There has been a dramatic increase in product approvals in the biotech industry over the past few years. This rapid market expansion is projected to continue for several years due to the proliferation of new specialty drug products and applications to the U.S. Food and Drug Administration (FDA) for additional indications of approved drugs. In 2004, a total of 108 specialty drugs were on the market and another 324 were in development. ¹

Specialty drugs have been the fastest growing segment of drug spending under the pharmacy benefit. ² The Aon Fall 2005 Health Care Trend Survey indicated that the specialty drug trend rate in 2006 will be 60% higher than the general pharmacy trend rate, with the specialty trend rate forecasted to be 19%, compared with 11.8% for general pharmacy costs. ³ At the current growth rate, it is anticipated that specialty drug spending will double over the next 4 years, accounting for more than 25% of all outpatient pharmacy spending by 2008. ⁴ Although less than 3% of the private health care population uses specialty pharmaceuticals, these patients account for 25% to 30% of total medical costs for private health care payers. ⁴

Over the last decade, private payers have been intensely focused on managing rising drug costs in general. ⁵ With new specialty drugs costing anywhere from $10,000 to $200,000 per patient per year, payers will be increasingly faced with significant challenges as new specialty drugs find uses in more common disease states, thus reaching larger populations. Payers will be faced not only with rising costs but also with ethical dilemmas related to which patients can receive these drugs and what the appropriate cost-share will be.

This paper will focus on the most significant challenges facing health care payers with respect to specialty pharmacy management, the solutions payers are implementing, and the potential implications for key stakeholders, including patients, providers, and payers. ⁵ Examples from the public sector, specifically Medicare Parts B and D, will be included for comparison where they are relevant.

### Defining and Categorizing Specialty Drugs
Creating a finite definition for specialty drugs poses a challenge for payers. The terms “biologic,” “biological,” “biopharmaceutical,” and “biotech” are often used interchangeably and imprecisely to describe novel biology-based therapeutics. ⁷ Not all drugs that are classified as “specialty” are biologic in origin. In general, specialty drugs are defined as high-cost injectable, infused, oral, or inhaled drugs that generally require close supervision and monitoring of the patient’s drug therapy. ⁷ The 2007 Medicare

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**ABSTRACT**

**BACKGROUND:** The rate of increase in spending on specialty pharmaceuticals is outpacing by far the rate of increase in spending for other drugs.

**OBJECTIVE:** To explore the strategies payers are using in response to challenges related to coverage, cost, clinical management, and access of specialty pharmaceuticals and to describe the potential implications for key stakeholders, including patients, physicians, and health care purchasers.

**METHODS:** Sources of information were identified in the course of providing consulting services in the subject area of specialty pharmaceuticals to health plans, pharmacy benefit managers, employers, and pharmaceutical manufacturers.

**RESULTS:** Specialty pharmaceuticals represent the fastest growing segment of drug spending due to new product approvals, high unit costs, and increasing use. Health care payers are faced with significant challenges related to coverage, cost, clinical management, and access. A variety of short- and long-term strategies have been employed to address these challenges.

**CONCLUSIONS:** Current management techniques for specialty pharmaceuticals often represent a stop-gap approach for controlling rising drug costs. Optimum cost and care management methods will evolve as further research identifies the true clinical and economic value of various specialty pharmaceuticals.

**KEYWORDS:** Specialty pharmacy, Biotechnology, Injectable drugs, Reimbursement, Benefit design

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Modernization Act (MMA) Final Guidance on Formularies defines a specialty drug as “a Part D drug with plan-negotiated prices that exceed $500 per month.” Table 1 lists the top 10 specialty therapeutic classes, the leading specialty drugs within those classes, and the average annual cost of therapy.

### Traditional Benefit Design Structures

Specialty drugs raise complex cost, access, and administrative issues for payers. They do not fit neatly into traditional benefit design structures in which most prescription drugs are covered under the pharmacy benefit. The result is inconsistency and perhaps inequity among payers in coverage, access, and reimbursement for specialty pharmaceuticals.

Specialty drugs fall into 1 of 2 distinct categories based on the site and method of administration: those that can be administered by the patient or caregiver, and those that require a health care professional to administer them in a physician’s office, infusion center, outpatient hospital department, or home. Survey data indicate that most payers include self-administered injectables (SAIs), such as etanercept (Enbrel) and interferon beta-1a (Avonex), in the pharmacy benefit.

There is a large difference in the average monthly cost to a payer for an SAI compared with the cost for other prescription drugs, often more than $1,500 for an SAI compared with an average of $18 per month for generic drugs and an average of $88 per month for brand drugs.

Injectable drugs administered by physicians or other health care providers are commonly termed office-administered injectables (OAI). Most payers include these products under the medical benefit along with physician office procedures, laboratory, radiology, and home health services. Historically, physicians other than oncologists have provided injections to patients in their offices that are relatively low in cost and are administered 1 time only or over a short period, such as antibiotics and anti-inflammatory steroids. In more recent years, physicians other than oncologists have provided OAI s that require chronic use, such as natalizumab (Tysabri) and infliximab (Remicade). Oncologists provide supportive care and administer chemotherapy in their offices. In the past, many of the oncology OAI s such as intravenous fluorouracil have had a relatively low drug cost, but more recent OAI s such as trastuzumab (Herceptin) and bevacizumab (Avastin) are expensive. Most payers today rely on physicians to obtain the OAI drugs, manage the inventory, administer the product, and submit claims for reimbursement for the drugs and professional services. This process is commonly termed “buy and bill.” Table 2 lists common specialty pharmacy products and their classification by site of administration.

Medicare policy results in similar management of injectable drugs: most OAI s are covered under the Part B portion of Medicare reimbursement to physicians (unless they are mandated to be covered under Part D, such as new vaccines not already covered under Part B (e.g., Zoster vaccine, live)), and SAIs are covered under the Part D drug benefit, unless the drug is provided incident to a physician’s office visit and is not mandated for coverage under Part D, such as erythropoietin to treat anemia in persons with chronic renal failure who are on dialysis.

### Key Challenges, Payer Strategies, and Potential Implications

Biotechnology therapies present a new set of challenges for the health care system. As most payers depend on the site of administration or the dispensing site to determine the benefit coverage of a drug, the management of these products tends to be “siloed” under either the pharmacy or medical management. Patient cost-share, clinical oversight, utilization management, and provider reimbursement may differ based on the site of

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**TABLE 1** Top 10 Specialty Therapeutic Classes

<table>
<thead>
<tr>
<th>Therapeutic Class</th>
<th>Leading Specialty Drugs – Brand Name</th>
<th>Average Annual Cost of Therapy ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rheumatoid arthritis</td>
<td>Enbrel, Humira, Kineret, Orencia, Remicade, Rituxan</td>
<td>15,000-20,000</td>
</tr>
<tr>
<td>Multiple sclerosis</td>
<td>Avonex, Betaseron, Copaxone, Rehif, Tysabri</td>
<td>20,000-24,000</td>
</tr>
<tr>
<td>Oral oncology</td>
<td>Gleevec, Tarceva, Nexavar, Revlimid, Sutent, Ifexia</td>
<td>40,500-95,000</td>
</tr>
<tr>
<td>Hematopoietics (used as an adjunct to cancer and other therapies)</td>
<td>Procrit, Epogen, Neupogen, Neulasta, Aranesp</td>
<td>5,000-20,000</td>
</tr>
<tr>
<td>Immunosuppressants (used with organ transplants)</td>
<td>Cyclosporine, Cellcept, Zeritix, ATGAM</td>
<td>10,000-45,000</td>
</tr>
<tr>
<td>Human growth hormone</td>
<td>Nutropin, Humatrope, Genotropin, Nortropin, tev-Tropin, Satzen</td>
<td>18,000-20,000</td>
</tr>
<tr>
<td>Hepatitis C</td>
<td>Rebetron, Pegasys, Peg-Intron, Infergen</td>
<td>24,000-30,000</td>
</tr>
<tr>
<td>Infertility</td>
<td>Follistim, Gonal F</td>
<td>10,000-20,000</td>
</tr>
<tr>
<td>Hemophilia</td>
<td>Recombinant blood factor products</td>
<td>150,000+</td>
</tr>
<tr>
<td>Osteoporosis</td>
<td>Forsteo</td>
<td>9,000</td>
</tr>
</tbody>
</table>

Adapted from Caremark Trends Rx Report 2006.
administration. Many payers find themselves facing a situation where their ability to manage the use of biotechnology therapy is hampered, in part, because there is no single point of control.

Key challenges in cost and care management of specialty pharmaceuticals arise in the traditional health insurance model from the differences in management and administration of pharmacy and medical benefits, including the following:

- Drug coding systems and integration of pharmacy claims and medical claims data
- Billing systems and payment methods
- Benefit design and patient cost-share
- Clinical and utilization management

Faced with these challenges, payers are eager to develop strategies to manage specialty drugs and are in various stages of strategy development and implementation, using a variety of management tools. As a result, current methods for biotechnology therapy management may not yet provide ideal solutions but represent a starting point for further refinement and improvement.

**Drug Coding Systems and Data Integration**

**Challenges**

Drugs billed under the pharmacy benefit are adjudicated with a National Drug Code (NDC) number, a unique 11-digit number that specifies the drug’s manufacturer, strength, dosage form, and package size. The NDC for a new drug is available at the time the drug receives FDA approval and before it enters the market.

On the other hand, drugs billed under the medical claims system are typically adjudicated with a Healthcare Common Procedure Coding System (HCPCS) “J” code. J codes at best identify only the chemical name of the drug, not the specific product manufacturer, strength, or package size. The NDC for a new drug is available at the time the drug receives FDA approval and before it enters the market.

Therefore, a J code can be used to represent several NDC numbers for multiple drug products. For example, J7192 represents all recombinant Factor VIII products (Recombinate, Kogenate FS, Humara, Kinetics) and does not differentiate among the various products.

**Determining the cost of the product is further complicated by the lack of reliable values in the quantity field on medical claims for J codes. A quantity of “1” is common for a J code medical claim, regardless of the actual quantity of the drug administered in metric units.**

The use of J codes for medical billing purposes is problematic from another perspective. A J code specific to a drug is assigned anywhere from 6 to 18 months after a drug enters the market. Until a specific J code for a new drug is assigned, a nonspecific code such as J3490 (Unclassified Biologics) or J3590 (Unclassified Drugs) is used for billing, which does not identify the drug being billed. Even 12 to 18 months after initial market introduction and assignment of a specific J code, medical offices may continue to use the nonspecific code (e.g., J3490 or J3590) for a drug with a J code because auditing medical claims for
accurate and precise use of J codes requires commitment of administrative resources by the payer.

Payer Strategies
To fully understand their specialty pharmacy use, payers gather data from pharmacy and medical claims, which often reside in separate databases. For pharmacy claims data, payers can easily identify specialty pharmacy use through the use of query tools dedicated to the pharmacy claims database and the existence of a data field that identifies route of administration. Analysis and evaluation of specialty pharmacy use in medical claims data are more difficult because of several factors such as (a) limited access to the data (e.g., across medical and pharmacy departments), (b) less standardization of medical claims data compared with pharmacy data, and (c) the tendency for payers to capture and enrich pharmacy claims with additional data fields, such as therapeutic class code that does not exist in medical claims data fields.

Potential Implications
The lack of a uniform coding system for drugs across pharmacy and medical benefits can result in over- or underpayment to providers and inaccurate accounting of spending on specialty pharmacy drugs. The Department of Health and Human Services recognized this when it proposed the use of NDC numbers for office-administered therapies rather than HCPCS J-codes in the HIPAA (Health Insurance Portability and Accountability Act) Standards for Electronic Transactions. Unfortunately, the original proposal to adopt NDC numbers as the standard for medical data for claims for drugs and biologics was rescinded due to the lack of capacity of current claims and billing systems to accommodate NDC numbers.

Billing Systems and Payment Methodology
Challenges
Claims billed under the pharmacy benefit are adjudicated in an online real-time electronic payment system based on the NDC number submitted by the pharmacy and are paid at negotiated contract rates. These claims typically undergo sophisticated concurrent clinical review edits, including drug-drug interactions and validation of appropriate dose according to factors such as patient age and gender. Claims billed under the medical benefit are typically batched to the payer and loaded into the payer's medical claims system with no concurrent clinical review. Contract rates for drugs billed under the medical benefit may vary by provider and are typically higher than pharmacy benefit contract rates. According to recent survey data, the average reimbursement to pharmacies for specialty drugs is average wholesale price (AWP) minus 15%, while the average reimbursement to physician offices for specialty drugs is AWP minus 8%.

As payers have applied cost-management strategies to reimbursement to providers in the pharmacy benefit, J-code reimbursement has been left relatively unchecked. Physicians are often able to bill specialty drugs at a premium well above their acquisition cost, creating a source of profit margin. Medicare, on the other hand, has more aggressively managed J-code reimbursement for Part B drugs. For example, the physician reimbursement formula was changed to average sales price (ASP) + 6%, effective in January 2005. Beginning January 1, 2006, physicians have had a choice between (1) obtaining these drugs from entities selected to participate in the Competitive Acquisition Program (CAP) in a competitive bidding process, or (2) acquiring and billing for competitively biddable Part B-covered drugs under the ASP drug payment methodology. Individual Medicare plans offering Part D drug benefits negotiate their own rates with network pharmacies, typically reimbursing pharmacies at an AWP discount rate.

Payer Strategies
Some payers are managing the actual net cost of specialty drugs by limiting distribution networks and revising reimbursement rates to providers by driving the distribution of specialty drugs through a specialty pharmacy provider (SPP).

SPPs are a diverse group of companies involved in overseeing the distribution, management, and reimbursement of specialty pharmacy products. SPPs have evolved out of several market sectors, including pharmacy benefit managers (PBMs), community pharmacy chains, home infusion companies, disease management companies, and wholesale distributors. PBMs are rapidly taking over the SPP market by either purchasing existing SPPs or creating SPP capabilities from their mail-service facilities.

Industry trends have shown increasing uptake of SPP services, with continued growth expected; 78% of surveyed health plans contract with one or more SPPs or are in the process of contracting with an SPP. Even though payers indicate that they have contracted with one or more SPPs, they do not necessarily require the use of the SPP for all specialty pharmacy products and lock out all other pharmacy providers. Survey data indicate that in 2005, only 48% of payers restricted the distribution of specialty drugs under the pharmacy benefit to contracted SPPs, and only 21% of payers restricted the distribution of specialty drugs under the medical benefit to contracted SPPs. Additionally, some payers will “cherry-pick” selected specialty pharmaceuticals (e.g., therapies for growth hormone, multiple sclerosis, rheumatoid arthritis, and infertility) that they direct to the SPP, based primarily on the drug cost, potential for savings, and opportunities for clinical and utilization management.

Potential Implications
The PBM industry's takeover of the specialty pharmacy industry may inhibit payers from choosing an SPP independent of their PBM. The payer's choice of vendors can be limited as more PBMs negotiate with their plan sponsors to use the services of
the PBM-SPP exclusively. Also, not all SPPs provide the same level of service nor do they all have the same level of clinical expertise, potentially resulting in different levels of patient care. However, limiting provider access to specialty pharmacy networks may contradict state-specific Any Willing Provider laws, which typically require managed care organizations to contract with any provider that agrees to meet the terms and conditions of the organization.17

Reduced reimbursement to physicians may result in lower overall drug costs. However, as payers restrict physician access and/or reduce their reimbursement rates for specialty pharmaceuticals, there may be indirect repercussions for patients. Some physicians have historically gained significant revenue and gross margin from the “buy and bill” model, where they buy drugs from the vendor of their choice and bill the payer for the drug cost and associated drug administration. When Medicare enacted new pricing methodology in the 2003 MMA, including the option of either ASP + 6% reimbursement or the use of a contracted CAP vendor, oncologists launched an aggressive opposition campaign, noting that the substantially reduced reimbursement might not allow them to continue to provide the same level of service to their patients. The potential loss of revenue from purchasing these drugs may affect the willingness of some physicians to administer these drugs in their offices, and payers are already seeing oncologists shift the administration of less profitable drugs from their office to a hospital outpatient infusion center.18 Payment methods and the amount of gross margin allowed in the reimbursement to physicians may affect patient access and how and where specialty pharmaceuticals are administered; the impact on the quality of care other than patient access requires research.19

Patients are potentially affected both clinically and administratively by reimbursement policy and payment methods. Patients may be affected clinically by potential delay in treatment because nonemergent drugs and biologicals must be ordered from the SPP for each patient rather than selected from the physician office drug inventory. Patients may be affected administratively in that their cost-share obligation may be payable to the SPP rather than to the treating physician.18

Benefit Design and Patient Cost-Share

Challenges

One of the key components of benefit design is patient cost-share. Cost-share structures usually differ across medical and pharmacy benefits, making it challenging to apply a uniform strategy. Patients typically are assessed a copayment for drugs in the pharmacy benefit, ranging from a monthly average of $10 for a generic drug to a monthly average of $43 for a brand drug.4 On the other hand, managed care plans offer a variety of cost-sharing structures under the medical benefit, ranging from fixed-dollar copayment to 20% coinsurance, with or without an out-of-pocket maximum.1011

Payer Strategies

Payers are experimenting with alternative benefit design options for coverage and management of cost and care outcomes for specialty pharmaceuticals. The most commonly discussed coverage strategy is moving all the specialty drugs to the pharmacy benefit.20 Payers are also considering various patient cost-sharing methods for specialty pharmaceuticals such as (a) higher copayment amounts; (b) coinsurance; (c) out-of-pocket payment of maximum dollar amounts per prescription or per year, or both; (d) annual deductibles; and (e) annual benefit maximums in dollar amounts. Survey data from 2005 showed that 11% of health plans have implemented a 4th-tier cost-share for specialty pharmacy products under the pharmacy benefit.21 A typical 4-tier benefit design might have a generic drug copayment of $10, a preferred brand-drug copayment of $25, a nonpreferred brand-drug copayment of $45, and a specialty pharmacy coinsurance in the range of 10% to 25%. To this 4-tier copayment structure can be added features such as a maximum out-of-pocket amount per prescription (e.g., $100) or an annual out-of-pocket maximum, such as $1,500. In a significant departure from the commercial marketplace, approximately 40% of plans offering Medicare Part D drug benefits in 2006 implemented a 4th tier specifically for specialty drugs with an average coinsurance of 25%.22 It is important to note that Part D beneficiaries are automatically limited in their annual out-of-pocket costs as a result of the catastrophic coverage provided in the benefit. Medicare beneficiaries who receive injectable drugs covered under Part B are assessed 20% coinsurance.

Potential Implications

Moving all specialty drugs to the pharmacy benefit would result in more uniform application of patient cost-share, clinical management, and utilization management. Including all the specialty drugs under the pharmacy benefit also eliminates some or most of the challenges in drug coding, data integration, billing, and payment that were identified earlier. On the other hand, patients who previously had little if any cost-share responsibility for drugs received under the medical benefit may be assessed a copayment or coinsurance, whereas patients who did have coinsurance for their medical benefit drugs may find their cost-share to be either higher or lower for specialty pharmaceuticals adjudicated under the pharmacy benefit. There may be other plan-specific operational challenges that interfere with a payer’s ability to move all injectable drugs to the pharmacy benefit. While management of all specialty drugs under the pharmacy benefit might be advantageous from the payer perspective, contract arrangements with providers—physicians and pharmacies—would be affected. Physicians would either need the capability to submit claims directly to the pharmacy (a process not currently supported by most medical office management systems) or rely on the contracted SPP to drop-ship the medication and bill the health plan directly,
resulting in a need for modification of physician reimbursement for services and potential lost revenue to the physician from “buy and bill.” Additionally, payers would need to accommodate employer groups who had either carved out their pharmacy benefits to a PBM or who had chosen not to offer a pharmacy benefit at all.

Some observers have expressed concern that higher patient cost share may adversely affect compliance with drug therapy, including the increased likelihood of skipped doses. The RAND Health Insurance Experiment demonstrated that when people have to pay for more of their care out of their own pockets, they use fewer medical services, including standard prescription benefits. Alternatively, a more recent study conducted by RAND researchers examined the elasticity of specialty drug demand and found that increased cost-sharing for specialty products does not reduce the use of these products but only transfers a much larger financial burden from the health plan to the patient. Insufficient data exist on the impact of cost sharing for biologics on overall patient adherence and long-term persistence with therapy. It is possible that any cost-share amount, even relatively small, can adversely affect patient adherence. Research will be necessary from a population perspective to determine the optimum balance between the amount of the member cost-share and patient adherence to those specialty pharmaceuticals that are determined to have high value in clinical outcomes.

Clinical and Utilization Management

Challenges

For specialty pharmaceuticals covered under the pharmacy benefit, most payers have turned to the traditional techniques employed by PBMs for managing the benefit for conventional drugs, including step therapy, quantity limits, prior authorization, and drug utilization review. Conversely, for many payers, very little cost or care management exists for specialty pharmaceuticals covered under the medical benefit. In some cases, payers have implemented prior authorization programs to review some of these therapies to ensure “appropriate use” as defined by FDA labeling and evidence-based clinical guidelines. In some circumstances, payers may only cover a drug according to its FDA-approved labeled indication; however, state law may mandate coverage of off-label use if there is sufficient evidence for use as cited by one or more national compendia. For example, the Association of Community Cancer Centers (ACCC) spearheaded efforts to make citation of a cancer drug in any of the standard reference compendia sufficient to require insurers to pay for its use outside of FDA-approved label indications. As of January 2006, 39 states have passed legislation regarding off-label drug use that follows the ACCC recommendation.

However, these restrictions on use are difficult to implement and administer under the medical benefit because claims are submitted after a service has been administered, not in real-time electronic format, and the staff responsible for medical management is typically not sufficiently trained in drug utilization management. As a result, drugs in the same therapy class may have different clinical management criteria applied to them, depending on the site of care and the billing provider. For example, a pharmacy claim submitted for etanercept (injection) to treat a patient with rheumatoid arthritis may be reviewed, either manually or electronically, for prior use of an appropriate oral therapeutic agent such as methotrexate (i.e., step therapy), whereas a medical benefit claim for infliximab (intravenous infusion) is unlikely to be reviewed for adherence to step therapy and may not be reviewed for use in an FDA-approved indication.

Payer Strategies

Payers recognize that developing an effective specialty pharmacy program involves much more than simply providing access to drugs at a discounted rate. Specialty pharmacy programs also typically focus on the development of clinical protocols, utilization management, and quality of care standards. Payers may use their existing pharmacy and therapeutics (P&T) committee, medical policy committee, technology assessment committee, or outside services to develop coverage guidelines. Some organizations have developed new committees to review specialty pharmacy drugs and technology. For example, Kaiser Permanente California has created a formal, centralized multidisciplinary group—the Biotechnology and Emerging Pharmaceutical Technology Assessment Committee—to review biotech drugs before review by their P&T committee. There are often special considerations related to the clinical review of specialty drugs. Because of the FDA’s accelerated process for certain classes of drugs, some have been approved without evidence produced in published randomized clinical trials. Therefore, payers in these cases have been forced to create clinical coverage guidelines in the absence of evidence of effectiveness. Other specialty pharmaceutical classes, such as drugs for rheumatoid arthritis, multiple sclerosis, or hepatitis C virus (HCV), have more evidence to support the development of coverage criteria and utilization management criteria.

Payers are also selecting preferred products in some drug classes and disease states where there are multiple therapy options within the class, including therapies to treat rheumatoid arthritis, multiple sclerosis, HCV, and growth hormone deficiency. Payers may have the ability to steer use to particular products to receive market share rebates from drug manufacturers. According to 1 survey, 45% of payers in 2004 had preferred products in at least 1 specialty pharmacy therapeutic category.

Due to the complex nature of most of these specialty pharmacy therapies, patients require care management to achieve optimal outcomes. Many health plans and employers have turned to SPPs to not only distribute specialty drugs but also to provide clinical services, including side-effect management, proactive
refill management, therapy adherence monitoring, management services related to response to therapy, and prior authorization oversight. Other vendors providing case management and disease management may also become involved, which may or may not overlap with the services provided by SPPs.

**Potential Implications**

At the time of market availability of a new specialty pharmaceutical, there may be minimal evidence available for decision making regarding coverage and utilization management. Pharmacoeconomic modeling may help inform decision makers about the impact on pharmacy budgets until more information becomes available on the actual effects on direct and indirect costs and clinical outcomes, and these results can be factored into clinical guidelines. Some health plans have adopted The AMCP Format for Formulary Submissions (Academy of Managed Care Pharmacy) and require pharmaceutical and biotechnology companies to submit dossiers for specialty drugs. As therapeutic categories become more mature and there are more products within the categories, nationally recognized evidence-based guidelines may become available that can be adopted by payers. The selection of preferred products within therapeutic categories needs to take into account the mechanism of action of each agent; it cannot be assumed that all biologics that are indicated to treat a specific disease are equivalent without head-to-head studies to confirm this activity. Additionally, as the medical community becomes more comfortable with these drugs, there will be more off-label use, making it more difficult to select preferred products if each drug has a number of clinical applications. Payers at this time have typically been open-minded about off-label use of biologics and other specialty pharmaceuticals. Under the Medicare Part D benefit, Medicare will only authorize off-label use if it is cited in 1 of the 3 approved drug compendia listed in the MMA. It remains to be seen if payers will become more aggressive in their management of off-label drug use and to what extent certain states will impose mandates for coverage of off-label uses. Table 3 lists selected common off-label uses of biologics.

The selection of preferred products within therapeutic categories needs to take into account the mechanism of action of each agent; it cannot be assumed that all biologics that are indicated to treat a specific disease are equivalent without head-to-head studies to confirm this activity. Additionally, as the medical community becomes more comfortable with these drugs, there will be more off-label use, making it more difficult to select preferred products if each drug has a number of clinical applications. Payers at this time have typically been open-minded about off-label use of biologics and other specialty pharmaceuticals. Under the Medicare Part D benefit, Medicare will only authorize off-label use if it is cited in 1 of the 3 approved drug compendia listed in the MMA. It remains to be seen if payers will become more aggressive in their management of off-label drug use and to what extent certain states will impose mandates for coverage of off-label uses. Table 3 lists selected common off-label uses of biologics.

Delegating the role of clinical and utilization management to an SPP needs oversight because these vendors are typically contracted on a fee-for-service basis and receive revenue from the sale of drugs and from administrative fees for claim transactions. The result may be unaligned incentives, in which the

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**Table 3** FDA-Approved and Common Off-Label (Unapproved) Uses of Selected Biologics

<table>
<thead>
<tr>
<th>Agent</th>
<th>Approved Indications</th>
<th>Unapproved Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adalimumab (Humira)</td>
<td>Rheumatoid arthritis, ankylosing spondylitis, psoriatic arthritis</td>
<td>Psoriasis, ulcerative colitis</td>
</tr>
<tr>
<td>Beacaplermin (Regranex)</td>
<td>Diabetic foot ulcers, wound care</td>
<td>Venous leg ulcers, scleroderma, sickle cell disease</td>
</tr>
<tr>
<td>Bevacizumab (Avastin)</td>
<td>Metastatic colorectal cancer, non-small cell lung cancer</td>
<td>Wet age-related macular degeneration, late-stage breast cancer, lung cancer, kidney cancer</td>
</tr>
<tr>
<td>Cisplatin (Platinol)</td>
<td>Bladder, testicular, ovarian cancer</td>
<td>Thyroid and lung cancers</td>
</tr>
<tr>
<td>Efluzumab (Raptiva)</td>
<td>Psoriasis, psoriatic arthritis, ankylosing spondylitis, osteoarthritis</td>
<td>Granuloma annulare</td>
</tr>
<tr>
<td>Etanercept (Enbrel)</td>
<td>Psoriasis, psoriatic arthritis, rheumatoid arthritis, ankylosing spondylitis, osteoarthritis</td>
<td>Behcet's disease, sarcoidosis, wound ulcers, vasculitides, pyoderma gangrenosum</td>
</tr>
<tr>
<td>Ibritumomab tiuxetan (Zevalin)</td>
<td>Non-Hodgkin's lymphoma</td>
<td>Various cancers</td>
</tr>
<tr>
<td>Infliximab (Remicade)</td>
<td>Rheumatoid arthritis, psoriatic arthritis, ulcerative colitis, Crohn's disease, ankylosing spondylitis, psoriasis</td>
<td>Kawasaki's disease, Sjogren's syndrome</td>
</tr>
<tr>
<td>Oxaliplatin (Eloxatin)</td>
<td>Metastatic colon cancer, pancreatic cancer</td>
<td>Postsurgery drug regimens, newly diagnosed colorectal cancer</td>
</tr>
<tr>
<td>Rituximab (Rituxan)</td>
<td>Non-Hodgkin's lymphoma, rheumatoid arthritis</td>
<td>Skin malignancies, blood cancers</td>
</tr>
<tr>
<td>Sunitinib (Sutent)</td>
<td>Gastrointestinal stromal tumors, advanced kidney cancer</td>
<td>Breast, colon, and pancreatic cancers (in clinical trials)</td>
</tr>
<tr>
<td>Trastuzumab (Herceptin)</td>
<td>Metastatic breast cancer</td>
<td>Early-stage breast cancer</td>
</tr>
</tbody>
</table>

payer desires to minimize inappropriate use of drugs and reduce drug costs, while the SPP earns revenue from the ongoing sale of drugs. From another perspective, the SPP has the incentive to function as the patient’s advocate to obtain insurance coverage of the drug and may also provide valuable therapy-specific information to the patient. Therefore, the role of oversight ultimately lies with the payer to ensure that clinical and utilization management is performed effectively.

**Defining the Value of Specialty Pharmacy**

At the core of the debate around specialty pharmaceuticals is the question of value. Is the drug worth it? Is the higher additional cost of the drug offset by significantly better patient outcomes or by avoiding other longer-term costs?  It is often critical to both short- and long-term outcomes. For therapy. A high rate of adherence with specialty drug regimens is necessary to persuade payers of the value of specialty pharmacy services. The AMCP Format for Formulary Submissions defines value in this way: “Value in health care relates to whether a medical intervention . . . improves health outcomes enough to justify the additional dollars spent compared to another intervention.” A conundrum can be created by patient demand for new products that may appear to be therapeutic breakthroughs but for which outcomes data are lacking. One practical result is that payers will often experience difficulty in denying payment for treatment. Additionally, coverage policy in health plans has not traditionally been designed to evaluate the therapeutic value of particular treatments relative to their direct or indirect cost.

Payers are looking increasingly to the pharmaceutical industry and specialty pharmacies to demonstrate the clinical and economic value of new specialty therapies and related support services. However, it is not yet certain that the pharmaceutical industry or specialty pharmacies will have sufficient motivation and commitment to produce the evidence-based evaluations that are necessary to inform decision makers responsible for determining coverage and managed care interventions for specialty pharmaceuticals.

**What is already known about this subject**

Most managed care payers have a broad knowledge of the various challenges related to the management of specialty pharmaceuticals and are familiar with most of the drugs included in this category.

**What this study adds**

This study outlines some of the methods to manage specialty pharmaceuticals, some of the challenges to effective cost and care management of these agents, and some of the potential implications for policy development by public and private payers.

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**REFERENCES/NOTES**


5. In the context of this article, “private health care payers” includes health plans, employers that purchase health care coverage through health plans, and employers that insure their own health care costs and are noted collectively in the text as “payers.”

6. As consultants involved in managed care pharmacy, the authors are exposed to various payer strategies. Sources of general market intelligence include market research interviews, focus groups, and direct consulting with health plans, PBMs, employers, and specialty pharmacies.


