPTA THERAPS INC	9/19/2016	EXONDYS 51 is an antisense oligonucleotide indicated for the treatment of Duchenne muscular dystrophy (DMD) in patients who have confirmed mutation of the DMD gene that is amenable to exon 51 skipping.
96	LARTRUVO (BLA # 761038)	OLARATUMAB	ELI LILLY AND CO	10/19/2016	LARTRUVO TM is a platelet-derived growth factor receptor alpha (PDGFR-α) blocking antibody indicated, in combination with doxorubicin, for the treatment of adult patients with soft tissue sarcoma (STS) with a histologic subtype for which an anthracycline-containing regimen is appropriate and which is not amenable to curative treatment with radiotherapy or surgery. This indication is approved under accelerated approval. Continued approval for this indication may be contingent upon verification and description of clinical benefit in the confirmatory trial.
97	ELITEK (BLA # 103946)	RASBURICASE	SANOFI SYNTHELABO	7/2/2002	ELITEK is a recombinant urate-oxidase indicated for initial management oif plasma uric acid levels in pediatric and adult patients with leukemia, lymphoma and solid tumor maligancies who are receiving anti-cancer therapy expected to result in tumor lysis and subsequent elevation of plasma uric acid.
98	KANUMA(BLA # 125561)	SEBELIPASE ALFA	ALEXION PHARMS	12/8/2015	KANUMA is a hrdrolytic lysosomal cholesteryl ester and triacylglcerol-sepcific enzyme indicated for the treatment of patients with a diagnosis of Lysosomal Acid Lipase (LAL) deficiency.
99	INTRAROSA (NDA # 208470)	PRASTERONE	ENDOCEUTICS INC	11/16/2016	INTAROSA is a steroid indicated for the treatment of moderate to severe dyspareunia, a symptom of vulvar and vaginal atophy, due to menopause.
100	SYLVANT (BLA #125496)	SILTUXIMAB	JANSSEN BIOTECH	4/23/2014	SYLVANT is an interleuken-6 (IL-6) antagonist indicated for the treatment of patients with muticentric Castleman's disease (MCD) who are human immunodeficiency virus (HIV) negative and human prepesvirus-8 negative.
101	VIDAZA (NDA # 050794)	AZACITIDINE	CELGENE	4/29/2016	VIDAZA is a nucleoside metabolic inhibitor indicated for the treatment of patients with the following FAB myelodyspalstic syndrome (MDS) subtypes: refractory anemia (RA) or refractory anemia with ringed siderolasts (if accompanied by neutropenia or thrombocytopenia or requiring transfusions), refrecatory anemia with excess blasts (RAEB), refractory anemia with excess blasts in transformation (RAEB-T), and chronic myelomonocytic leukemia (CMMoL).

102	AURYXIA (NDA # 205874)	FERRIC CITRATE	KERYX BIOPHARMS	9/5/2014	AURYXIA is a phosphate binder indicated for the control of serum phosphorous levels in patients with chronic kidney diseas or dyalysis.
103	RAPIVAB (NDA #206426)	PERAMIVIR	BIOCRYST PHARMACEUTICALS INC	12/19/2014	RAPIVAB is an influenza virus neuraminidase inhibitor indicated for the treatment of acute uncomlicated influenza in patients 18 years and older who have been symtomatic for no more han two days.
104		ALAFENAMIDE			Alafenamide is a HIV1 nucleoside analog reverse transcriptase inhibitors (NRTIs) and is indicated as a complete regimen for the treatment of HIV-1 infection in adults and pediatric patients 12 years of age and older who have no antiretroviral treatment history

Appendix VI: Stakeholder 1:1 Consultations

Stakeholder	Topic	USP Category/Class	Summary of Consultation	HQS EC Decision/Rationale
Abuse Deterrent Coalition	Abuse Deterrent Formulations	Analgesics	The information presented in this consultation provides supplemental material about the need for abuse deterrent formulation support. This consultation highlights labeling changes for current abuse deterrent formulations as well as abuse deterrent formulations under review by the FDA.	Adding a Class or Category based on formulation would change the structure of the USP system to be much less useful to CMS as a formulary evaluation tool and make it difficult to maintain consistency within the MMG.
Acadia	Pimavanserin (NUPLAZID)	Antipsychotics	The data presented in this consultation represents an alternative viewpoint to the USP MMG v7.0. This consultation is suggesting to divide the "Antipsychotics, 2nd Generation/Atypical" class into two new classes: "2nd Generation/Atypical: non-selective receptor blockade" and "2nd Generation/Atypical: selective receptor blockade" to distinguish pimavanserin's unique mechanism of action.	Pimavanserin was placed in the "Antipsychotics, 2nd Generation/Atypical" class. At this time, there are insufficient FDA approved drug products to meet the minimum requirements for further dividing this class.
ALS Association	New Class	Immunological Agents	The information presented in this consultation provides supplemental material for EC consideration. The stakeholder requests creating a new class for ALS medications and highlights the robust pipeline for new treatments. Currently, riluzole is the only drug approved for ALS treatment and is classified under "Central Nervous System Agents, Other".	There are insufficient FDA approved drug products to meet the minimum requirements for adding an additional class at this time.

Axovant	5-HT6 Receptor Antagonists	Antidementia Agents	The information presented in this consultation provided a clinical development overview of 5-HT6 receptor antagonists prior to FDA approval. Stakeholder suggests creating a new "5-HT6 Antagonists" class under "Antidementia Agents" category to better differentiate their unique mechanism of action.	There are insufficient FDA approved drug products to meet the minimum requirements for adding an additional class at this time.
AstraZeneca	Omega-3- carboxylic acids (EPANOVA)	Cardiovascular Agents/ Dyslipidemics, Other	The data presented in this consultation is consistent with the drug information provided to the HQS EC. Stakeholder suggests including omega-3-carboxylic acids in USP Category "Cardiovascular Agents" and "Dyslipidemics, Other" class.	Omega-3-carboxylic acids (EPANOVA was placed independent of the consultation in the "Dyslipidemics, Other" class
AstraZeneca	Dapagliflozin/ metformin HCL ER (XIGDUO)		The data presented in this consultation is consistent with the drug information provided to the HQS EC. Stakeholder suggests the inclusion of dapagliflozin/metformin HCL in the MMG v7.0.	According to the Guiding Principles, combination products will not be placed unless there is a new chemical entity.
AstraZeneca	Glycopyrrolate/ formoterol fumarate (BEVESPI AEROSPHERE)	Respiratory Tract/Pulmonary Agents	The data presented in this consultation is consistent with the drug information provided to the HQS EC, and represents an alternative viewpoint to the USP MMG v7.0 Draft. Glycopyrrolate and formoterol fumarate inhalation aerosol was FDA approved on April 25, 2016. The stakeholder suggested the addition of a new class "long-acting muscarinic antagonist/long-acting beta2-adrenergic agonist (LAMA/LABA)" in the USP MMG v7.0.	EC evaluated the full respiratory category and determined not to divide the respiratory tract agents in this revision. According to the Guiding Principles, combination products will not be placed unless there is a new chemical entity.
AstraZeneca	Lesinurad (ZURAMPIC)	Anti-gout Agents	The information presented in this consultation provides supplemental material for EC consideration. Stakeholder suggested expanding the Antigout category to 'Urate Lowering Therapies' and 'Anti-Flare Agents' classes and classifying lesinurad in the 'Anti-Flaire Agents' class.	EC reviewed the "Antigout" category and made no changes in this revision.

AstraZeneca	PAMORA	Gastrointestinal Agents	The data presented in this consultation is consistent with the drug information provided to the HQS EC, and represents an alternative viewpoint to the USP MMG v7.0 Draft. The stakeholder requests the inclusion of a new "Peripherally-Acting Mu-Opioid Receptor Antagonists (PAMORA)" class within the "Gastrointestinal Agents" category, which includes naloxegol.	There are insufficient FDA approved drug products to meet the minimum requirements for adding an additional class at this time
Collegium	Oxycodone (Xtampza ER)	Analgesics	The data presented in this consultation is consistent with the drug information provided to the HQS EC, and represents an alternative viewpoint to the USP MMG v7.0 Draft. The stakeholder is requesting a new class within the "Analgesics" category for "Opioid Analgesics, Abuse Deterrent" and the inclusion of Xtampza ER.	Adding a Class or Category based on formulation would change the structure of the USP system to be much less useful to CMS as a formulary evaluation tool and make it difficult to maintain consistency within the MMG.
Concordia	Atropine/ Hyoscyamine /Phenobarbital/ Scopolamine (DONNATAL)	Gastrointestinal Agents	The information presented in this consultation provides supplemental material for EC consideration. The supplemental information focused on the cost-effectiveness of drugs used to treat irritable bowel syndrome. The consultation suggests that Donnatal be included in USP MMG v7.0.	The drug does not meet the minimum requirements for placement at this time. As per the Guiding Principles, drugs must be FDA-approved and Part D eligible to be placed. Insufficient clinical evidence and/or outcome data is available at this time to justify placement at this time.
Eli Lilly	JAK Inhibitors	Immunological Agents, Immunomodulators	The information presented in this consultation provides supplemental material for EC consideration, including clinical development data for baricitinib. The stakeholder suggests the inclusion of JAK inhibitors within the "Immunological Agents, Immunomodulators" class.	There are insufficient FDA approved drug products to meet the minimum requirements for adding an additional class at this time

Endo	Buprenorphine (BELBUCA)	Analgesics	The data presented in this consultation is consistent with the drug information provided to the HQS EC, and represents an alternative viewpoint to the USP MMG v7.0 Draft. The stakeholder requested the inclusion of buprenorphine buccal films on the MMG v7.0 with a new indication.	Buprenorphine was placed independently of the consultation as a new indication for pain in the category "Analgesics" and class "Opioid Analgesics, Short-acting."
Gilead	sofosbuvir (SOVALDI) ledipasvir/ sofosbuvir (HARVONI) sofosbuvir/ velpatasvir (EPCLUSA)	Antivirals, Anti- Hepatitis C Agents, Second Generation	The data presented in this consultation is consistent with the drug information provided to the HQS EC, and represents an alternative viewpoint to the USP MMG v7.0 Draft. The stakeholder requested creating a new class for sofosbuvir based drugs in fixed dose combinations.	The EC expanded the "Anti- Hepatitis C (HCV) Agents" into two classes: "First Generation" and "Second Generation" based on current treatment guidelines.
GSK	Umeclidinium/ vilanterol (ANORO ELLIPTA) Umeclidinium (INCRUSE ELLIPTA) Fluticasone furoate (ARNUITY ELLIPTA) Mepolizumab (NUCALA)	Respiratory Tract/Pulmonary Agents	The data presented in this consultation is consistent with the drug information provided to the HQS EC, and represents an alternative viewpoint to the USP MMG v7.0 Draft. The stakeholder suggested adding mepolizumab in a new class called "Respiratory Biologics", adding fluticasone furoate to "Anti-inflammatory, inhaled corticosteroids", adding umeclidinium to "Bronchodilators, anticholinergic", and adding umeclidinium/vilanterol" in a new class called "Anticholinergic/Sympathomimetic".	Mepolizumab is classified under "Respiratory Tract Agents, Other". Umeclidinium has been placed in the "Bronchodilators, Anticholinergic" class. According to the Guiding Principles, combination products will not be placed unless there is a new chemical entity.
GSK	Meningococcal Group B Vaccine (BEXSERO)	Immunological Agents	The information presented in this consultation is consistent with the drug information provided to the HQS EC, and supports current USP MMG v6.0 Draft #2.	Prior to consultation, USP independently placed secukinumab in the USP Category and Class "Immunological Agents, Vaccines".

GSK	Albiglutide (TANZEUM)	Blood Glucose Regulators	The information presented in this consultation is consistent with the drug information provided to the HQS EC, and supports current USP MMG v6.0 Draft #2.	Prior to consultation, USP independently placed secukinumab in the USP Category " <i>Blood Glucose Regulators</i> ".
GSK/Viiv	Abacavir/ dolutegravir/ lamivudine (TRIUMEQ) Entry Inhibitors	Antivirals	The data presented in this consultation is consistent with the drug information provided to the HQS EC, and represents an alternative viewpoint to the USP MMG v7.0 Draft. The stakeholder requested the addition of a new "Single Tablet Regimens" class and a new "Entry inhibitors" class.	It is outside of the USP MMG Guiding Principles to classify drugs based on dosage form.
GW	Cannabinoids	Anticonvulsants	The data presented in this consultation is consistent with the drug information provided to the HQS EC, and represents an alternative viewpoint to the USP MMG v7.0 Draft. The information presented in this consultation provides supplemental material for EC consideration including several prospective products in the pipeline.	There are insufficient FDA approved drug products to meet the minimum requirements for adding an additional class at this time.
Novartis	Interleukin 17 Antagonists - Secukinumab (COSENTYX)		The data presented in this consultation is consistent with the drug information provided to the HQS EC. The information presented in this consultation provides supplemental material for EC consideration. Stakeholder suggests adding a new class for "Interleukin 17 Antagonists".	Prior to consultation, USP independently placed secukinumab in the USP Category " <i>Dermatological Agents</i> ". There are insufficient FDA approved drug products to meet the minimum requirements for adding an additional class at this time.

ОРКО	Calcifediol (RAYALDEE)	Hormonal Agents	The data presented in this consultation is consistent with the drug information provided to the HQS EC, and represents an alternative viewpoint to the USP MMG v7.0 Draft. Calcifediol was FDA approved on June 17, 2016 and the consultation suggested drug placement in USP Category "Hormonal Agents, Parathyroid".	Prior to consultation, USP independently placed calcifediol in the USP Category "Metabolic Bone Disease Agents".
Purdue	Abuse Deterrent Formulations	Analgesics	The data presented in this consultation is consistent with the drug information provided to the HQS EC, and represents an alternative viewpoint to the USP MMG v7.0 Draft. The stakeholder is requesting a new class within "Analgesics" category for "Opioid Analgesics with Abuse Deterrent Properties".	Adding a Class or Category based on formulation would change the structure of the USP system to be much less useful to CMS as a formulary evaluation tool and make it difficult to maintain consistency within the MMG.
Teva	New Class	Analgesics, Opioid Analgesics Long- acting	The data presented in this consultation is consistent with the drug information provided to the HQS EC, and represents an alternative viewpoint to the USP MMG v7.0 Draft. Stakeholder urges the importance of creating a new class called "Opioid Analgesics Long-acting, Abuse Deterrence" to better reflect opioids with FDA approved abuse deterrence claims.	Adding a Class or Category based on formulation would change the structure of the USP system to be much less useful to CMS as a formulary evaluation tool and make it difficult to maintain consistency within the MMG.
Valeant	Latanoprostene bunod (VYZULTA)	Ophthalmic Agents	The information presented in this consultation provided a clinical development overview of latanoprostene bunod prior to FDA approval. The stakeholder suggests creating a new class "Cytoskeletal Relaxing Agents" under the "Ophthalmic Agents" category.	There are insufficient FDA approved drug products to meet the minimum requirements for adding an additional class at this time.
Vertex	Ivacaftor (KALYDECO) Lumacaftor/ ivacaftor (ORKAMBI)	Cystic Fibrosis Agents	The data presented in this consultation is consistent with the drug information provided to the HQS EC, and represents an alternative viewpoint to the USP MMG v7.0 Draft. The stakeholder suggests creating a new class "CFTR Modulators" to distinguish the mechanism of action of ivacaftor and lumacaftor/ivacaftor.	Prior to consultation, USP independently placed lumacaftor/ivacaftor in "Respiratory Tract/Pulmonary Agents, Cystic Fibrosis Agents".

Xenoport	Gabapentin enacarbil (HORIZANT)	Central Nervous System Agents	The data presented in this consultation is consistent with the drug information provided to the HQS EC, and represents an alternative viewpoint to the USP MMG v7.0 Draft. This consultation suggests removing gabapentin enacarbil from "Central Nervous System Agents, Other" and moving it to a new class "Central Nervous System, Restless Leg Syndrome" class. The stakeholder highlights that there are four other FDA-approved drugs that treat restless leg syndrome classified under "Antiparkinson Agents, Dopamine Agonists".	Gabapentin enacarbil is placed in "CNS Agents, Other". The EC determined not to create a new class "Restless Leg Syndrome" in this revision.
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Appendix VII: Open Microphone Web Meetings



Medicare Model Guidelines (MMG) Subcommittee				
Working Meeting Notes (Open Microphone Meeting #1)				
EC / EP / SC Name	MMG Subcommittee			
USP Staff	Donna Bohannon, Diana Kwan, Emily Ann Myer, James Ngov, Rick Schnatz			
Stakeholders	Beneficiaries/Patient Advocacy Groups			
	Melody Ryan (Chair)			
EC Members	Mark Decerbo			
Meeting Format (Face-to-Face, Teleconference)	Teleconference			
Meeting Start Date	October 17, 2016			
Time Start	11:03 a.m.			
Time Stop	11:43 a.m.			
Work Performed	See Notes Below			
Names of Volunteers in Attendance				
Melody Ryan (Chair)	Rebecca Chater			
Natalie Kean	Caitlyn Ozier			
Kerry Willis	Nicole Braccio			
Patrick Wildman	Melissa Wu			
Emily Schaller	Mike Miller			
Julie Georgi	Brittany Meyer			

William Heath	Annita Tedesco
Melissa Simon	Quardricos Driskell
Susan Kelly	Rebecca Chater
Kimberly Calder	

- Donna Bohannon delivered a PowerPoint presentation on an overview of USP.
- Melody Ryan delivered a PowerPoint presentation about USP MMG v.7.

Questions

1. Do you anticipate any other placements between now and December?

Yes, we do. We will have placement of any new agents that are approved after this meeting and anything that might have been missed, as well as any considerations from the public comment.

2. Can public comments center on recommending additional classes and categories?

Yes, during the public comment period we review all comments, so if there is a category or class being proposed, the committee will review and evaluate these for placement.

Comments

1. Natalie Kean, AIDS Institute:

- a. We are happy to see continued improvement to the guidelines, including adding combination drugs and creating a separate Hepatitis B class.
- b. In respect to Hepatitis, we request a separate recognition of the newer direct-acting antivirals; these really represent the standard of care now, and we think it would be helpful for them to be distinguished from the rest of the antiviral agents.
- c. We are happy to see that Hepatitis B is listed separately on the examples draft, but notice that it is not listed separately on the categories and classes draft document.
- d. In respect to HIV, we request an additional class for a single-tablets regimen. The FDA recognizes these multi-class combination products and they are really the standard of care. The treatment guidelines for HIV recommend these combination products, so we think they should be their own class recognized in the guidelines.
- e. We request the addition of an entry inhibitor class to better clarify what some of the drugs do in action.

2. Kerry Willis, National Kidney Foundation:

a. We request a separate class for potassium binders because we believe if they are not in a separate class, kidney disease patients will not have access to potentially lifesaving drugs.

- b. Because the kidney is responsible for maintaining potassium balance, people with impaired kidney function are at high risk for hyperkalemia, which is often asymptomatic and often needs to be treated on an emergency basis. Many kidney patients have coexisting heart failure and diabetes, which makes them especially vulnerable to cardiac arrest and serious arrhythmias caused by hyperkalemia.
- c. If there are not at least two potassium binding drugs on a formulary, patients may not be able to get the most effective treatment for them. Also without a well-tolerated potassium-lowering agent to prevent hyperkalemia, kidney patients may not be able to continue RAP inhibitor therapy, which is the most effective current treatment to slow progression of kidney disease.

3. Patrick Wildman, ALS Association:

- a. There is a very high percentage of the ALS community that is receiving their care through Medicare, and they are receiving access to prescription drugs through Part D.
- b. There is currently only one drug approved and available by the FDA for the treatment of ALS; however, there is quite a robust pipeline. We anticipate about 3–4 therapies to be approved by the FDA within the next few years, certainly by 2020.
- c. We request a new class for ALS medicines to ensure patient access as these new therapies come out on the market. Without a new class, we fear that new medicines will be scattered around the formulary by Part D plans or simply put into existing classes where Part D plans could easily exclude them from coverage. A new class will prevent ALS patients from being denied access from medicines that can prolong their lives.
- d. Creating a new class would not create a precedent for another disease or condition. We know that USP cannot create a new class with only one example drug. MMG v.6 included new classes that contained only one example drug, and Federal law for Part D plans state that each category or class must include at least two drugs, unless only one drug is available for each class.
- e. If new drugs for ALS are not approved by the FDA in the next few years and USP does create a new class, it will not have a negative impact on Part D formularies.

4. Emily Schaller, Rock CF Foundation:

- a. In 2012, the first CFPR modulator was approved by the FDA, and now there are two drugs available that treat Cystic Fibrosis (CF) and its underlying cause.
- b. We request a CFPR modulator class, which would be different than the current class available for CF agents, because the current drugs available treat CF in a different way.
- c. CF should be treated with Medicare and other marketplace plans because they are going to treat CF on a new level. It would be nice to have a separate class for new drugs as they come out to prevent CF patients from being denied access.

Concluding Remarks from USP:

Our public comment period is open. The draft for the categories and classes and the example drugs are listed on our website at: http://www.usp.org/usp-healthcare-professionals/usp-medicare-model-guidelines.

You can also submit detailed comments through our survey or via email.



Medicare Model Guidelines (MMG) Subcommittee				
Working Meeting Notes (Open Microphone Meeting #2)				
EC / EP / SC Name	MMG Subcommittee			
USP Staff	Donna Bohannon, Diana Kwan, Emily Ann Myer, James Ngov, Rick Schnatz			
Stakeholders	Health Plans/PBMs			
	Melody Ryan (Chair)			
EC Members	Mark Decerbo			
Meeting Format (Face-to-Face, Teleconference)	Teleconference			
Meeting Start Date	October 17, 2016			
Time Start	2:00 p.m.			
Time Stop	2:21 p.m.			
Work Performed	See Notes Below			
Names of Volunteers in Attendance				
Melody Ryan (Chair)	Mark Decerbo			
Marissa Schlaifer	Soumi Saha			
Renee Sabin-Haggerty	Melissa Wu			
Kelle Turner	Nicole Braccio			
Francesca Landrum	Jennifer Cruz			
Mike Miller	Rachael Seagrove			
Mark Noga	Hamzah Whatley			

Melissa Andel	Marc M.
Megan McKinney	Rebecca Cater
Maria Martin	Caitlyn Ozier
Karen McLin	Lamar Davis
Mary Jo Carden	Mihir Patel
Steve A.	Julie Georgi
Jody Gembarski	Annita Tedesco
Shenita Outland	Jeff Murphy
Kim Dawson	Greg Pugh
Giana Mandel	Brenda Yam
Alysia Iverson	Shana Durant

- Donna Bohannon delivered a PowerPoint presentation on an overview of USP.
- Melody Ryan delivered a PowerPoint presentation about USP MMG v.7.

Questions

3. Do you expect any big changes to the draft we placed online?

Big changes are unlikely because we placed about 70 items already. We will have placement of any new agents that are approved after this meeting and anything that might have been missed, as well as any considerations from the public comment.

4. Will there be a crosswalk provided to ease the movement from old to new drug categories and classes?

We will pose this question to the Expert Committee when they meet in November.

Comments

1. Marissa Schlaifer, PCMA:

- a. MMG is being used by CMS for the marketplace and exchange programs as requirements rather than guidelines; we know that this isn't something USP advocated for, but it is the reality.
- b. MMG is serving multiple purposes, and they do get used as requirements for a drug in every class, which can influence negotiations for Part D plans, as well as marketplace plans, which is where the challenges come up. We know that USP doesn't focus on cost, but it's important that committeggmembers know the barriers to health plans and PBM's

- ability to negotiate increased plan costs, which affect individuals and the government with increased premiums.
- c. We are pleased to see that USP followed their guidelines by only adding classes when absolutely necessary and only added three classes this time.
- d. Going forward USP can expect many comments from organizations about specific drugs and creating classes to meet their needs.

USP Response: USP has heard from industry and is aware that MMG have been applied to the exchanges. On November 1st the USP Drug Classification System draft v.1 will be posted to the USP.org website. You may go to the website today to find out more information about the classification system and how it utilizes USP classes and categorizes to be more comprehensive and flexible.

Concluding Remarks from USP:

Our public comment period is open. The draft for the categories and classes and the example drugs are listed on our website at: http://www.usp.org/usp-healthcare-professionals/usp-medicare-model-guidelines.

You can also submit detailed comments through our survey or via email.



Medicare Model Guidelines (MMG) Subcommittee				
Working Meeting Notes Open Microphone Meeting #3)				
EC / EP / SC Name MMG Subcommittee				
USP Staff	Donna Bohannon, Diana Kwan, Emily Ann Myer, James Ngov, Rick Schnatz			
Stakeholders	Meeting #3 -Pharmaceutical Manufacturers			
	Melody Ryan (Chair)			
EC Members	Mark Decerbo			
Meeting Format (Face-to-Face, Teleconference)	Teleconference			
Meeting Start Date	October 19, 2016			
Time Start	2:00 p.m.			
Time Stop	3:25 p.m.			
Work Performed	See Notes Below			
Names of Public Participants in Attenda	ance			
Melody Ryan (Chair)	Stephen McMillan			
Janel Tedesco	Mike Miller			
Vanessa Fisher	Lauren Buckley			
Jordana Wollmann	Melissa Wu			
Margaret Nowak Mann	Melissa Andel			
Scott Jordan	Erin Ahrens			
Brian Boatman Susan Kelly				
Juan Maya	Donna Booth			

Mary Bordeaux	Paul Coplan
Annita Tedesco	Travis Kenney
Arnold Doyle	Sherri Chenevert
Margaret Davis-Cerone	Shannon Dzubin
Holly Owens	Amy Demske
Tiffany Gillis	Ashley Flint
Courtney Keplinger	Caitlyn Ozier
Chris Danes	Carolyn Ha
Asif Shaikh	Stacey Poole
Dan Cohen	Julie Georgi
Giana Mandel	Mike Storm
Caitlin Koury	Lauren Hoffman
Brenda Yam	David Spiegel
Muhammad Ami Javed	Stephen Zhang
Matthew Wieman	Arnold Doyle

- Donna Bohannon delivered a PowerPoint presentation on an overview of USP.
- Melody Ryan delivered a PowerPoint presentation about USP MMG v.7.

Questions

1. For category CNS agents and specifically the multiple sclerosis class, can you clarify whether infused products are included?

Yes, if certain infused products are included in Part D, they are included in the formulary, so there are several infused products on the FRF.

2. How do you determine whether products are included in the "respiratory tract agents, other" class or "no USP class" with subcutaneous injections (asthma biologics) that require administration by a healthcare provider?

The formulation does not define whether this drug will be placed; it's more about the indication and use. If it is on the FRF from CMS, that is a signal that it may be Medicare Part D eligible, but that would not determine if it would be in the "respiratory agents, other" category or not.

Omalizumab was given "No USP class" within the respiratory category, whereas a recently approved biologic was given the "respiratory tract agents, class". How did we make this distinction?

We will take this back to the committee and reconsider.

3. The USP guidance states that all FDA approved medications since MMG v.6 that are included in the CMS FRF will be included in the MMG v.7. Given that several newly approved medications across different therapeutic areas (e.g., HIV and vaccines) are missing from the draft, what is USP's plan for addressing this gap?

Any drugs that may have been inadvertently missed will be part of the agenda for the MMG subcommittee meeting. If you are concerned about a drug that you do not see on the guidelines draft, please submit your comments through the public comment, survey, or email. If that drug is eligible for Medicare Part D, the committee will certainly review it for placement.

Comments

5. Brian Boatman, Amgen:

- a. The current MMG have 3 different classes of dyslipidemics in the category of cardiovascular agents. These include fibric acid derivatives, HMG reductase inhibitors, and a group labeled "others", which has previously included loosely grouped agents that limit production or impact absorption of cholesterol.
- b. Industry already references a new class called PCSK9 inhibitors.
- c. We encourage moving the PCSK9 drugs from the "others" class to a new class of drugs within the cardiovascular agents called "dyslipidemics PCSK9 inhibitors".
- d. This change would provide a more appropriate classification for these medications that accurately reflects their unique mechanism of action and important therapeutic value.
- e. There are currently two FDA-approved PCSK9 inhibitors: Alirocumab and Evolocumab, both of which are completely dissimilar to the others placed in this class.
- f. Despite concerns over cost, strict practices have kept costs of PCSK9 inhibitors to less than 2% of their predicted costs.

6. Stacey Poole, Takeda Pharmaceuticals:

- a. We are here to discuss Vedolizumab for moderately or severely active Ulcerative Colitis and Crohn's Disease. This is an IV drug and is typically a part B drug; however, it is also utilized under Part D.
- b. Our primary concern is that Vedolizumab appears to be inadvertently missing from the MMG v.7.
- c. We believe it is appropriate to group this drug in the immune-modulators class if USP does not wish to create a new class for it, which is our preference.
- d. We believe that not placing this drug while simultaneously placing other IV drugs with similar indicators would be difficult to rationalize. It skews the therapeutic options available for Medicare beneficiaries and their providers, and patient access to effective therapy.
- e. We urge USP to correct this omission considering the increasing number of patients that use this drug under Medicare.

7. David Spiegel, Relypsa:

- a. We request a new potassium binder class for Veltassa and SPS because of the unique pharmacologic mechanism of action and the threat of hyperkalemia. This new class should fall under the genital urinary class because hyperkalemia occurs almost exclusively in the presence of kidney malfunction.
- b. Unlike the other drugs placed in the current potassium binder class, Veltassa and SPS have a distinct mechanism of action that does not rely on intact kidney function.
- c. Hyperkalemia is a serious life-threatening condition that can cause cardiac arrest and arrhythmia, which can result in death.
- d. It is important to appropriately class Veltassa and SPS to ensure patients have access.

8. Paul Coplan, Purdue Pharma:

- a. We request that USP revise the current category for analgesics by adding a new class for opioid analgesics with FDA recognized abuse deterrent characteristics.
- b. A new class is crucial for improving patient access to abuse deterrent formulations and to address the nation's opioid abuse crisis.
- c. Since 2013 when USP last took revisions to MMG, significant product labeling changes have been made to opioid analysics by the FDA.
- d. These significant product labeling changes warrant the addition of a new class for opioid analgesics since USP defines changes in therapeutic use as new FDA indications, significant product labeling changes, or removal from U.S. drug market.
- e. There is a pipeline of more than 30 active investigations into abuse deterrent formulations.
- f. Creating a new class would improve patient access to these drugs because patients often face formulary restrictions that only give them access to opioid drug products lacking in abuse deterrents.

9. Scott Jordan, Cyto Kinetics:

- a. We request a new class for amyotrophic lateral sclerosis for ALS drugs because currently the MMG do not have a class for ALS therapies.
- b. There is currently only one therapy available for ALS patients, and it is categorized under "central nervous system agents, central nervous system other".
- c. There is a very high percentage of the ALS community that is receiving their care through Medicare, and they are receiving access to prescription drugs through part D.
- d. There is currently only one drug approved and available by the FDA for the treatment of ALS; however, there is quite a robust pipeline. We anticipate about 3–4 therapies to be approved by the FDA within the next few years, certainly by 2020.
- e. We request a new class for ALS medicines to ensure patient access as these new therapies come out on the market. Without a new class, we fear that new medicines will be scattered around the formulary by part D plans or simply put into existing classes where part D plans could easily exclude them from coverage. A new class will prevent ALS patients from being denied access from medicines that can prolong their lives.
- f. Creating a new class would not create a precedent for another disease or condition. We know that USP cannot create a new class with only one example drug. MMG v.6 included

- new classes that contained only one example drug, and Federal law for part D plans state that each category or class must include at least two drugs, unless only one drug is available for each class.
- g. If new drugs for ALS are not approved by the FDA in the next few years and USP does create a new class, it will not have a negative impact on part D formularies.

10. Asif Shaikh, Boehringer-Ingelheim:

- a. Our comments are in reference to respiratory tract/pulmonary agents.
- b. New respiratory therapies have been approved, and we consider the "respiratory tract agents, other" class as being too broad in recognizing meaningful differences in products, specifically combination dose therapies.
- c. We request a subclass for LAMA/LABA combination drugs, which are long-acting muscle agents because of their significant clinical differences.

11. Sherri Chenevert and Stephen Zang, Shire:

- a. We request a new class for ophthalmic agents for ophthalmic anti-inflammatory LFA1 antagonists. Currently, the MMG list Lifitegrast under "ophthalmic agent, other".
- b. We believe that creating a new class is consistent with USP guidelines to create a new class for a newly approved drug by the FDA for a therapeutic use not described by an existing class.
- c. Creating a new class is consistent with FDA classification of a new drug as the first medication of a newly defined class for LFA1 antagonists.
- d. This drug is not pharmacologically similar to others in the "ophthalmic agent, other" class. This non-specific class may not reflect the drug's unique mechanism of action and may cause confusion for eye care professionals.

12. Christopher Danes, Takeda Pharmaceuticals:

- a. We request another classification for Ixazomib other than "antineoplastics, other" because this is the first oral produce um pathway inhibitor.
- b. We do appreciate that USP didn't classify Ixazomib under the molecular target inhibitors because they are focused on targeting the protein kinase signaling cascades.
- c. We do believe that because Ixazomib is a produce um pathway inhibitor, this warrants a new classification under the antineoplastics category.
- d. Ixazomib targets the inoculum-producing pathway and is approved for patients with multiple melanoma and lymphoma.
- e. The inoculum producing pathway is an increasingly complex signaling pathway that controls signaling within cancer cells by controlling the half-life of proteins within the cell, controlling compartmentalization, and can deregulate pathways on which cancer cells have become reliant.
- f. Targeting the inoculum producing pathway is a growing field in cancer treatment.
- g. A new classification is warranted under the antineoplastic agents because this is a complex approach to targeting different types of cancers.
- h. A new class will allow for beneficiaries to access these unique drugs.

13. Donna Booth, Glaxo:

- a. While USP is striving to meet the request of CMS for limiting the addition of new classifications of medications, inclusion of all combinations products for respiratory diseases into "respiratory tract, other", specifically ICS/LABA and LAMA/LABA, may limit patients' ability to access all available treatment options needed for an incremental approach for COPD treatment as their disease progresses.
- b. We request that the USP add these separate classifications to account for different or complementary mechanisms of actions in the treatment of COPD.

14. Matthew Wieman, Teva:

- a. We request a new class for abuse deterrent formulations for the opioid class to reinforce what has been asked by the government, FDA, and stakeholders.
- b. We need to strike an appropriate balance between access for patients in need of opioids while addressing the risks of misuse and abuse.

15. Dan Cohen, Abuse Deterrent Coalition

- a. We request that USP revise the analgesic category by adding a new class for opioids analgesics with recognized abuse deterrent characteristics by the FDA.
- b. These significant product labeling changes warrant the addition of a new class for opioid analgesics because USP defines changes in therapeutic use as new FDA indications, significant product labeling changes, or removal from the U.S. drug market.
- c. As part of the FDA's Opioid Action plan, all applications for the approval of opioid analgesics that do not have abuse deterrent characteristics will be subject to the additional scrutiny of an expert advisory panel.
- **d.** The two current categories for opioids would undermine patient access to abuse deterrent formulations.

Concluding Remarks from USP:

Our public comment period is open. The draft for the categories and classes and the example drugs are listed on our website at: http://www.usp.org/usp-healthcare-professionals/usp-medicare-model-guidelines.

You can also submit detailed comments through our survey



Medicare Model Guidelines (MMG) Subcommittee				
Working Meeting Notes (Open Microphone #4)				
EC / EP / SC Name	MMG Subcommittee			
USP Staff	Donna Bohannon, Diana Kwan, Emily Ann Myer, James Ngov			
Stakeholders	Providers/Healthcare Associations			
	Melody Ryan (Chair)			
EC Members	Mark Decerbo			
Meeting Format (Face-to-Face, Teleconference)	Teleconference			
Meeting Start Date	October 20, 2016			
Time Start	10:00 a.m.			
Time Stop	10:44 a.m.			
Work Performed	See Notes Below			
Names of Participants				
Melody Ryan (Chair)	Stacey Poole			
John Nelson	George Bakris			
Susan Kelly	Mike Heath			
Seth Baum	Shana Durant			
Debbie Perfetto	Sheila Heitzig			
Brenna Jenny	Tiffany Gillis			
Jinsy Andrews	Eric Roath			

Caitlyn Ozier	Danial Baker
Holly Owens	Suresh Khemani
Mike Miller	Shilpa Briggs
Michael Baxter	Nee Clase
Matthew Weir	

- Donna Bohannon delivered a PowerPoint presentation about an overview of USPC.
- Melody Ryan delivered a PowerPoint presentation about USP MMG v.7.

Comments

16. Seth Baum, American Society for Preventive Cardiology:

- a. We request to make the PCSK9 inhibitors their own class. This is consistent with current U.S. practices and standard of care, as well as your particular guidelines for creating a new class.
- b. The PCSK9 inhibitors are the single greatest advance in lipid-lowering therapy in 30 years.
- c. This is the first biologic to enter the arena of lipid-lowering therapy and to put them in the "other" category diminishes their value and their role in managing patients, and it also ignores their differences from other lipid-lowering agents.
- d. These drugs are indicated for high-risk cholesterol patients.
- e. The enhanced granularity will help inform formularies.

USP response: We have heard this comment several times during the Open Mic sessions, and the committee will definitely review this.

17. Matthew Weir, University of MD:

- a. We request a new class for potassium binders, because there are many more coming and these are pharmacologically distinct from the other drugs in the mineral electrolyte modifier class.
- b. Hyperkalemia is a huge lethal problem for kidney patients; therefore, we need these potassium modifiers to be removed from their current class and put in a separate class so that there will be more choices for physicians to choose from.
- c. The newer agents are safer, more efficacious, and better tolerated, similar to the phosphate binders.
- d. We need more choices in clinical practice, and we won't get that if there is so much restriction in how these drugs are placed in the large mineral electrolyte modifier class.

USP response: This has been a recurring theme in our Open Mic sessions, and the committee will meet in a few weeks and will review drugs that will go in a class like that.

18. Jinsy Andrews, Columbia University Medical Center:

a. The latest MMG draft doesn't include a separate class for ALS medications.

- b. The vast majority of patients are covered under Medicare so the USP model formulary for Medicare is really important for ALS patients and providers.
- c. The formulary design has made the practice of medicine a bit more complicated and burdensome for ALS patients and providers.
- d. Because this is a rapidly progressing disease, this means that time is often short for these patients, so we need to create a new class for ALS medications before the next MMG update.
- e. There are a number of drugs in the late stages of development that will become available before the next MMG update. ALS patients could be challenged in accessing these new therapies if these medications don't have a separate class before the next MMG update.

USP response: We have heard about the plight of ALS patients and the impending approvals that will happen, so this is definitely on the agenda for the next MMG meeting.

19. John Nelson, California Cardiovascular Institute:

- a. We request a new class for PCSK9 inhibitors because they are the first biologic, and this is a tremendous development in the field of cardiovascular prevention.
- b. We have new ICD-10 codes specifically for familial hypercholesterolemia, for which these drugs have unique indication. This means that now we can also look at family history of this disease and use these unique codes for documentation of the disease.
- c. These drugs need to be in a separate class from statins, fibrates, and omega-3s.

Follow up comment from Seth Baum:

- a. About 10% or fewer of familial hypercholesterolemia patients have been identified, and having the ICD-10 code will help us identify more patients so that we can diagnose and treat these patients sooner.
- b. Having a separate class for PCSK9 inhibitors will have a tremendous impact on identifying FH patients.
- c. There are more biosimilars coming, and so this class is already growing.

20. George Bakris, Comprehensive Hypertension Center:

- a. We request a new class for potassium binders so that we can differentiate these from other agents.
- b. The kidney handles 90% of the body's potassium, and there are growing numbers of people with advanced kidney disease at high risk of hyperkalemia; therefore, it's very important that we manage hyperkalemia.
- c. The advent of the approval of Patiromer, which is the second potassium binder on the market, as well as the anticipated approval of additional potassium binders, has enabled patients to use ACE inhibitors and angiotensinreceptive blockers well-known to slow progression of kidney disease and are beneficial for heart disease.
- d. Hyperkalemia is differentiated from others in the electrolyte and mineral-modifying class, and these potassium binders are not interchangeable with other drugs in this class, especially because we have more drugs being released.

Concluding Remarks from USP:

Our public comment period is open. The draft for the categories and classes and the example drugs are listed on our website at: http://www.usp.org/usp-healthcare-professionals/usp-medicare-model-guidelines.

You can also submit detailed comments through our survey or via email

Appendix VIII: Public Comments

COMMENT ID	Topic	USP Category/ Class	Summary	USP Decision/ Rationale
11020004 10310012 11020017	Expand Categories	"Anti-Obesity Agents"	Three (3) commenters suggested developing a new USP Category for Anti-Obesity treatments. One commenter notes that the USP MMG is used as part of EHB and health insurance exchanges where obesity coverage is essential.	Comment not incorporated. This exceeds the authority of USP, as anti-obesity drugs are not Part-D eligible. Refer to Medicare Prescription Drug Benefit Manual, Chapter 6, Section 20.1.
11010024 10240001 11020013 11020011 11020016 11090002 11020025	Expand Classes	Analgesics	Seven (7) commenters suggested developing a new USP Class for Abuse Deterrent Formulations (ADF) under Opioid Analgesics. Three commenters highlight the significant change in product labeling for ADFs.	Comment not incorporated. Adding a Class or Category based on formulation would change the structure of the USP system to be much less useful to CMS as a formulary evaluation tool and make it difficult to maintain consistency within the MMG.
11020019	diclofenac sodium topical solution	Analgesics, Nonsteroidal Anti- inflammatory Drugs	One (1) commenter requested the inclusion of diclofenac sodium topical solution in USP Category/Class: Analgesics, Nonsteroidal Anti-inflammatory Drugs.	Diclofenac sodium is classified under "Dermatological Agents". It is outside of the USP MMG Guiding Principles to classify drugs based on dosage form.
11020019	ibuprofen/ famotidine	Analgesics, Nonsteroidal Anti- inflammatory Drugs	One (1) commenter requested the inclusion of ibuprofen/famotidine combination tablets in USP Category/Class: Analgesics, Nonsteroidal Anti-inflammatory Drugs.	Comment not incorporated. Combination products of existing drugs in the MMG are generally not included.
11020019	Naproxen /esomeprazole magnesium	Analgesics, Nonsteroidal Anti- inflammatory Drugs	One (1) commenter requested the inclusion of naproxen/esomeprazole magnesium combination tablets in USP Category/Class: Analgesics, Nonsteroidal Anti-inflammatory Drugs.	Comment not incorporated. Combination products of existing drugs in the MMG are generally not included.
10280052	Hydrocodone bitartrate	Analgesics, Opioid Analgesics, Long- acting	One (1) commenter requested the inclusion of hydrocodone bitartrate within the existing class "Opioid Analgesics, Long-acting.	Comment not incorporated. Hydrocodone is listed as an example drug in the "Opioid Analgesics, Shortacting" class. Exclusion from the "Longacting" class as an example drug does not exclude the drug product from potential coverage.

10270065 11020003	Expand Classes	Antidementia Agents	Two (2) commenters suggested establishing new classes within USP Category Antidementia Agents based on mechanism of action. One commenter proposed the addition of a '5-HT6 Receptor Agonists' Class.	Comment not incorporated. There are insufficient drug products to meet the minimum requirements for adding an additional class at this time.
11020001	lesinurad	Antigout Agents	One (1) commenter suggested expanding the Antigout category to 'Urate Lowering Therapies' and 'Anti-Flare Agents' classes and classifying lesinurad in the 'Anti-Flaire Agents' class.	Comment not incorporated. EC reviewed the "Antigout" category and made no changes in this revision.
11020001	gefitinib	Antineoplastics, Molecular Target Inhibitors	One (1) commenter suggested the inclusion of gefitinib in Antineoplastics, Molecular Target Inhibitors class.	Comment incorporated.
11020004	lenvantinib	Antineoplastics, Molecular Target Inhibitors	One (1) commenter suggested the inclusion of lenvantinib in Antineoplastics, Molecular Target Inhibitors class.	Comment incorporated.
11020012	Ixazomib	Antineoplastics	One (1) commenter suggested that USP include ixazomib as an example drug in a new class 'Proteasome Pathway Inhibitor' and noted that there are two other drug candidates in development.	Comment not incorporated. Ixazomib is classified under "Antineoplastics, Other". There are insufficient drug products to meet the minimum requirements for adding an additional class at this time.
11010021	General	Antineoplastics	One (1) commenter expressed concerns about overlap between the "Molecular Target Inhibitors" and "Enzyme Inhibitors" classes, as the molecular target for many agents is an enzyme. The commenter was interested in how the committee distinguished between these two classes.	Because Antineoplastics are a CMS-protected class, the EC determined that this action be reviewed in a future revision.

11020006 11020007	Expand Classes	Antivirals	Two (2) commenters request to separate the Antihepatitis B (HBV) Agents' class into 'Anti-hepatitis B Oral Agents' and 'Anti-hepatitis B, Other'. They also request to separate Anti-hepatitis C (HCV) Agents class into 'Anti-hepatitis C, Oral Agents' and Anti-Hepatitis C, Other'. They recommend to include all anti-hepatitis oral agents on the example drug list.	Comment not incorporated. It is outside of the USP MMG Guiding Principles to classify drugs based on dosage form.
11020028	tenofovir alafenamide	Antivirals, Anti- hepatitis B (HBV) Agents	One (1) commenter suggested adding tenofovir alafenamide as an example drug in 'Antivirals, Antihepatitis B (HBV) Agents'.	Comment not incorporated. According to the Guiding Principles, combination products will not be placed unless there is a new chemical entity. For this product, the chemical entities already exist in another combination product listed as an example on the MMG.
11020025 11020011	Expand Classes	Antivirals, Anti- hepatitis C (HCV) Agents	Two (2) commenters suggested creating two new classes in 'Antivirals' Category: Interferon and Peginterferon based treatments (IFN, PEG-IFN) and 'Direct-acting Antiviral (DAA)' classes.	Comment not incorporated. The "Antihepatitis C (HCV) Agents" class was expanded to 'Anti-hepatitis C (HCV) Agents First Generation' and 'Antihepatitis C (HCV) Agents Second Generation' based on current treatment guidelines.
11020020	Expand Classes	Antivirals, Anti- hepatitis C (HCV) Agents	One (1) commenter suggested reclassifying the 'Antivirals' category into 'Anti-hepatitis C Agents, Direct-acting Antivirals' and 'Anti-hepatitis C Agents, Interferon and Ribavirin'.	Comment not incorporated. The "Anti-hepatitis C (HCV) Agents" class was expanded to 'Anti-hepatitis C (HCV) Agents First Generation' and 'Anti-hepatitis C (HCV) Agents Second Generation' based on current treatment guidelines.
11020006 11020007	Ombitasvir/ paritaprevir/ ritonavir	Antivirals, Anti- hepatitis C (HCV) Agents	One (1) commenter requests the inclusion of ombitasvir/paritaprevir/ritonavir in 'Antivirals, Anti-hepatitis C (HCV) Agents'.	Comment not incorporated. According to the Guiding Principles, combination products will not be placed unless there is a new chemical entity. For this product, the chemical entities already exist in another combination product listed as an example on the MMG.

11020028	telaprevir	Antivirals, Anti- hepatitis C (HCV) Agents	One (1) commenter suggested to remove telaprevir from the example drug list as it is no longer sold in the US.	Comment incorporated.
11020028	boceprevir	Antivirals, Anti- hepatitis C (HCV) Agents	One (1) commenter suggested to remove boceprevir from the example drug list as it is no longer sold in the US.	Comment incorporated.
11020028	Interferons	Antivirals, Anti- hepatitis C (HCV) Agents	One (1) commenter suggested removing interferons from the example drug list, stating that AASLD/IDSA HCV Guidance Committee no longer recommends interferons for treatment of HCV in any patient category.	Comment not incorporated. The interferons were incorporated in the new class "Antihepatitis C (HCV) Agents First Generation". The EC decided not to remove interferons as an example drug.
11020006 11020007 11020028	Emtricitabine/ tenofovir alafenamide	Antivirals, Anti- HIV Agents, Nucleoside and Nucleotide Reverse Transcriptase Inhibitors (NRTI)	Three (3) commenters suggested including emtricitabine/tenofovir alafenamide in 'Antivirals, Anti-HIV Agents, Nucleoside and Nucleotide Reverse Transcriptase Inhibitors' as it is a drug recommended on the DHHS HIV/AIDS Treatment Guidelines.	Comment not incorporated. According to the Guiding Principles, combination products will not be placed unless there is a new chemical entity. For this product, the chemical entities already exist in another combination product listed as an example on the MMG.
11020006 11020007	Didanosine delayed-release	Antivirals, Anti-HIV Agents, Nucleoside and Nucleotide Reverse Transcriptase Inhibitors (NRTI)	Two (2) commenters suggested including didanosine delayed-release in 'Antivirals, Anti-HIV Agents, Nucleoside and Nucleotide Reverse Transcriptase Inhibitors' as it is a drug recommended on the DHHS HIV/AIDS Treatment Guidelines.	Comment not incorporated. It is outside of the USP MMG Guiding Principles to classify drugs based on dosage form.
11020006 11020007 11020028	Emtricitabine /rilpivirine/ tenofovir alafenamide	Antivirals, Anti- HIV Agents, Nucleoside and Nucleotide Reverse Transcriptase Inhibitors (NRTI)	Three (3) commenters suggested including emtricitabine/rilpivirine/tenofovir alafenamide in 'Antivirals, Anti-HIV Agents, Nucleoside and Nucleotide Reverse Transcriptase Inhibitors' as it is a drug recommended on the DHHS HIV/AIDS Treatment Guidelines.	Comment not incorporated. According to the Guiding Principles, combination products will not be placed unless there is a new chemical entity. For this product, the chemical entities already exist in another combination product listed as an example on the MMG.

11020006 11020007	Nevirapine extended- release	Antivirals, Anti-HIV Agents, Non- nucleoside Reverse Transcriptase Inhibitors (NRTI)	Two (2) commenters suggested including nevirapine extended-release in 'Antivirals, Anti-HIV Agents, Non-nucleoside Reverse Transcriptase Inhibitors' as it is a drug recommended on the DHHS HIV/AIDS Treatment Guidelines.	Comment not incorporated. It is outside of the USP MMG Guiding Principles to classify drugs based on dosage form.
11020006 11020007	Dolutegravir/ abacavir/ lamivudine	Antivirals, Anti-HIV Agents, Integrase Inhibitors (INSTI)	Two (2) commenters suggested including dolutegravir/abacavir/lamivudine in 'Antivirals, Anti-HIV Agents, Integrase Inhibitors' as it is a drug recommended on the DHHS HIV/AIDS Treatment Guidelines.	Comment not incorporated. The single drug entities of that combination already exist within the MMG. According to the Guiding Principles, combination products will not be placed unless there is a new chemical entity.
11020006 11020007	elvitegravir	Antivirals, Anti-HIV Agents, Integrase Inhibitors (INSTI)	Two (2) commenters suggested including elvitegravir in 'Antivirals, Anti-HIV Agents, Integrase Inhibitors' as it is a drug recommended on the DHHS HIV/AIDS Treatment Guidelines.	Comment incorporated.
11020006 11020007	Cobicistat	Antivirals, Anti-HIV Agents, Other	Two (2) commenters suggested including cobicistat in 'Antivirals, Anti-HIV Agents, Others' as it is a drug recommended on the DHHS HIV/AIDS Treatment Guidelines.	Comment not incorporated. Cobicistat was already placed on the MMG as a combination product prior to its approval as a single agent.
11020021	empagliflozin	Blood glucose regulators, Antidiabetic Agents	One (1) commenter supports the inclusion of empagliflozin in the example drug list under 'Antidiabetic Agents' Class, however, is concerned with the broad scope and large number of drugs in this class.	
10310012 11020001	Expand Classes	Blood Glucose Regulators, Antidiabetic Agents	One (1) commenter suggested to separate diabetes treatments in the USP Category/Class 'Blood Glucose Regulators, Antidiabetic Agents' into different classes based on mechanism of action. One (1) commenter suggested the USP Class 'Antidiabetic Agents' be divided into specific diabetes drug classes based on the American Diabetes Association (ADA) and American Association of Clinical Endocrinologist (AACE) guidelines.	Comment not incorporated. EC reviewed the "Antidiabetic Agents" class and determined not to divide the antidiabetic agents based on mechanism of action.

11020022	dulaglutide	Blood glucose regulators, Antidiabetic Agents	One (1) commenter requests the inclusion of dulaglutide in "Blood glucose regulators, Antidiabetic Agents".	Exclusion from the "Antidiabetic Agents" class as an example drug does not exclude the drug product from potential coverage.
11012016	Name change	Blood Products/Modifiers/ Volume Expanders, Hemostasis Agents	One (1) commenter noted the name change for "Coagulants" to "Hemostatic Agents" under the "Blood Products/Modifiers/Volume Expanders" category was not reflected in the draft.	Comment incorporated.
11020011 11020014 11020025 11020029	Expand Classes	Cardiovascular Agents	Four (4) commenters requested to create a new 'Dyslipidemics, Proprotein Convertase Subtilisin Kexin 9 (PCSK9) Inhibitors' class within the 'Cardiovascular Agents' Category.	Comment not incorporated. Insufficient clinical evidence and/or outcome data is available at this time to justify a new USP class.
11020001	Omega-3- carboxylic acids	Cardiovascular Agents, Dyslipidemics, Other	One (1) commenter suggests to add omega-3-carboxylic acids as an example drug in 'Dyslipidemics, Other" class within the "Cardiovascular Agents" category.	Comment not incorporated. Exclusion from the "Dyslipidemics, Other" class as an example drug does not exclude the drug product from potential coverage.
11020027	Gabapentin enacarbil extended release	Central Nervous System Agents	One (1) commenter suggested creating a new "Restless Leg Syndrome" class within "Central Nervous System Agents" and including gabapentin enacarbil extended release in this class.	Comment not incorporated. Gabapentin enacarbil is classified in the MMG under "Central Nervous System Agents, Other". It is outside of the USP MMG Guiding Principles to classify drugs based on dosage form.
ID Numbers on File	New Class	Central Nervous System Agents	One thousand and forty (1040) commenters requested the addition of a new ALS class within the MMG v7.0.	Comment not incorporated. There are insufficient FDA approved drug products to meet the minimum requirements for adding an additional class at this time.
11020015 11040001	Dalfampridine	Central Nervous System Agents, Multiple Sclerosis Agents	Two (2) commenters suggested expanding the Multiple Sclerosis Agents into separate classes. One commenter suggested creating a "Multiple Sclerosis, Immunomodulatory" and "Multiple Sclerosis, Symptomatic" classes, where dalfampridine would be classified under "symptomatic". One commenter suggested moving dalfampridine into a new "Neural Transmission Enhancements" class.	Comment not incorporated. There are not enough example drugs to justify adding these separate USP Classes.

11040001	Alemtuzumab	Central Nervous System Agents, Multiple Sclerosis Agents	One (1) commenter suggested adding a new class 'Immune Modulators' within 'Multiple Sclerosis Agents' and including all interferons plus alemtuzumab, daclizumab, dimethyl fumarate, fingolimod, glatiramer, natalizumab, and teriflunomide.	Comment not incorporated. The drug does not meet the minimal requirements to justify classification in a new USP class.
11040001	Intravenous methylprednisolo ne	Central Nervous System Agents, Multiple Sclerosis Agents	One (1) commenter suggested adding intravenous methylprenisolone to a new class for treatment of multiple sclerosis exacerbations rather than disease treatment.	Comment not incorporated. There are not enough example drugs to justify adding this separate USP Class.
11040001	Mitoxantrone	Central Nervous System Agents, Multiple Sclerosis Agents	One (1) commenter suggested creating a new class "Multiple Sclerosis Agents, Immune Suppressant" under the existing "Central Nervous System Agents" and including mitoxantrone in that class.	Comment not incorporated. There are not enough example drugs to justify adding this separate USP Class.
11040001	Adrenocorticotr opic hormone	Central Nervous System Agents, Multiple Sclerosis Agents	One (1) commenter suggested adding adrenocorticotropic hormone to a new class for treatment of multiple sclerosis exacerbations rather than disease treatment.	Comment not incorporated. There are not enough example drugs to justify adding this separate USP Class.
10210001	Expand Classes	Cystic Fibrosis Agents	One (1) commenter suggested creating a new class for CFTR modulators.	Comment not incorporated. There are not enough example drugs to justify adding this separate USP Class.
11020014	Expand Classes	Dermatological Agents	One (1) commenter requested the addition of "Dermatological Biologics – TNF Blockers".	Comment not incorporated. EC reviewed the category "Dermatological Agents" category and made no changes in this revision.
11020025 11020022	Expand Classes	Dermatological Agents	Two (2) commenters suggested differentiating the "Dermatological Agents" Category into separate classes: anti-acne, anti-biotic, antibacterial, antifungal, anti-inflammatory, antineoplastic/anti-metabolic, antihistamine, anti-rosacea, anti-xerotic, anti-cytokine agents, and monoclonal antibodies (which would include IL-17s, ixekizumab, and secukinumab).	Comment not incorporated. EC reviewed the "Dermatological Agents" category and determined the category would not be subdivided in this revision.

11010013	Asfotase alfa	Genetic or Enzyme Disorder: Replacement, Modifiers, Treatment	One (1) commenter requested the inclusion of asfotase alfa in "Genetic or Enzyme Disorder: Replacement, Modifiers, Treatment" category.	Comment incorporated.
11020025	Expand Classes	Genetic or Enzyme Disorder: Replacement, Modifiers, Treatment	One (1) commenter requested to include each therapy approved to treat a single genetic metabolic disorder. The commenter also expressed concerns that not all approved therapies to treat genetic or enzyme disorders since January 1, 2014 are included in MMG v7.0.	Comment not incorporated. EC reviewed FDA approved drugs for Medicare Part D eligibility for the term 1/1/14 to 12/8/16. Drug products that were eligible were assigned to the appropriate category and class.
110200019	Interferon gamma-1b	Genetic or Enzyme Disorder: Replacement, Modifiers, Treatment	One (1) commenter requested adding interferon gamma-1b to "Genetic or Enzyme Disorder: Replacement, Modifiers, Treatment" category.	Comment not incorporated. Drug was placed in "Immunological Agents, Immunomodulators".
10310012	Expand Classes	Hormonal Agents, Stimulant/Replace ment/Modifying (Pituitary)	One (1) commenter recommended separating different pituitary hormone treatments into different classes based on the most common clinical use or mode of treatment.	Comment not incorporated. EC reviewed the category and determined to take no action in this revision.
11010021	General	Hormonal Agents, Parathyroid Hormone	One (1) commenter suggested including parathyroid agents where appropriate under the "Metabolic Bone Disease Agents" category because adding two new classes for parathyroid antagonists and agonists would impose a requirement on Part D sponsors using the USP MMG to cover single medications in each class.	Comment incorporated. Cinacalcet was reclassified to USP category "Metabolic Bone Disease Agents." Calcifediol was also added as a newly approved drug to the category.
11020025	Expand Classes	Immunological Agents, Immune Suppressants	classes: post-transplant, biological disease modifying	Comment not incorporated. EC reviewed the category and determined to take no action in this revision.

11020014	Expand Classes	Immunological Agents	One (1) commenter recommended a new USP Class called "Immune Suppressants - TNF Blockers" within the existing "Immunological Agents"	Comment not incorporated. EC reviewed the category and determined to take no action in this revision.
11020026	Tofacitnib	Immunological Agents, Immune Suppressants	One (1) commenter suggested moving tofacitnib from "Immune Suppressant" to "Immunomodulator" class within "Immunological Agents" category.	Comment not incorporated. EC reviewed the category and determined to take no action in this revision.
11020022	JAK Inhibitors	Immunological Agents, Immunomodulators	One (1) commenter suggested JAK inhibitors be reclassified from the "Immune Suppressant" class to the "Immunomodulators" class.	Comment not incorporated. EC reviewed the category and determined to take no action in this revision.
11020019	Expand Classes	Immunological Agents, Immunomodulators	One (1) commenter suggested dividing the "Immunomodulators" class into classes that are more specific to the disease being treated.	Comment not incorporated. EC reviewed the category and determined to take no action in this revision.
11020020	General	Inflammatory Bowel Disease Agents	One (1) commenter suggested the inclusion of all inflammatory bowel disease drugs in the USP MMG v7.0, particularly noting vedolizumab, ustekinemab, and biosimilars adalimumab-atto and infliximab-dyyb.	Comment not incorporated. Vedolizumab is included under "Immunological Agents, Immunomodulators". Adalimumab and infliximab is included under "Immunological Agents, Immune Suppressants".
11020014	Expand Classes	Metabolic Bone Disease Agent	One (1) commenter suggested adding a "RANK Ligand Inhibitors" Class under "Metabolic Bone Disease Agent" Category.	Comment not incorporated. There are insufficient drug products to meet the minimum requirements for adding an additional class at this time.

11020019	Interferon gamma-1b	Metabolic Bone Disease Agents	One (1) commenter requested adding interferon gamma-1b to the "Metabolic Bone Disease Agents" category.	Comment not incorporated. Drug was placed in "Immunological Agents, Immunomodulators".
10310009	Expand Classes	Ophthalmic Agents	One (1) commenter requested moving lifitegrast from "Ophthalmic Agents, Other" class to a new class called "Ophthalmic Agents, Anti-inflammatory, LFA-1 Antagonists".	Comment not incorporated. There are insufficient drug products to meet the minimum requirements for adding an additional class at this time.
11020024	Expand Classes	Ophthalmic Agents	One (1) commenter suggested providing more granularity in the "Ophthalmic Agents" category based on clinical differences of drugs.	Comment not incorporated. EC reviewed the "Ophthalmic Agents" category and determined the category would not be subdivided in this revision.
11020001	Expand Classes	Respiratory Tract/Pulmonary Agents	One (1) commenter suggested expanding the "Respiratory Tract/Pulmonary Agents" Category to include classes: "Long-acting muscarinic antagonist/long-acting beta2-adrenergic agonist (LAMA/LABA)", "Inhaled corticosteroids/long-acting beta2-adrenergic agonist (ICS/LABA)", and "Immunomodulators." Commenter requests that if LAMA/LABA class cannot be added, include bevespi aerosphere as an example drug in "Respiratory Tract Agents, Other".	Comment not incorporated. EC evaluated the full respiratory category and determined not to divide the respiratory tract agents in this revision. According to the Guiding Principles, combination products will not be placed unless there is a new chemical entity.
11020011 11020025	Expand Classes	Respiratory Tract/Pulmonary Agents	Two (2) commenters suggested expanding the "Respiratory Tract/Pulmonary Agents" category to include two new classes: "Bronchodilator, Anticholinergic Containing Combinations" (to include LAMA/LABAs) and "Bronchodilator, Anticholinergic Containing Combinations".	Comments not incorporated. It is outside of the USP MMG Guiding Principles to include combination products in separate USP Classes.
11020018	Expand Classes	Respiratory Tract/Pulmonary Agents	One (1) commenter suggested expanding the category "Respiratory Tract/Pulmonary Agents" by adding additional classes noting new respiratory care therapies.	Comment not incorporated. EC evaluated the full respiratory category and determined not to divide the respiratory tract agents in this revision.

11020021	Expand Classes	Respiratory Tract/Pulmonary Agents	One (1) commenter requested adding tiotropium/olodaterol to the USP MMG v7.0 under a new LABA/LAMA class. Commenter requests at a minimum to add tiotropium/olodaterol to the "Respiratory Tract Agents, Other" class, alongside two other fixed dose combination products umeclidinum/vilanterol trifenate and indacaterol/glycopyrrolate.	Comment partially incorporated. These single agents exist within the "Respiratory Agents" category. According to the Guiding Principles, combination products will not be placed unless there is a new chemical entity.
11020021	Nintedanib	Respiratory Tract/Pulmonary Agents, Pulmonary Fibrosis Agents	One (1) commenter supports the addition of this separate class under "Respiratory Tract/Pulmonary Agents".	USP acknowledges the supportive comment.
10270164 10280078 11010010 11020002 11020005 11020008 11010020	Vedolizumab		Seven (7) commenters requested the inclusion of vedolizumab in the MMG v7.0. Four (4) commenters suggested creating a new class to reflect vedolizumab's mechanism of action as a gut selective integrin receptor antagonist. One (1) commenter requested to add vedolizumab as an example drug under "Immunological Agents, Immunomodulators". Two (2) commenters expressed concerns that the "Immunomodulators" class needs to be more specific to reflect the various mechanisms of action. Four (4) commenters highlight that there are Part B drugs that can be covered under Part D in special instances, and vedolizumab is one such case.	Comments incorporated. Vedolizumab has been added to "Immunological Agents, Immunomodulators".
11020025	General		One (1) commenter suggested that USP should provide further details on the exact process by which therapies that have gained FDA approval since MMG v6.0 are selected for inclusion and the mechanisms used to verify the accuracy and comprehensiveness of that list.	USP acknowledges this comment. USP provides an Approach and Methodology document on its website for public review.
11020025	General		One (1) commenter suggested that the USP share a summary of the issues transmitted to CMS under the current provision of the Guiding Principles.	USP provides an Approach and Methodology document on its website for public review.

11020025 11020021	General	Two (2) commenter expressed concerns that not all Part D eligible drugs and vaccines on the FRF are included as examples in the MMG v7.0.	Comment not incorporated. The CMS Formulary Reference File (FRF) is a list of unique identifiers used by Part D sponsors for the submission of Part D formularies and for CMS review. The FRF does not represent a coverage determination for any specific drug.
11020027	General	One (1) commenter suggested USP should discontinue the use of the "Other" classes that group together rare and non-rare disease drugs, highlighting concerns that non-rare disease products will face undue challenges in obtaining formulary	USP acknowledges this comment.
11020004	General	One (1) commenter suggested adding new categories and classes to include drugs that are covered by health insurers in the commercial market.	USP acknowledges this comment.
11020009	General	One (1) commenter supports USP's work on the MMG v7.0 and is looking forward to the release of the USP Drug Classification System.	USP acknowledges the supportive comment.
11020003 11020011 11020014 11020022 11020025	General	Five (5) commenters express concerns that the current USP MMG triennial revision cycle is too long to address ongoing advances in therapies. Four (4) commenters suggest an annual revision process to ensure timely access to new therapies.	USP acknowledges these comments.
11020011	General	One (1) commenter suggested the classification of combination products in the MMG, citing the benefits of those products.	USP acknowledges this comment.
11020011 11020021	General	Two (2) commenters expressed concerns with the lack of clarity between the use of the Formulary Reference File (FRF) and the MMG. One commenter recommends that USP include a complete cross-walk of current proposed revisions against the prior version of the MMG (i.e. including any redactions and further explanation of proposed changes).	USP acknowledges the comment. USP provides an Approach and Methodology document on its website for public review.

11020011	General	One (1) commenter expressed concern for increased confusion with the upcoming release of the USP Drug Classification System with respect to the MMG.	USP acknowledges this comment.
11020022	General	One (1) commenter suggests emphasis on main therapeutic use to determine a drug's proper classification into the MMG, citing the World Health Organization's Anatomical Therapeutic Chemical (ATC) system.	USP acknowledges this comment.
11010013 11020011 11020025	General	Three (3) commenters expressed concerns with the transparency of MMG version updates, noting that there were two different versions of the MMG v7.0 drafts uploaded with no explanation to stakeholders.	USP acknowledges this comment. USP provides an Approach and Methodology document on its website for public review.
11020025	General	One (1) commenter suggested that the USP categories and classes should be more detailed to adequately represent the drugs needed by Part D plans. Commenter also requested USP to identify the process by which MMG is reviewed.	document on its website for public review.

Appendix IX: USP Background

The United States Pharmacopeial Convention (USP), established by practitioners in 1820, is the official public standards-setting authority for all prescription and over-the-counter medicines, dietary supplements, and other healthcare products manufactured and sold in the United States. USP sets standards for the quality of these products and works with healthcare providers to help them reach the standards. USP's standards are also recognized and used in many other countries outside the United States. These standards have been helping to ensure good pharmaceutical care for people throughout the world for more than 185 years. USP is an independent, science-based public health organization. As a self-sustaining not-for-profit, 501(c)(3) organization, USP is funded through revenues from the sale of products and services that help to ensure good pharmaceutical care. USP's contributions to public health are enriched by the participation and oversight of expert volunteers representing pharmacy, medicine, and other healthcare professions as well as academia, government, the pharmaceutical industry, health plans, and consumer organizations.

The USP Convention membership is constituted to ensure suitable representation of those sectors of the healthcare system that are impacted by, and in turn impact, USP's activities. The Convention can have more than 450 members representing:

- US colleges and schools of medicine and pharmacy.
- State medical societies and pharmacy associations.
- National and state professional and scientific organizations.
- Governmental bodies.
- Health science and other non-US organizations and pharmacopeias.
- Domestic, foreign, and international manufacturers, distributors, and trade and affiliated associations.
- Consumer organizations and persons representing the public interest.

Convention members elect the USP Convention Officers (president, treasurer, and secretary), the Board of Trustees, and the Council of Experts and vote on resolutions that determine the organization's direction and priorities.

The Council of Experts is the body that makes USP's scientific and standards-setting decisions. Members of the council are elected by the USP Convention membership. Each Council of Experts member serves as the chair of an Expert Committee for a five-year term, with the members of each Expert Committee also serving a five-year term. The Council of Experts and its Expert Committees provide the scientific foundation for USP's public health products and programs.