The 2022 results are in PHARMACY SURVEY

INDUSTRY ANALYSIS
Healthcare and inflation

TECHNOLOGY
Telehealth and abortion

Oncology CAR-T update

Plaque psoriasis
NOW APPROVED

Olumiant is the first and only approved systemic treatment for adults with severe alopecia areata.

INDICATION

Olumiant is a Janus kinase (JAK) inhibitor indicated for the treatment of adult patients with severe alopecia areata.

Limitations of Use:
Not recommended for use in combination with other JAK inhibitors, biologic immunomodulators, cyclosporine or other potent immunosuppressants.

SELECT IMPORTANT SAFETY INFORMATION:

WARNING RELATED TO SERIOUS INFECTIONS, MORTALITY, MALIGNANCY, MAJOR ADVERSE CARDIOVASCULAR EVENTS, AND THROMBOSIS

SERIOUS INFECTIONS:
Olumiant-treated patients are at increased risk of serious bacterial, fungal, viral and opportunistic infections leading to hospitalization or death, including tuberculosis (TB). Interrupt treatment with Olumiant if a serious infection occurs until the infection is controlled. Olumiant should not be given to patients with active tuberculosis. Test for latent TB before and during therapy, except for COVID-19; treat latent TB prior to use. Monitor all patients for active TB during treatment, even patients with initial negative, latent TB test.

MALIGNANCIES:
Malignancies have also occurred in patients treated with Olumiant. Higher rate of lymphomas and lung cancers was observed with another JAK inhibitor vs. TNF blockers in RA patients.

MAJOR ADVERSE CARDIOVASCULAR EVENTS (MACE):
Higher rate of MACE (defined as cardiovascular death, myocardial infarction, and stroke) was observed with another JAK inhibitor vs. TNF blockers in RA patients.

THROMBOSIS:
Thrombosis has occurred in patients treated with Olumiant. Increased incidence of pulmonary embolism, venous and arterial thrombosis was observed with another JAK inhibitor vs. TNF blockers.

Please see the following pages for Important Safety Information, including Boxed Warning about Serious Infections, Mortality, Malignancy, Major Adverse Cardiovascular Events, and Thrombosis, and Brief Summary of Prescribing Information.
INDICATION
Olumiant is a Janus kinase (JAK) inhibitor indicated for the treatment of adult patients with severe alopecia areata.

Limitations of Use: Not recommended for use in combination with other JAK inhibitors, biologic immunomodulators, cyclosporine or other potent immunosuppressants.

SELECT IMPORTANT SAFETY INFORMATION: WARNING RELATED TO SERIOUS INFECTIONS, MORTALITY, MALIGNANCY, MAJOR ADVERSE CARDIOVASCULAR EVENTS, AND THROMBOSIS

SERIOUS INFECTIONS: Olumiant-treated patients are at increased risk of serious bacterial, fungal, viral and opportunistic infections leading to hospitalization or death, including tuberculosis (TB). Interrupt treatment with Olumiant if a serious infection occurs until the infection is controlled. Olumiant should not be given to patients with active tuberculosis. Test for latent TB before and during therapy, except for COVID-19; treat latent TB prior to use. Monitor all patients for active TB during treatment, even patients with initial negative, latent TB test.

MORTALITY: Higher rate of all-cause mortality, including sudden cardiovascular death was observed with another Janus kinase (JAK) inhibitor vs. tumor necrosis factor (TNF) blockers in rheumatoid arthritis (RA) patients.

MALIGNANCIES: Malignancies have also occurred in patients treated with Olumiant. Higher rate of lymphomas and lung cancers was observed with another JAK inhibitor vs. TNF blockers in RA patients.

MAJOR ADVERSE CARDIOVASCULAR EVENTS (MACE): Higher rate of MACE (defined as cardiovascular death, myocardial infarction, and stroke) was observed with another JAK inhibitor vs. TNF blockers in RA patients.

THROMBOSIS: Thrombosis has occurred in patients treated with Olumiant. Increased incidence of pulmonary embolism, venous and arterial thrombosis was observed with another JAK inhibitor vs. TNF blockers.

Please see the following pages for Important Safety Information, including Boxed Warning about Serious Infections, Mortality, Malignancy, Major Adverse Cardiovascular Events, and Thrombosis, and Brief Summary of Prescribing Information.
IMPORTANT SAFETY INFORMATION

WARNING: SERIOUS INFECTIONS, MORTALITY, MALIGNANCY, MAJOR ADVERSE CARDIOVASCULAR EVENTS, AND THROMBOSIS

SERIOUS INFECTIONS

Patients treated with Olumiant are at risk for developing serious infections that may lead to hospitalization or death. Most patients with rheumatoid arthritis (RA) who developed these infections were taking concomitant immunosuppressants such as methotrexate or corticosteroids. If a serious infection develops, interrupt Olumiant until the infection is controlled. Reported infections include:

- Active tuberculosis (TB), which may present with pulmonary or extrapulmonary disease. Olumiant should not be given to patients with active tuberculosis. Test patients, except those with COVID-19, for latent TB before initiating Olumiant and during therapy. If positive, start treatment for latent infection prior to Olumiant use.
- Invasive fungal infections, including candidiasis and pneumocystosis. Patients with invasive fungal infections may present with disseminated, rather than localized, disease.
- Bacterial, viral, and other infections due to opportunistic pathogens.

Carefully consider the risks and benefits of Olumiant prior to initiating therapy in patients with chronic or recurrent infection.

Closely monitor patients for the development of signs and symptoms of infection during and after treatment with Olumiant including the possible development of TB in patients who tested negative for latent TB infection prior to initiating therapy.

The most common serious infections reported with Olumiant included pneumonia, herpes zoster, and upper respiratory tract infection. Among opportunistic infections, tuberculosis, multidermalonal herpes zoster, esophageal candidiasis, pneumocystosis, acute histoplasmosis, cryptococcosis, cytomegalovirus, and BK virus were reported with Olumiant. Some patients have presented with disseminated rather than localized disease, and were often taking concomitant immunosuppressants such as methotrexate or corticosteroids.

Avoid use of Olumiant in patients with an active, serious infection, including localized infections. Consider the risks and benefits of treatment prior to initiating Olumiant in patients with chronic or recurrent infection; who have been exposed to TB; with a history of a serious or an opportunistic infection; who have resided or traveled in areas of endemic tuberculosis or endemic mycoses; or with underlying conditions that may predispose them to infection.

Consider anti-TB therapy prior to initiation of Olumiant in patients with a history of latent or active TB in whom an adequate course of treatment cannot be confirmed, and for patients with a negative test for latent TB but who have risk factors for TB infection.

Viral reactivation, including cases of herpes virus reactivation (e.g., herpes zoster), were reported in clinical studies with Olumiant. If a patient develops herpes zoster, interrupt Olumiant treatment until the episode resolves. The impact of Olumiant on chronic viral hepatitis reactivation is unknown. Screen for viral hepatitis in accordance with clinical guidelines before initiating Olumiant.

MORTALITY

In a large, randomized, postmarketing safety study in RA patients 50 years of age and older with at least one cardiovascular risk factor comparing another Janus kinase (JAK) inhibitor to tumor necrosis factor (TNF) blockers, a higher rate of all-cause mortality, including sudden cardiovascular death, was observed with the JAK inhibitor.

Consider the benefits and risks for the individual patient prior to initiating or continuing therapy with Olumiant.

MALIGNANCIES

Lymphoma and other malignancies have been observed in patients treated with Olumiant. In RA patients treated with another JAK inhibitor, a higher rate of malignancies (excluding non-melanoma skin cancer [NMSC]) was observed when compared with TNF blockers. Patients who are current or past smokers are at increased risk. A higher rate of lymphomas was observed in patients treated with the JAK inhibitor compared to those treated with TNF blockers. A higher rate of lung cancers and an additional increased risk of overall malignancies were observed in current or past smokers treated with the JAK inhibitor compared to those treated with TNF blockers.

Consider the benefits and risks for the individual patient prior to initiating or continuing therapy with Olumiant, particularly in patients with a known malignancy (other than successfully treated NMSC), patients who develop a malignancy, and patients who are current or past smokers.

NMSCs have been reported in patients treated with Olumiant. Periodic skin examination is recommended for patients who are at increased risk for skin cancer.

MAJOR ADVERSE CARDIOVASCULAR EVENTS

In RA patients 50 years of age and older with at least one cardiovascular risk factor treated with another JAK inhibitor, a higher rate of major adverse cardiovascular events (MACE) (defined as cardiovascular death, myocardial infarction [MI], and stroke) was observed when compared with TNF blockers. Patients who are current or past smokers are at additional increased risk. Discontinue Olumiant in patients that have experienced a myocardial infarction or stroke.

Consider the benefits and risks for the individual patient prior to initiating or continuing therapy with Olumiant, particularly in patients who are current or past smokers and patients with other cardiovascular risk factors. Inform patients about the symptoms of serious cardiovascular events and the steps to take if they occur.
THROMBOSIS
Thrombosis, including deep venous thrombosis (DVT) and pulmonary embolism (PE), has been observed at an increased incidence in patients treated with Olumiant compared to placebo. In addition, there were cases of arterial thrombosis. Many of these adverse events were serious and some resulted in death. In RA patients 50 years of age and older with at least one cardiovascular risk factor treated with another JAK inhibitor, a higher rate of thrombosis was observed when compared with TNF blockers. Avoid Olumiant in patients at risk. Discontinue Olumiant and promptly evaluate patients with symptoms of thrombosis.

HYPERSENSITIVITY
Reactions such as angioedema, urticaria, and rash that may reflect drug hypersensitivity have been observed in patients receiving Olumiant, including serious reactions. If a serious hypersensitivity reaction occurs, promptly discontinue Olumiant while evaluating the potential causes of the reaction.

GASTROINTESTINAL PERFORATIONS
Gastrointestinal perforations have been reported in Olumiant clinical studies. Monitor Olumiant-treated patients who may be at increased risk for gastrointestinal perforation (e.g., patients with a history of diverticulitis). Promptly evaluate patients who present with new onset abdominal symptoms for early identification of gastrointestinal perforation.

LABORATORY ABNORMALITIES
Neutropenia – Olumiant treatment was associated with an increased incidence of neutropenia (absolute neutrophil count [ANC] <1000 cells/mm³) compared to placebo. Evaluate at baseline and thereafter according to routine patient management. In patients with RA or alopecia areata (AA), avoid initiation or interrupt Olumiant treatment in patients with an ANC <1000 cells/mm³.

Lymphopenia – Absolute lymphocyte count (ALC) <500 cells/mm³ were reported in Olumiant clinical trials. Lymphocyte counts less than the lower limit of normal were associated with infection in patients treated with Olumiant, but not placebo. Evaluate at baseline and thereafter according to routine patient management. In patients with RA or AA, avoid initiation or interrupt Olumiant treatment in patients with an ALC <500 cells/mm³.

Anemia – Decreases in hemoglobin levels to <8 g/dL were reported in Olumiant clinical trials. Evaluate at baseline and thereafter according to routine patient management. In patients with RA or AA, avoid initiation or interrupt Olumiant treatment in patients with hemoglobin <8 g/dL.

Liver Enzyme Elevations – Olumiant treatment was associated with increased incidence of liver enzyme elevation compared to placebo. Increases of alanine transaminase (ALT) ≥5x upper limit of normal (ULN) and of aspartate transaminase (AST) ≥1.0x ULN were observed in patients in Olumiant clinical trials.

Evaluate at baseline and thereafter according to routine patient management. Promptly investigate the cause of liver enzyme elevation to identify potential cases of drug-induced liver injury. If increases in ALT or AST are observed and drug-induced liver injury is suspected, interrupt Olumiant until this diagnosis is excluded.

Lipid Elevations – Treatment with Olumiant was associated with increases in lipid parameters, including total cholesterol, low-density lipoprotein cholesterol, and high-density lipoprotein cholesterol. Assess lipid parameters approximately 12 weeks following Olumiant initiation in patients with RA or AA. Manage patients according to clinical guidelines for the management of hyperlipidemia.

VACCINATIONS
Avoid use of live vaccines with Olumiant. Update immunizations in patients with RA or AA prior to initiating Olumiant therapy in agreement with current immunization guidelines.

ADVERSE REACTIONS
In RA trials, the most common adverse reactions (≥1%) reported with Olumiant were: upper respiratory tract infections, nausea, herpes simplex, and herpes zoster.

In AA trials, the most common adverse reactions (≥1%) reported with Olumiant were: upper respiratory tract infections, headache, acne, hyperlipidemia, creatine phosphokinase increase, urinary tract infection, liver enzyme elevations, folliculitis, fatigue, lower respiratory tract infections, nausea, genital Candida infections, anemia, neutropenia, abdominal pain, herpes zoster, and weight increase.

PREGNANCY AND LACTATION
Based on animal studies, Olumiant may cause fetal harm when administered during pregnancy. Advise pregnant women and women of reproductive potential of the potential risk to a fetus. Consider pregnancy planning and prevention for women of reproductive potential. Advise women not to breastfeed during treatment with Olumiant and for 4 days after the last dose.

HEPATIC AND RENAL IMPAIRMENT
Olumiant is not recommended in patients with RA or AA and severe hepatic impairment or severe renal impairment (estimated glomerular filtration rate [eGFR] <30 mL/min/1.73m²).

Please see the following pages for Brief Summary of Prescribing Information, including Boxed Warning about Serious Infections, Mortality, Malignancy, Major Adverse Cardiovascular Events, and Thrombosis.

BA HCP ISI RA-AA 13JUN2022

Reference: 1. Olumiant. Prescribing Information. Lilly USA, LLC.
BRIEF SUMMARY OF PRESCRIBING INFORMATION
Consult the package insert for complete prescribing information.

INDICATIONS AND USAGE
Rheumatoid Arthritis: Olumiant is indicated for the treatment of adult patients with moderately to severely active rheumatoid arthritis who have had an inadequate response to one or more tumor necrosis factor (TNF) blockers.

LIMITATIONS OF USE: Not recommended for use in combination with other Janus kinase (JAK) inhibitors, biologic disease-modifying antirheumatic drugs (DMARDs), or with potent immunosuppressants such as methotrexate or cyclosporine.

Coronavirus Disease 2019 (COVID-19): Olumiant is indicated for the treatment of COVID-19 in hospitalized adults requiring supplemental oxygen, non-invasive or invasive mechanical ventilation, or extracorporeal membrane oxygenation (ECMO).

Alopecia Areata: Olumiant is indicated for the treatment of adult patients with severe alopecia areata.

LIMITATIONS OF USE: Not recommended for use in combination with other JAK inhibitors, biologic immunomodulators, cyclosporine or other potent immunosuppressants.

WARNING: SERIOUS INFECTIONS, MORTALITY, MALIGNANCY, MAJOR ADVERSE CARDIOVASCULAR EVENTS (MACE), AND THROMBOSIS
SERIOUS INFECTIONS
Patients treated with Olumiant are at risk for developing serious infections that may lead to hospitalization or death. Most patients with rheumatoid arthritis (RA) who developed these infections were taking concomitant immunosuppressants such as methotrexate or corticosteroids.

If a serious infection develops, interrupt Olumiant until the infection is controlled.

Reported infections include:
- Active tuberculosis, which may present with pulmonary or extrapulmonary disease. Olumiant should not be given to patients with active tuberculosis.
- Patients, except those with COVID-19, should be tested for latent tuberculosis before initiating Olumiant and during therapy. If positive, start treatment for latent infection prior to Olumiant use.
- Invasive fungal infections, including candidiasis and pneumocystosis. Patients with invasive fungal infections may present with disseminated, rather than localized, disease.
- Bacterial, viral, and other infections due to opportunistic pathogens.

The risks and benefits of treatment with Olumiant should be carefully considered prior to initiating therapy in patients with chronic or recurrent infections.

Patients should be closely monitored for the development of signs and symptoms of infection during and after treatment with Olumiant including the possible development of tuberculosis in patients who tested negative for latent tuberculosis infection prior to initiating therapy.

MORTALITY
In a large, randomized, postmarketing safety study in RA patients 50 years of age and older with at least one cardiovascular risk factor comparing another JAK inhibitor to tumor necrosis factor (TNF) blockers, a higher rate of all-cause mortality, including sudden cardiovascular death, was observed with the JAK inhibitor.

MALIGNANCIES
Lymphoma and other malignancies have been observed in patients treated with Olumiant. In RA patients treated with another JAK inhibitor, a higher rate of malignancies (excluding non-melanoma skin cancer [NMSC]) was observed when compared with current or past smokers who have risk factors for TB infection. Consultation with a physician with expertise in tuberculosis is recommended to aid in the decision about whether initiating anti-TB therapy is appropriate for an individual patient.

During Olumiant use, monitor patients for the development of signs and symptoms of TB, including cough or fever, night sweats, weight loss, or unexplained persistent fatigue or new onset of hemoptysis.

Serious infections—Serious and sometimes fatal infections due to bacterial, mycobacterial, invasive fungal, viral, or other opportunistic pathogens have been reported in patients with rheumatoid arthritis receiving Olumiant. The most common serious infections reported with Olumiant included pneumonia, herpes zoster, and urinary tract infection. Among opportunistic infections, tuberculosis, cutaneous, and other infections were reported in Olumiant-treated patients. Some patients have presented with disseminated rather than localized disease, and were often taking concomitant immunosuppressants such as methotrexate or corticosteroids.

Avoid use of Olumiant in patients with an active, serious infection, including localized infections. Consider the risks and benefits of treatment prior to initiating Olumiant in patients:
- with chronic or recurrent infection
- who have been exposed to tuberculosis
- with a history of a serious or an opportunistic infection
- who have resided or traveled in areas of endemic tuberculosis or endemic mycoses; or
- with underlying conditions that may predispose them to infection.

In patients with rheumatoid arthritis or alopecia areata, closely monitor for the development of signs and symptoms of infection during and after treatment with Olumiant. Interrupt Olumiant in patients with rheumatoid arthritis or alopecia areata, if the patient develops a serious infection, an opportunistic infection, or sepsis. A patient who develops a new infection during treatment with Olumiant should undergo prompt and complete diagnostic testing appropriate for an immunocompromised patient; appropriate antimicrobial therapy should be initiated, the patient should be closely monitored, and Olumiant should be interrupted if the patient is not responding to therapy. Do not resume Olumiant until the infection is controlled.

In patients with COVID-19, monitor for signs and symptoms of new infections during and after treatment with Olumiant. There is limited information regarding the use of Olumiant in patients with COVID-19 and concomitant active serious infections. The risks and benefits of treatment with Olumiant in COVID-19 patients with other concurrent infections should be considered.

Tuberculosis—Evaluate patients for active infection prior to administration of Olumiant. Olumiant should not be given to patients with active tuberculosis (TB).

Test patients with rheumatoid arthritis or alopecia areata for latent tuberculosis. Patients with rheumatoid arthritis or alopecia areata and latent TB should be treated with standard antitubercular therapy before initiating Olumiant. Consider anti-TB therapy prior to initiation of Olumiant in patients with a history of latent or active TB in whom an adequate course of treatment cannot be confirmed, and for patients with a negative test for latent TB but who have risk factors for TB infection.

During 0 to 52-week exposure, events of tuberculosis were reported in 0 patients treated with Olumiant were pneumonia, herpes zoster, and urinary tract infection.

In a large, randomized, postmarketing safety study of another JAK inhibitor in RA patients 50 years of age and older with at least one cardiovascular risk factor, a higher rate of major adverse cardiovascular events (MACE) and thrombosis—Thrombosis, including deep venous thrombosis and pulmonary embolism, has been observed at an increased incidence in patients treated with Olumiant compared to placebo. In addition, there were cases of arterial thrombosis. Many of these adverse events were serious and some resulted in death. In RA patients 50 years of age and older with at least one cardiovascular risk factor treated with another JAK inhibitor, a higher rate of thrombosis was observed when compared with TNF blockers. Avoid Olumiant in patients at risk. Patients with symptoms of thrombosis should discontinue Olumiant and be promptly evaluated.

Adverse Reactions in Patients with Rheumatoid Arthritis—In a large, randomized, postmarketing safety study of another JAK inhibitor in RA patients 50 years of age and older with at least one cardiovascular risk factor, a higher rate of all-cause mortality, including sudden cardiovascular death, was observed in patients treated with the JAK inhibitor compared with TNF blockers. Consider the benefits and risks for the individual patient prior to initiating or continuing therapy with Olumiant.

Malignancy and Lymphoproliferative Disorders—Malignancies were observed in clinical studies of Olumiant.

In a large, randomized, postmarketing safety study of another JAK inhibitor in RA patients, a higher rate of malignancies (excluding non-melanoma skin cancer [NMSC]) was observed in patients treated with the JAK inhibitor compared to those treated with TNF blockers. A higher rate of lymphomas was observed in patients treated with the JAK inhibitor compared to those treated with TNF blockers. A higher rate of lung cancers was observed in current or past smokers treated with the JAK inhibitor compared to those treated with TNF blockers. In this study, current or past smokers had an additional increased risk of overall malignancies.

Consider the benefits and risks for the individual patient prior to initiating or continuing therapy with Olumiant, particularly in patients with a known malignancy (other than successfully treated NMSC), patients who develop a malignancy, and patients who are current or past smokers.
Non-melanoma skin cancers—NMSCs have been reported in patients treated with Olumiant. Periodic skin examination is recommended for patients who are at increased risk for skin cancer.

Major Adverse Cardiovascular Events—In a large, randomized, postmarketing safety study of another JAK inhibitor in RA patients 50 years of age and older with at least one cardiovascular risk factor, a higher rate of major adverse cardiovascular events (MACE) defined as cardiovascular death, non-fatal myocardial infarction (MI), and non-fatal stroke was observed with the JAK inhibitor compared to those treated with TNF blockers. Patients who are current or past smokers are at additional increased risk.

Consider the benefits and risks for the individual patient prior to initiating or continuing therapy with Olumiant, particularly in patients who are current or past smokers and patients with other cardiovascular risk factors. Patients should be informed about the symptoms of serious cardiovascular events and the steps to take if they occur. Discontinue Olumiant in patients who have experienced a myocardial infarction or stroke.

Thrombosis—Thrombosis, including deep vein thrombosis (DVT) and pulmonary embolism (PE), has been observed at an increased incidence in patients treated with Olumiant compared to placebo. In addition, arterial thrombosis events in the extremities have been reported in clinical studies with Olumiant. Many of these adverse events were serious and some resulted in death. There was no clear relationship between platelet count elevations and thrombotic events. In a large, randomized, postmarketing safety study of another JAK inhibitor in RA patients 50 years of age and older with at least one cardiovascular risk factor, higher rates of overall thrombosis, DVT, and PE were observed compared to those treated with TNF blockers.

If clinical features of DVT/PE or arterial thrombosis occur, patients should discontinue Olumiant and be evaluated promptly and treated appropriately. Avoid Olumiant in patients that may be at increased risk of thrombosis.

Hypersensitivity—Reactions such as angioedema, urticaria, and rash that may reflect drug hypersensitivity have been observed in patients receiving Olumiant, including serious reactions. If a serious hypersensitivity reaction occurs, promptly discontinue Olumiant while evaluating the potential causes of the reaction.

Gastrointestinal Perforations—Gastrointestinal perforations have been reported in clinical studies with Olumiant. Monitor Olumiant-treated patients who may be at increased risk for gastrointestinal perforation (e.g., patients with a history of diverticulitis). Evaluate promptly patients presenting with new onset abdominal symptoms for early identification of gastrointestinal perforation.

Laboratory Abnormalities

Neutropenia—Treatment with Olumiant was associated with an increased incidence of neutropenia (absolute neutrophil count [ANC] less than 1000 cells/mm³) compared to placebo.

In patients with rheumatoid arthritis or alopecia areata, avoid initiation or interrupt Olumiant treatment in patients with an ANC less than 1000 cells/mm³.

In patients with COVID-19, there is limited information regarding use of Olumiant in patients with an ANC less than 1000 cells/mm³. Avoid initiation or interrupt Olumiant treatment in patients with COVID-19 and an ANC less than 500 cells/mm³.

Evaluate at baseline and thereafter according to routine patient management. Adjust dosing based on ANC.

Lymphopenia—Absolute lymphocyte count (ALC) less than 500 cells/mm³ were reported in Olumiant clinical trials. Lymphocyte counts less than the lower limit of normal were associated with infection in patients treated with Olumiant, but not placebo.

In patients with rheumatoid arthritis or alopecia areata, avoid initiation or interrupt Olumiant treatment in patients with an ALC less than 500 cells/mm³.

In patients with COVID-19, there is limited information regarding use of Olumiant in patients with an ALC less than 500 cells/mm³. Avoid initiation or interrupt Olumiant treatment in patients with COVID-19 and an ALC less than 200 cells/mm³.

Evaluate at baseline and thereafter according to routine patient management. Adjust dosing based on ALC.

Anemia—Decreases in hemoglobin levels to less than 8 g/dL were reported in Olumiant clinical trials. In patients with rheumatoid arthritis or alopecia areata, avoid initiation or interrupt Olumiant treatment in patients with hemoglobin less than 8 g/dL. Evaluate at baseline and thereafter according to routine patient management. Adjust dosing based on hemoglobin levels.

In patients with COVID-19, there is limited information regarding use of Olumiant in patients with hemoglobin less than 8 g/dL.

Liver Enzyme Elevations—Treatment with Olumiant was associated with increased incidence of liver enzyme elevation compared to placebo. Increases of ALT ≥5 times upper limit of normal (ULN) and increases of AST ≥10 times ULN were observed in patients in Olumiant clinical trials. Evaluate at baseline and thereafter according to routine patient management. Prompt investigation of the cause of liver enzyme elevation is recommended to identify potential cases of drug-induced liver injury. If increases in ALT or AST are observed and drug-induced liver injury is suspected, interrupt Olumiant until this diagnosis is excluded.

Lipid Elevations—Treatment with Olumiant was associated with increases in lipid parameters, including total cholesterol, low-density lipoprotein (LDL) cholesterol, and high-density lipoprotein (HDL) cholesterol. Assessment of lipid parameters should be performed approximately 12 weeks following Olumiant initiation in patients with rheumatoid arthritis or alopecia areata. Manage patients according to clinical guidelines for the management of hyperlipidemia.

Vaccinations—Avoid use of live vaccines with Olumiant. Update immunizations in patients with rheumatoid arthritis or alopecia areata prior to initiating Olumiant therapy in agreement with current immunization guidelines.

ADVERSE REACTIONS

The following clinically significant adverse reactions are described elsewhere in the labeling (see Warnings and Precautions: Serious Infections; Mortality and Lymphoproliferative Disorders; Major Adverse Cardiovascular Events; Thrombosis; Hypersensitivity; Gastrointestinal Perforations; Laboratory Abnormalities).

Clinical Trials Experience—Because clinical studies are conducted under widely varying conditions, adverse reaction rates observed in the clinical studies of a drug cannot be directly compared to rates in the clinical studies of another drug and may not predict the rates observed in a broader patient population in clinical practice.

Adverse Reactions in Patients with Rheumatoid Arthritis—The safety of Olumiant was evaluated in six randomized, double-blind, placebo-controlled studies (three Phase 2, three Phase 3) and a long-term extension study in patients with moderately to severely active RA. Patients were randomized to placebo (1070 patients), Olumiant 2 mg (479 patients), or baricitinib 4 mg (997 patients).

Patients could be switched to baricitinib 4 mg from placebo or Olumiant 2 mg from as early as Week 12 depending on the study design. All patients initially randomized to placebo were switched to baricitinib 4 mg by Week 24.

During the 16-week treatment period, adverse events leading to discontinuation of treatment were reported by 35 patients (11.4 per 100 patient-years) treated with placebo, 17 patients (12.1 per 100 patient-years) with Olumiant 2 mg, and 40 patients (13.4 per 100 patient-years) treated with baricitinib 4 mg.

During 0 to 52-week exposure, adverse events leading to discontinuation of treatment were reported by 31 patients (9.2 per 100 patient-years) with Olumiant 2 mg, and 52 patients (10.2 per 100 patient-years) treated with baricitinib 4 mg.

Overall Infections—During the 16-week treatment period, infections were reported by 253 patients (82.1 per 100 patient-years) treated with placebo, 139 patients (99.1 per 100 patient-years) treated with Olumiant 2 mg, and 298 patients (100.1 per 100 patient-years) treated with baricitinib 4 mg.

During 0 to 52-week exposure, infections were reported by 200 patients (59.6 per 100 patients-years) treated with Olumiant 2 mg, and 500 patients (55.3 per 100 patient-years) treated with baricitinib 4 mg.

In the 0 to 52-week exposure population, the most commonly reported infections with Olumiant were viral upper respiratory tract infection, upper respiratory tract infection, urinary tract infection, and bronchitis.

Serious Infections—During the 16-week treatment period, serious infections were reported in 13 patients (4.2 per 100 patient-years) treated with placebo, 5 patients (3.6 per 100 patient-years) treated with Olumiant 2 mg, and 11 patients (3.7 per 100 patient-years) treated with baricitinib 4 mg.

During 0 to 52-week exposure, serious infections were reported in 14 patients (4.2 per 100 patient-years) treated with Olumiant 2 mg and 32 patients (3.5 per 100 patient-years) treated with baricitinib 4 mg.

In the 0 to 52-week exposure population, the most commonly reported serious infections with Olumiant were pneumonia, herpes zoster, and urinary tract infection.

Tuberculosis—During the 16-week treatment period, no events of tuberculosis were reported.

During 0 to 52-week exposure, events of tuberculosis were reported in 0 patients treated with Olumiant 2 mg and 1 patient (0.1 per 100 patient-years) treated with baricitinib 4 mg. Cases of disseminated tuberculosis were also reported.

Opportunistic Infections (excluding tuberculosis)—During the 16-week treatment period, opportunistic infections were reported in 2 patients (0.6 per 100 patient-years) treated with placebo, 0 patients treated with Olumiant 2 mg and 2 patients (0.7 per 100 patient-years) treated with baricitinib 4 mg.

During 0 to 52-week exposure, opportunistic infections were reported in 1 patient (0.3 per 100 patient-years) treated with Olumiant 2 mg and 5 patients (0.6 per 100 patient-years) treated with baricitinib 4 mg.

Maladies—During the 16-week treatment period, malignancies excluding non-melanoma skin cancers (NMSCs) were reported in 0 patients treated with placebo, 1 patient (0.7 per 100 patient-years) treated with Olumiant 2 mg, and 1 patient (0.3 per 100 patient-years) treated with baricitinib 4 mg.

During the 0 to 52-week treatment period, malignancies excluding NMSCs were reported in 2 patients (0.6 per 100 patient-years) treated with Olumiant 2 mg and 6 patients (0.7 per 100 patient-years) treated with baricitinib 4 mg.

OLUMIANT® (baricitinib) BA HCP BS 13JUN2022
During the 16-week treatment period, increases in platelet counts 23,000 cells/mm³ in patients treated with baricitinib 4 mg. Arterial thrombosis—During the 16-week treatment period, arterial thromboses were reported in 1 patient treated with placebo (0.3 per 100 patient-years), 2 patients (1.4 per 100 patient-years) treated with Olumiant 2 mg, and 2 patients (0.7 per 100 patient-years) treated with baricitinib 4 mg. During the 0 to 52-week treatment period, arterial thromboses were reported in 3 patients (0.9 per 100 patient-years) treated with Olumiant 2 mg and 3 patients (0.3 per 100 patient-years) treated with baricitinib 4 mg.

Laboratory Abnormalities

Neutropenia—During the 16-week treatment period, neutrophil counts below 1000 cells/mm³ occurred in 5% of patients treated with placebo, 0.6% of patients treated with Olumiant 2 mg, and 0.3% of patients treated with baricitinib 4 mg. There were no neutrophil counts below 500 cells/mm³ observed in any treatment group.

Platelet Elevations—During the 16-week treatment period, increases in platelet counts above 600,000 cells/mm³ occurred in 1% of patients treated with placebo, 1.1% of patients treated with Olumiant 2 mg, and 2.0% of patients treated with baricitinib 4 mg. Mean platelet count increased by 3000 cells/mm³ at 16 weeks treated with placebo, by 15,000 cells/mm³ at 16 weeks in patients treated with Olumiant 2 mg and by 23,000 cells/mm³ in patients treated with baricitinib 4 mg.

Liver Enzyme Elevations—Events of increases in liver enzymes ≥3 times the ULN were observed in patients treated with Olumiant.

- During the 16-week treatment period, ALT elevations ≥3 times the ULN occurred in 1.0% of patients treated with placebo, 1.7% of patients treated with Olumiant 2 mg, and 1.4% of patients treated with baricitinib 4 mg.
- During the 16-week treatment period, AST elevations ≥3 times the ULN occurred in 0.8% of patients treated with placebo, 1.3% of patients treated with Olumiant 2 mg, and 0.9% of patients treated with baricitinib 4 mg.
- In a phase 3 study of DMARD-naive patients, during the 24-week treatment period, ALT and AST elevations ≥3 times the ULN occurred in 1.9% and 0% of patients treated with methotrexate monotherapy, 1.9% and 1.3% of patients treated with baricitinib 4 mg monotherapy, and 4.7% and 1.9% of patients treated with baricitinib 4 mg plus methotrexate.

Lipid Elevations—In controlled clinical trials, Olumiant treatment was associated with dose-related increases in lipid parameters, including total cholesterol, triglycerides, LDL cholesterol, and HDL cholesterol. Elevations were observed at 12 weeks and remained stable thereafter. During the 16-week treatment period, changes in lipid parameters are summarized below:

- Mean LDL cholesterol increased by 8 mg/dL in patients treated with Olumiant 2 mg and by 14 mg/dL in patients treated with baricitinib 4 mg.
- Mean HDL cholesterol increased by 7 mg/dL in patients treated with Olumiant 2 mg and by 9 mg/dL in patients treated with baricitinib 4 mg.
- The mean LDL/HDL ratio remained stable.
- Mean triglycerides increased by 7 mg/dL in patients treated with Olumiant 2 mg and by 15 mg/dL in patients treated with baricitinib 4 mg.

Creatine Phosphokinase (CPK)—Olumiant treatment was associated with increases in CPK within one week of starting Olumiant and plateauing after 8 to 12 weeks. At 16 weeks, the mean change in CPK for Olumiant and baricitinib 4 mg was 57 IU/L and 52 IU/L, respectively.

Creatine—In controlled clinical trials, dose-related increases in serum creatinine were observed with Olumiant treatment. At 52 weeks, the mean increase in serum creatinine was less than 0.1 mg/dL, with baricitinib 4 mg. The clinical significance of the observed serum creatinine increases is unknown.

Other Adverse Reactions—Other adverse reactions are summarized in the following table.

<table>
<thead>
<tr>
<th>Adverse Reactions</th>
<th>Weeks 0-16</th>
<th>Weeks 0-36</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Placebo</strong> n=1310</td>
<td><strong>Olumiant 4 mg</strong> n=1307</td>
<td></td>
</tr>
<tr>
<td>Upper respiratory tract infectionsa</td>
<td>201(16.0)</td>
<td>230 (18.1)</td>
</tr>
<tr>
<td>AST ≥3 x ULNa</td>
<td>117 (9.4)</td>
<td>149 (11.8)</td>
</tr>
<tr>
<td>Thrombocytosis &gt;600,000 cells/mm³</td>
<td>34 (2.6)</td>
<td>59 (7.9)</td>
</tr>
<tr>
<td>Creatine phosphokinase (CPK) &gt;5 x ULNa</td>
<td>38 (2.7)</td>
<td>36 (4.5)</td>
</tr>
<tr>
<td>Neutropenia &lt;1000 cells/mm³</td>
<td>22 (1.8)</td>
<td>26 (2.2)</td>
</tr>
<tr>
<td>Deep vein thrombosis</td>
<td>18 (1.4)</td>
<td>20 (1.5)</td>
</tr>
<tr>
<td>Pulmonary embolism</td>
<td>11 (0.8)</td>
<td>20 (1.5)</td>
</tr>
<tr>
<td>Urinary tract infection</td>
<td>13 (1.0)</td>
<td>19 (1.5)</td>
</tr>
</tbody>
</table>

a As assessed by measured values within the clinical trial database. Frequencies are based on shifts from pre-treatment to post-treatment (with number at risk as the denominator), except for ALT and AST for which frequencies are based on observed elevation during treatment.

b Creatine phosphokinase frequencies presented in the table were available for a single trial (COVID II) in patients with COVID-19 and do not represent integrated data.
Adverse Reactions That Occurred in ≥1% of Patients Treated with Olumiant 2 mg or Olumiant 4 mg in Alopecia Areata Trials (Cont.)

<table>
<thead>
<tr>
<th>Adverse Reaction</th>
<th>Placebo n=371 (%)</th>
<th>Olumiant 2 mg n=365 (%)</th>
<th>Olumiant 4 mg n=540 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liver enzyme elevations&lt;sup&gt;a&lt;/sup&gt;</td>
<td>2.4</td>
<td>1.1</td>
<td>3.0</td>
</tr>
<tr>
<td>Foliculitis&lt;sup&gt;b&lt;/sup&gt;</td>
<td>0.8</td>
<td>1.4</td>
<td>2.2</td>
</tr>
<tr>
<td>Fatigue</td>
<td>1.1</td>
<td>0.8</td>
<td>2.2</td>
</tr>
<tr>
<td>Lower respiratory tract infections (LRTI)&lt;sup&gt;c&lt;/sup&gt;</td>
<td>0.8</td>
<td>2.2</td>
<td>2.0</td>
</tr>
<tr>
<td>Nausea</td>
<td>1.6</td>
<td>2.7</td>
<td>2.0</td>
</tr>
<tr>
<td>Genital Candida infections&lt;sup&gt;g&lt;/sup&gt;</td>
<td>0.3</td>
<td>2.2</td>
<td>1.3</td>
</tr>
<tr>
<td>Anemia</td>
<td>0.3</td>
<td>0.3</td>
<td>1.3</td>
</tr>
<tr>
<td>Neutropenia&lt;sup&gt;i&lt;/sup&gt;</td>
<td>0.8</td>
<td>0.3</td>
<td>1.3</td>
</tr>
<tr>
<td>Abdominal pain&lt;sup&gt;i&lt;/sup&gt;</td>
<td>2.2</td>
<td>3.8</td>
<td>0.9</td>
</tr>
<tr>
<td>Herpes zoster</td>
<td>0.5</td>
<td>1.4</td>
<td>0.9</td>
</tr>
<tr>
<td>Weight increased</td>
<td>0.3</td>
<td>1.6</td>
<td>0.9</td>
</tr>
</tbody>
</table>

<sup>a</sup> % - study size adjusted percentages.
<sup>b</sup> URTI includes: acute sinusitis, influenza, laryngitis, nasopharyngitis, oropharyngeal pain, pharyngitis, pharyngotonsillitis, rhinitis, sinusitis, tonsillitis, upper respiratory tract infection, viral upper respiratory tract infection, viral sinusitis, viral pharyngitis, respiratory tract infection viral, rhinovirus infection and adenoviruses
<sup>c</sup> Acne includes: acne and dermatitis acneform.
<sup>d</sup> Hyperlipidemia includes: hyperlipidemia, hypercholesterolemia, hypertriglyceridemia, dyslipidemia, lipids increased, low density lipoprotein increased, blood cholesterol increased, and blood triglycerides increased.
<sup>e</sup> UTI includes: cystitis, urinary tract infection, white blood cells urin positive, urinary tract infection bacterial, and pyelonephritis.
<sup>f</sup> Liver enzyme elevations includes: transaminases increased, aspartate aminotransferase increased, alanine aminotransferase increased, hepatic enzyme increased, gamma-glutamyl transferase increased, and hepatic function abnormal.
<sup>g</sup> Foliculitis was most commonly localized in the scalp region associated with hair regrowth.
<sup>h</sup> LRTI includes: bronchitis, bronchiolitis, lower respiratory tract infection, pneumonia, COVID-19 pneumonia, and respiratory tract infection.
<sup>i</sup> Genital Candida infections includes: vulvovaginal candidiasis, vulvovaginal mycotic infection, and genital infection fungal.
<sup>j</sup> Neutropenia includes: neutropenia and neutrophil count decreased.
<sup>k</sup> Abdominal pain includes: abdominal pain, abdominal pain lower, abdominal pain upper, and abdominal discomfort.

In patients treated with any dose of baricitinib, adverse reactions that occurred in fewer than 1% of patients include arterial thrombosis, B cell lymphoma, lymphoproliferative, and fungal sinus infections. Additional adverse reactions observed after Week 52: venous thromboembolic events (VTE), including deep venous thrombosis (DVT) and pulmonary embolism (PE), and malignancy including non-melanoma skin cancer.

Overall, the adverse reactions observed in patients with alopecia areata treated with Olumiant were consistent with the adverse reactions in patients with rheumatoid arthritis.

Postmarketing Experience—The following adverse reactions have been identified during post-approval use of Olumiant. Because these reactions are reported voluntarily from a population of uncertain size, it is not always possible to reliably estimate their frequency or establish a causal relationship to drug exposure.

Immune System Disorders: Drug hypersensitivity (events such as rash, urticaria, and angioedema have been observed).

Drug Interactions

Strong OAT3 Inhibitors—Baricitinib exposure is increased when Olumiant is co-administered with strong Organic Anion Transporter 3 (OAT3) inhibitors (such as probenecid), hence the dosage of baricitinib should be reduced by half the recommended dose.

Other JAK Inhibitors or Biologic DMARDs—Olumiant has not been studied in combination with other JAK inhibitors or with biologic DMARDs.

Use in Specific Populations

Pregnancy

Risk Summary—Based on the findings from animal reproduction studies, Olumiant may cause fetal harm during pregnancy. Available data from clinical trials and postmarketing case reports with Olumiant exposure in pregnancy are insufficient to inform a drug-associated risk for major birth defects, miscarriage, or other adverse maternal or fetal outcomes. There are no human data on chronic baricitinib exposure throughout pregnancy. There are risks to the mother and the fetus associated with rheumatoid arthritis in pregnancy. Consider the risks and benefits with chronic use of Olumiant during pregnancy.

In animal embryo-fetal development studies, oral baricitinib administration to pregnant rats and rabbits at exposures equal to or greater than approximately 11 and 46 times the maximum recommended human dose (MRHD) of 4 mg/day, respectively, resulted in reduced fetal body weights, increased embryolethality (rabbits only), and dose-related increases in skeletal malformations. No developmental toxicity was observed in pregnant rats and rabbits treated with oral baricitinib during organogenesis at approximately 2 and 7 times the exposure at the MRHD, respectively. In a pre- and post-natal development study in pregnant female rats, oral baricitinib administration at exposures approximately 24 times the MRHD resulted in reduction in pup viability (increased incidence of stillborn pups and early neonatal deaths), decreased fetal birth weight, reduced fetal body weight gain, decreased cytotoxic T cells on post-natal day (PND) 35 with evidence of recovery by PND 65, and developmental delays that might be attributable to decreased body weight gain. No developmental toxicity was observed at an exposure approximately 5 times the exposure at the MRHD.

The background risks of major birth defects and miscarriage for the indicated population(s) are unknown. All pregnancies have a background risk of birth defect, loss, or other adverse outcomes. In the U.S. general population, the estimated background risk of major birth defects and miscarriage in clinically recognized pregnancies is 2-4% and 15-20%, respectively. Report pregnancies to Eli Lilly and Company at 1-800-LillyRx (1-800-545-5979).

Clinical Considerations—Disease-Associated Maternal and/or Embryo/Fetal Risk: Published data suggest that increased disease activity is associated with the risk of developing adverse pregnancy outcomes in women with rheumatoid arthritis. Adverse pregnancy outcomes include preterm delivery (before 37 weeks of gestation), low birth weight (less than 2500 g) infants, and small for gestational age at birth.

Data—Animal Data: In an embryofetal development study in pregnant rats, dosed orally during the period of organogenesis from gestation days 6 to 17, baricitinib was teratogenic (skeletal malformations that consisted of bent limb bones and rib anomalies) at exposures equal to or greater than approximately 1.1 times the MRHD (on an AUC basis at maternal oral doses of 10 mg/kg/day and higher). No developmental toxicity was observed in rats at an exposure approximately 2 times the MRHD (on an AUC basis at a maternal oral dose of 2 mg/kg/day).

In an embryofetal development study in pregnant rabbits, dosed orally during the period of organogenesis from gestation days 7 to 20, embryolethality, decreased fetal body weights, and skeletal malformations (rib anomalies) were observed in the presence of maternal toxicity at an exposure approximately 46 times the MRHD (on an AUC basis at a maternal oral dose of 30 mg/kg/day). Embryolethality consisted of increased post-implantation loss that was due to elevated incidences of both early and late resorptions. No developmental toxicity was observed in rabbits at an exposure approximately 7 times the MRHD (on an AUC basis at a maternal oral dose of 10 mg/kg/day).

In a pre- and post-natal development study in pregnant female rats dosed orally from gestation day 0 through lactation day 20, adverse findings observed in pups included decreased survival from birth to post-natal day 4 (due to increased stillbirths and early neonatal deaths), decreased birth weight, decreased body weight gain during the pre-weaning phase, increased incidence of malrotated forelimbs during the pre-weaning phase, and decreased cytotoxic T cells on PND 35 with recovery by PND 65 at exposures approximately 24 times the MRHD (on an AUC basis at a maternal oral dose of 25 mg/kg/day). Developmental delays (that may be secondary to decreased body weight gain) were observed in males and females at exposures approximately 24 times the MRHD (on an AUC basis at a maternal oral dose of 25 mg/kg/day). These findings included decreased forelimb and hindlimb grip strengths, and delayed mean age of sexual maturity. No developmental toxicity was observed in rats at an exposure approximately 5 times the MRHD (on an AUC basis at a maternal oral dose of 5 mg/kg/day).

Lactation

Risk Summary—No information is available on the presence of Olumiant in human milk, the effects of the drug on the breastfed infant, or the effects of the drug on milk production. Baricitinib is present in the milk of lactating rats. Because of the potential for serious adverse reactions in nursing infants advise women not to breastfeed during treatment with Olumiant and for 4 days after the last dose (approximately 5 to 6 half-lives).

Data—A single oral dose of 25 mg/kg radiolabeled baricitinib was administered to lactating female Sprague-Dawley rats on post-partum day 13. Drug exposure was approximately 45-fold greater in milk than in plasma based on AUC<sub>0-4</sub>, values.

Females and Males of Reproductive Potential

Contraception—Based on animal studies, Olumiant may cause fetal harm when administered during pregnancy. Consider pregnancy planning and prevention for females of reproductive potential.

Pediciatric Use—The safety and effectiveness of Olumiant in pediatric patients have not been established.

Geriatric Use—Of the 310 patients treated in the rheumatoid arthritis clinical trials, a total of 537 patients were 65 years of age and older, including 71 patients 75 years of age and older. Of the 2558 patients treated in the COVID-19 clinical trials, a total of 781 were 65 years of age and older, including 295 patients 75 years and older. No overall differences in safety or effectiveness were observed between these subjects and younger subjects.
and other reported clinical experience has not identified differences in responses between the elderly and younger patients, but greater sensitivity of some older individuals cannot be ruled out. Of the 1200 patients in the alopecia areata trials, a total of 29 patients were 65 years of age or older. The number of patients aged 65 years and older was not sufficient to determine whether they respond differently from younger patients. Olumiant is known to be substantially excreted by the kidney, and the risk of adverse reactions to this drug may be greater in patients with impaired renal function. Because geriatric patients are more likely to have decreased renal function, care should be taken in dose selection, and it may be useful to monitor renal function.

**Hepatic Impairment**—No dose adjustment is necessary in patients with mild or moderate hepatic impairment. The use of Olumiant has not been studied in patients with rheumatoid arthritis or alopecia areata and severe hepatic impairment and is therefore not recommended. Olumiant has not been studied in patients with COVID-19 and severe hepatic impairment. Olumiant should only be used in patients with COVID-19 and severe hepatic impairment if the potential benefit outweighs the potential risk.

**Renal Impairment**—Renal function was found to significantly affect baricitinib exposure. The recommended dosage of Olumiant in patients with moderate renal impairment (estimated glomerular filtration rate [GFR] between 30 and <60 mL/min/1.73 m²) should be reduced by half the recommended dose. Olumiant is not recommended for use in patients with rheumatoid arthritis or alopecia areata and severe renal impairment (estimated GFR of less than 30 mL/min/1.73 m²).

**COVID-19**—The recommended dosage of Olumiant in patients with moderate renal impairment (estimated GFR between 30 and <60 mL/min/1.73 m²) or severe renal impairment (estimated GFR between 15 and <30 mL/min/1.73 m²) is 2 mg once daily and 1 mg once daily, respectively. Olumiant is not recommended for use in patients who are on dialysis, have end-stage renal disease (ESRD), or with estimated GFR of <15 mL/min/1.73 m².

**OVERDOSAGE**

Single doses up to 40 mg and multiple doses of up to 20 mg daily for 10 days have been administered in clinical trials without dose-limiting toxicity. Pharmacokinetic data of a single dose of 40 mg in healthy volunteers indicate that more than 80% of the administered dose is expected to be eliminated within 24 hours. In case of an overdose, it is recommended that the patient should be monitored for signs and symptoms of adverse reactions. Patients who develop adverse reactions should receive appropriate treatment.

Additional information can be found at www.Olumiant.com
Publisher’s Note

COVID-19 pandemic and drug prices continue to dominate healthcare news in the United States, and our annual pharmacy survey revealed the complicated, and sometimes surprising, attitudes about them.

More than 950 people filled out the survey, a much larger number of respondents than we’ve had the past several years. Our colleagues at Pharmacy Times® helped increase the number of responses by sharing the survey with their readers.

The surprising results? More than half (58%) of the respondents indicated that they believe the Centers for Medicare and Medicaid Services (CMS) should be given the power to negotiate drug prices for the Medicare program. It is remarkable how mainstream that idea has become.

But, interestingly, a similar proportion — 54% — said the problem of high drug prices has been exaggerated. This result may reflect that 38% of the respondents to our survey said they work in the pharmacy benefit management (PBM) sector of healthcare. The PBM industry contends it deserves more credit than it gets for negotiating down the actual amounts paid for drugs (the net price), and 62% of the respondents to our survey agreed with the statement that PBMs lower net drug prices.

Our flight of questions about COVID-19 showed some optimism is afoot. Roughly 2 out of 3 respondents (62%) indicated that they believe the worst of the pandemic is over in the U.S. Yet the responses indicated concern about Paxlovid rebound and long COVID. And just under half (46%) of the respondents agreed or strongly agreed with the statement that the “country needs to learn to live with COVID-19.”

COVID-19 vaccination for the foreseeable future? Half of the respondents agreed or strongly agreed with that statement.

Our survey also is a window into views about Aduhelm (aducanumab), the controversial Alzheimer’s drug, biosimilars (66% believe they will help lower drug expenditures) and imposing transparency rules on PBMs (49% indicated that they agreed with that).

Many thanks to everyone who filled out the survey. The results give us — and Managed Healthcare Executive® readers — many useful, provocative insights into drug and pharmacy issues. Our plates are full of food for thought.

Mike Hennessy Jr.
President and CEO
of MJH Life Sciences®
The 2022 results are in PHARMACY SURVEY PAGE 18

Industry Analysis
26 Healthcare relatively immune to inflation — so far
36 The 340B program is at a crossroads
39 Are primary care physicians an endangered species?
40 The private equity bet on healthcare

Oncology
42 The latest on CAR-T therapy

Population Health
44 How employers, insurers are coping with abortion after Dobbs

Technology
46 Telehealth abortion after Dobbs

Drugs in the Pipeline
48 For plaque psoriasis treatment, abundance gets more company

Departments
12 Editorial Advisory Board
13 Editorial Advisory Board Opinion
16 Medical World News®

© 2022 MultiMedia Medical LLC. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical including by photocopy, recording, or information storage and retrieval without permission in writing from the publisher. Authorization to photocopy items for internal/educational or personal use, or the internal/educational or personal use of specific clients, is granted by MJH Life Sciences® for libraries and other users registered with the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923. 978-750-8400 fax 978-646-8700 or visit http://www.copyright.com online. For uses beyond those listed above, please direct your written request to Permission Dept. email: etemple-morris@mmhgroup.com

MJH Life Sciences® provides certain customer contact data (such as customer’s name, addresses, phone numbers and email addresses) to third parties who wish to promote relevant products, services and other opportunities that may be of interest to you. If you do not want MJH Life Sciences® to make your contact information available to third parties for marketing purposes, simply call toll-free 888-529-2922 between the hours of 7:30 a.m. and 5 p.m. CST and a customer service representative will assist you in removing your name from MJH Life Sciences® lists. Outside the U.S., please phone 218-740-6477.

Managed Healthcare Executive® does not verify any claims or other information appearing in any of the advertisements contained in the publication and cannot take responsibility for any losses or other damages incurred by readers in reliance of such content.

Managed Healthcare Executive® welcomes unsolicited articles, manuscripts, photographs, illustrations and other materials but cannot be held responsible for their safekeeping or return.

Library Access: Libraries offer online access to current and back issues of Managed Healthcare Executive® through the EBSCO host databases.

To subscribe, call toll-free 888-527-7026. Outside the U.S. call 218-740-6477.
Healthcare works better when it’s connected

We see a way forward that puts people first. That’s why we connect you with the right balance of care, technology, and expertise to solve complex challenges and streamline healthcare experiences.

Whether through people, platforms, or process improvements—we make it easier for health plans to turn challenges into change.

Introducing Carelon—a new vision for healthcare services backed by decades of industry experience.

Perspective is everything
Managed Healthcare Executive

Editorial Advisory Board

Francois de Brantes, M.S., MBA, is senior vice president of commercial business development at Signify Health.

Otis Brawley, M.D., is the Bloomberg Distinguished Professor of Oncology and Epidemiology at Johns Hopkins University and former chief medical and scientific officer of the American Cancer Society.

Joel V. Brill, M.D., is the chief medical officer for Predictive Health, LLC, which partners with stakeholders to improve coverage of value-driven care that optimizes health for people.

Lili Brillstein is a nationally recognized thought leader in the advancement of Episodes of Care as a value-based approach for specialty care. She is the CEO of BCollaborative, which works with stakeholders across the healthcare continuum to successfully make the move from fee for service to value-based healthcare.

David Calabrese, RPh, M.H.P., is market president, Health Plans/PBMs at OptumRx, a pharmacy benefits firm that provides services for more than 65 million lives nationally.

Rodrigo Cerdá, M.D., M.P.H., is senior vice president of health services and chief medical officer of Independence Blue Cross in Philadelphia.

Douglas L. Chaet, FACHE, is president of Value Evolutions and the founder and chairman of the American Association of Integrated Healthcare Delivery Systems.

Perry Cohen, Pharm.D., is CEO of The Pharmacy Group and the TPG family of companies, which provides services to associations, healthcare and information technology organizations, payers and pharmaceutical companies.

Darnell Dent is principal of Dent Advisory Services, LLC, a management consulting practice focused on helping leadership improve organizational effectiveness and overall performance. He most recently served as president and CEO of a managed care organization.

Don Hall, M.P.H., is principal of DeltaSigma LLC, a consulting practice specializing in strategic problem solving for managed care organizations. He most recently served as president and CEO of a nonprofit, provider-sponsored health plan.

Cynthia Hundorfean is president and CEO of Allegheny Health Network (AHN), an integrated healthcare delivery system that serves Western Pennsylvania. AHN is part of the Highmark Health family of companies.

Eric C. Hunter, MBA, is the president and CEO of CareOregon, a nonprofit health plan based in Portland, Oregon.

Keely Eng Macmillan, M.S., is an associate principal, consulting, value-based care at Sg2, a healthcare consulting firm headquartered in Skokie, Illinois.

John Mathewson is chief operating officer for America’s Health Insurance Plans (AHIP), the national trade association that advocates for the health insurance community and the consumers they serve across the nation.

Ateev Mehrotra, M.D., M.P.H., is a professor of healthcare policy and medicine at Harvard Medical School and a hospitalist at Beth Israel Deaconess Medical Center in Boston.

Margaret A. Murray, M.P.A., is the founding CEO of the Association for Community Affiliated Plans, which represents 54 nonprofit safety net health plans in 26 states.

Kevin Ronneberg, M.D., is vice president and associate medical director for health initiatives at HealthPartners, an integrated, nonprofit provider and health insurance company located in Bloomington, Minnesota.

Marc Samuels, J.D., M.P.H., is the CEO of ADVi, a strategic advisory services life sciences firm in Washington, D.C.

William Shrank, M.D., is Humana’s senior vice president and chief medical officer. In this role, he is responsible for leading and implementing the company’s integrated care delivery strategy. This strategy emphasizes a consumer-friendly, evidence-based, technology-enabled approach to personalized health improvement for the company’s more than 16 million Humana health plan members.

Mission Managed Healthcare Executive provides healthcare executives at health plans and provider organizations with analysis, insights and strategies to pursue value-driven solutions.
5 priorities for managed care

When I began my career in managed healthcare in the mid-1980s, I worked at a large nonprofit hospital. Employers were frustrated about rising healthcare costs and were willing to push employees into preferred provider organizations and HMOs through financial incentives. Our primitive attempts at managing healthcare costs included tracking all hospitalized patients using a chalkboard and working to get them out of the hospital while also enforcing precertification for new hospitalizations.

Managed care was a developing industry and not particularly effective at doing anything but riling up providers and members. Costs continued to escalate.

Fast forward four decades. We are still an evolving industry. We’ve gone beyond a simple focus on cost management to improving healthcare outcomes and access to care. Are we actually doing it? The jury is out. But we are still riling up providers and members.

So where should we focus if we are to meaningfully impact healthcare in a positive way going forward? With the benefit of hindsight, there are five areas that I believe offer the best prospect for the future of managed healthcare and that emerging leaders should embrace.

**Improve coordination of healthcare resources.** Healthcare has become many times more complicated in the past 40 years. Members with chronic conditions are often bounced around between a myriad of providers, some in network and some out. Overworked health plan staff often struggle to stay on top of all the issues facing members with cancer, diabetes, heart disease and a host of other scary problems. Nurses, social workers and other care coordinators could make a huge difference — if there were enough of them.

**Take on the challenges of long-term care.** Coordinating long-term care, respite and hospice services must become part of our industry’s future competencies. Our rapidly aging population, increasing incidence of debilitating conditions and insufficient supporting resources are a formula for a crisis in this country. Coordinating services for this population with a focus on keeping people in their homes or other noninstitutional settings has demonstrated success in outcomes and costs.

**Incorporate behavioral and dental health care.** Untreated behavioral health conditions and lack of dental care have a significant impact on health outcomes and costs. Coordinating access to these services for members should be a critical part of addressing members’ needs. Unfortunately, these services are often the most difficult to access, particularly for those on Medicaid or Medicare.

**Address social determinants of health.** Where you live, what you do for a living and your socioeconomic status have a huge bearing on every aspect of your health. Assessing each member’s status relative to social determinants of health should be part of the coordination of services that will impact outcomes and costs.

**Ensure women have access to reproductive health services.** Sadly, the Supreme Court has interjected conservative legal opinion into an area that begs more, not less, resources. The maternal death rate in the U.S. rivals many third-world countries in large part due to lack of access to prenatal care and other reproductive health services. It will continue be a difficult issue for plans to deal with given the state of the country.

If there is one overriding theme of how to best address producing better outcomes and cost management in our industry, it’s addressing the astounding lack of coordination. Managed care organizations should fill that void in our system.

After 40 years, it’s now or never.

---

Don Hall, M.P.H., is the principal of DeltaSigma, LLC and a member of the Managed Healthcare Executive® editorial advisory board.
Dry eye starts with tear film disruption.¹

Treat by activating tear film production.²

EXPLORE A DIFFERENT PATH TO TREATING DRY EYE DISEASE.²

Tyrvaya®, the first and only nasal spray approved to treat the signs and symptoms of dry eye, is believed to activate the trigeminal parasympathetic pathway via the nose, resulting in increased tear film production.² The exact mechanism of action is unknown at this time.

Watch Tyrvaya in action at Tyrvaya-pro.com.

INDICATION
Tyrvaya® (varenicline solution) nasal spray is indicated for the treatment of the signs and symptoms of dry eye disease.

IMPORTANT SAFETY INFORMATION
The most common adverse reaction reported in 82% of patients was sneezing. Events that were reported in 5–16% of patients were cough, throat irritation, and instillation-site (nose) irritation.

Please see Brief Summary of Prescribing Information on the adjacent page and the full Prescribing Information at Tyrvaya-pro.com.

BRIEF SUMMARY: Consult the full Prescribing Information for complete product information available at www.tyrvaya-pro.com.

INDICATIONS AND USAGE
TYRVAYA® (varenicline solution) nasal spray is a cholinergic agonist indicated for the treatment of the signs and symptoms of dry eye disease.

ADVERSE REACTIONS
Clinical Trials Experience: Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in the clinical trials of a drug cannot be directly compared to rates in the clinical trials of another drug and may not reflect the rates observed in practice.

In three clinical trials of dry eye disease conducted with varenicline solution nasal spray, 349 patients received at least 1 dose of TYRVAYA. The majority of patients had 31 days of treatment exposure, with a maximum exposure of 105 days.

The most common adverse reactions reported in 82% of TYRVAYA treated patients was sneezing. Other common adverse reactions that were reported in >5% of patients include cough (16%), throat irritation (13%), and instillation-site (nose) irritation (8%).

USE IN SPECIFIC POPULATIONS
Pregnancy: Risk Summary: There are no available data on TYRVAYA use in pregnant women to inform any drug associated risks. In animal reproduction studies, varenicline did not produce malformations at clinically relevant doses.

All pregnancies have a risk of birth defect, loss, or other adverse outcomes. In the US general population, the estimated background risk of major birth defects and miscarriage in clinically recognized pregnancies is 2% to 4% and 15% to 20%, respectively.

Data: Animal Data: Pregnant rats and rabbits received varenicline succinate during organogenesis at oral doses up to 15 and 30 mg/kg/day, respectively. While no fetal structural abnormalities occurred in either species, maternal toxicity, characterized by reduced body weight gain, and reduced fetal weights occurred in rabbits at the highest dose (4864 times the MRHD on a mg/m² basis).

In a pre- and postnatal development study, pregnant rats received up to 15 mg/kg/day of oral varenicline succinate from organogenesis through lactation. Maternal toxicity, characterized by a decrease in body weight gain, was observed at 15 mg/kg/day (1216 times the MRHD on a mg/m² basis). Decreased fertility and increased auditory startle response occurred in offspring at the highest maternal dose of 15 mg/kg/day.

Lactation: Risk summary: There are no data on the presence of varenicline in human milk, the effects on the breastfed infant, or the effects on milk production. In animal studies varenicline was present in milk of lactating rats. However, due to species-specific differences in lactation physiology, animal data may not reliably predict drug levels in human milk.

The lack of clinical data during lactation precludes a clear determination of the risk of TYRVAYA to an infant during lactation; however, the developmental and health benefits of breastfeeding should be considered along with the mother’s clinical need for TYRVAYA and any potential adverse effects on the breastfed child from TYRVAYA.

Pediatric Use: Safety and efficacy of TYRVAYA in pediatric patients have not been established.

Geriatric Use: No overall differences in safety or effectiveness have been observed between elderly and younger adult patients.
Medical World News® is a first-of-its-kind, 24-hour online program that is for healthcare professionals, by healthcare professionals. The site provides video editorial content on cutting-edge topics in healthcare as well as stories about the well-being practices of healthcare professionals and their interests outside of work. The videos are available as a livestream and an on-demand basis for all healthcare stakeholders.

News, insight, human interest — you will find it all on Medical World News®.

DEEP DIVE

Deep Dive Into Tuberculosis

Robert C. Bollinger, M.D., M.P.H., an infectious disease professor at the Johns Hopkins University of Medicine, and Sebastian Seiguer, J.D., MBA, CEO and co-founder of emocha Health, discuss tuberculosis and directly observed therapy (DOT). Seiguer describes how telehealth can help with DOT and the potential for applying the DOT-telehealth combination to other conditions.

https://www.medicalworldnews.com/view/deep-dive-into-tuberculosis

WELLBEING CHECKUP

Professional Boundaries

Working in palliative cancer can be incredibly rewarding but also lead to burnout and anxiety. Kimberly Curseen, M.D., director of supportive and palliative care outpatient services and an associate professor at the Winship Cancer Institute at Emory University in Atlanta, discusses how professional boundaries and institutional support can help clinicians maintain a positive attitude.

https://www.medicalworldnews.com/view/wellbeing-checkup-professional-boundaries

BEHIND THE SCIENCE

Behind Rethinking Metformin

Metformin has been the first-line therapy for type 2 diabetes for decades. But recent advances in glycemic control therapy and new data from the Diabetes Prevention Program Outcomes Study have seeded some doubt about metformin being the presumptive choice. At the 2022 annual meeting of the American Diabetes Association, Endocrinology Network editors spoke with experts about the new data and whether it was time to reconsider metformin as being the nearly automatic first choice for first-line treatment.

https://www.medicalworldnews.com/view/behind-the-science-behind-rethinking-metformin
Dry eye disease

In this Managed Healthcare Executive® K-Cast, Laura M Periman, M.D., a board-certified ophthalmologist and ocular surface disease expert in Seattle, discussed dry eye disease, its consequences and treatment. What follows is an edited version of her remarks.

Definition and prevalence
Dry eye disease is a busy, noisy and messy umbrella term for probably about 30 different clinical subdiagnoses. The consequences include interruptions in vision, tear film stability, ocular discomfort, and, most importantly, inflammation.

Dry eye disease affects people of all races, hormone statuses, and ages. There are multiple risk factors. Everything from lifestyle, screen time, contact lens wear, nutrition, underlying disease states, diabetes, high blood pressure, and all the medications needed to control those underlying disease states can contribute to dry eye disease.

The prevalence of dry eye disease in the United States is estimated to be anywhere between 16 million and 50 million people. The reason for that variability is in how those epidemiologic studies define dry eye and when they were done.

Quality of life
We know that workplace productivity is negatively impacted by dry eye disease. This has significant implications for large employers, especially those with computer-heavy work demands.

There's also a biopsychosocial impact of dry eye disease, not only the biology and the damage that's happening on the ocular surface, but the patient's workplace performance and presence in the family. Some of these patients get what we call ocular fatigue. They want to close their eyes, but they aren't ready for bed. Ocular fatigue is a late symptom. It's best to not let people get to that point.

Economic burden
The monthly expenditure for a patient with moderate dry eye with things like over-the-counter palliatives, eye drops, eye ointments, antiallergy drops, and nasal sprays, is around $50 to $80. That doesn't include the co-payments for their prescription medications that they may also need. There are also the in-office therapeutics that we have to offer, which are typically noncovered services. Those are direct pay, and the cost expenditure can be in the thousands per year. The annual expenditure, depending on the severity of disease, can run into the tens of thousands of dollars.

Treatment
Let's start with patients with mild, early-stage disease. What can they do? Adequately hydrate. Get enough sleep. Focus on nutrition. They can take omega fatty acid supplements. There's excellent supportive science for this. Take herbal supplements, such as highly bioavailable curcuminoid extract.

Make sure your contact lenses are changed on a regular basis. Limit your screen time. Use a desktop humidifier. All those basic foundational interventions (can help).

When those fail, you need to move to the next level. We're going to add a short course of a steroid and an immunomodulator. With a stage 3 patient, we have to start layering on advanced and sophisticated treatments, such as autologous serum drops, amniotic membranes, or doxycycline. The literature on doxycycline isn't good. I'd much rather have patients on a host of things other than oral doxycycline.

In addition to prescription treatments and home care, you've got in-office devices. There are international consensus guidelines around the use of in-office technologies, including IPL (intense pulsed light). It's an in-office treatment used to address inflammation of benign skin conditions, such as rosacea, which is commonly associated with dry eye, and meibomian gland dysfunction (MGD).

There are other treatments in development, including a water-free formulation of cyclosporine. It has phenomenal tolerability.

There are some paradigm-shifting treatments in development. I am particularly excited about the anti-Demodex (face mite) medication. The phase 3 study just finished and top-line data was recently released. It could change the landscape in polypharmacy because it's targeted, specific and direct at what that main contributor is.

Other technologies that I often use include neural stimulation. We use two methods, extranasal vibration stimulation device and an intranasal varenicline nasal spray. Both are highly effective. We were a phase 3 trial site for both those modalities, and they function about the same.

Unmet needs
One unmet need is treatment of ocular pain associated with dry eye. There are two, phase 3 drugs in development that directly address ocular pain through novel pathways. We also need new ways to sort out which type of MGD a patient has.

All the tools that we have are wonderful and effective in the right clinical situation. There are still problems with access to some of these medications. I'd love to see more opportunities like this to help third-party leadership understand that when we're asking for a certain medication, it's not willy-nilly. There's a rhyme and reason to it. Maybe we can work together better to create efficient, timely, effective access for patients.

I'm excited about innovations and collaboration. The future looks bright.
Every year we survey readers about pharmacy and drug issues. And every year we climb a learning curve full of insights into what readers are thinking and footholds for future articles for Managed Healthcare Executive®. This year we had just over 950 respondents. We cast a wider net, thanks to our colleagues at the Pharmacy Times®, who shared the survey with their readers. We detect some optimism about the COVID-19 pandemic (2 out 3 respondents think the worst is over in the U.S.) and biosimilars (2 out 3 see them as bringing drug expenditures down). You will also see that there is a range of opinions about pharmacy benefit managers, the best tactics for slowing the growth in drug expenditures and, indeed, whether the problem of high drug prices has been exaggerated. Take a look. If you’re like us, you’ll learn a lot.

— Managed Healthcare Executive® editors
HOT TOPICS IN COVID-19

- Regular vaccination against COVID-19 will be necessary for the foreseeable future.
  - Strongly Disagree: 9%, Mildly Disagree: 17%, Neutral: 23%, Mildly Agree: 29%, Strongly Agree: 22%

- At-home rapid antigen tests are an important tool for curbing COVID-19.
  - Strongly Disagree: 9%, Mildly Disagree: 17%, Neutral: 23%, Mildly Agree: 31%, Strongly Agree: 20%

- The high risk of long COVID is a reason to prevent as many COVID-19 infections as possible.
  - Strongly Disagree: 12%, Mildly Disagree: 16%, Neutral: 28%, Mildly Agree: 29%, Strongly Agree: 15%

- Paxlovid rebound is a major concern.
  - Strongly Disagree: 9%, Mildly Disagree: 16%, Neutral: 30%, Mildly Agree: 33%, Strongly Agree: 13%

- The country needs to learn to live with COVID-19.
  - Strongly Disagree: 14%, Mildly Disagree: 18%, Neutral: 25%, Mildly Agree: 28%, Strongly Agree: 15%

- Congress needs to appropriate additional COVID-19 funding.
  - Strongly Disagree: 9%, Mildly Disagree: 15%, Neutral: 23%, Mildly Agree: 28%, Strongly Agree: 25%

- Vaccination rates have about peaked and there is little that can be done to improve them.
  - Strongly Disagree: 14%, Mildly Disagree: 28%, Neutral: 26%, Mildly Agree: 24%, Strongly Agree: 8%

IS THE WORST OF THE COVID-19 PANDEMIC OVER IN THE U.S.?

- 62% Yes
- 35% No
- 5% had no opinion

61% of respondents think herd immunity will be achieved in the U.S.

34% do not think so

5% had no opinion
2022 Pharmacy Survey

**COMBATTING COVID-19**

**Who did it best?**

- **Former President Donald Trump**: 27% good, 20% very good, 9% excellent, 24% satisfactory, 20% poor, 13% very poor.
- **President Joe Biden**: 30% good, 29% very good, 12% excellent, 22% satisfactory, 24% poor, 13% very poor.
- **Anthony Fauci, M.D.**: 31% good, 19% very good, 24% excellent, 28% satisfactory, 17% poor, 9% very poor.
- **Rochelle Walensky, M.D.**: 30% good, 16% very good, 16% excellent, 24% satisfactory, 28% poor, 10% very poor.
- **CDC**: 30% good, 17% very good, 14% excellent, 29% satisfactory, 28% poor, 10% very poor.
- **Congress**: 29% good, 14% very good, 14% excellent, 30% satisfactory, 22% poor, 10% very poor.
- **Pfizer**: 32% good, 16% very good, 14% excellent, 27% satisfactory, 17% poor, 7% very poor.
- **Moderna**: 28% good, 15% very good, 15% excellent, 32% satisfactory, 27% poor, 9% very poor.
- **FDA**: 31% good, 17% very good, 17% excellent, 29% satisfactory, 27% poor, 8% very poor.
- **World Health Organization**: 27% good, 23% very good, 23% excellent, 27% satisfactory, 14% poor, 8% very poor.

**Has the problem of high drug prices been exaggerated?**

- **YES**: 54%
- **NO**: 38%
- **7% had no opinion**

**Would international reference pricing be an effective way to lower drug prices?**

- **YES**: 62%
- **NO**: 28%
- **10% had no opinion**

**Should Congress cap the out-of-pocket cost for insulin at $35 per month?**

- **YES**: 62%
- **NO**: 27%
- **11% had no opinion**

**Should CMS be given the power to negotiate drug prices for Medicare?**

- **YES**: 58%
- **NO**: 28%
- **14% had no opinion**

**Has the problem of high drug prices been exaggerated?**

- **YES**: 38%
- **NO**: 54%
- **7% had no opinion**

**Would international reference pricing be an effective way to lower drug prices?**

- **YES**: 28%
- **NO**: 62%
- **10% had no opinion**

**Should Congress cap the out-of-pocket cost for insulin at $35 per month?**

- **YES**: 27%
- **NO**: 62%
- **11% had no opinion**

**Should CMS be given the power to negotiate drug prices for Medicare?**

- **YES**: 28%
- **NO**: 58%
- **14% had no opinion**
How important is interchangeability to the greater use of biosimilars?

![Image showing the distribution of responses to the survey question about biosimilars and their effect on drug expenditures.]

**WILL BIOSIMILARS HAVE A SIGNIFICANT EFFECT ON DRUGS EXPENDITURES DURING THE NEXT SEVERAL YEARS?**

- **66%** Yes
- **25%** No
- **9%** had no opinion

**2022 Pharmacy Survey**

65% of respondents think lawmakers and regulators need to take steps to stop “patent thickets” and other maneuvers that keep biosimilars off the market.
Rate your confidence in the effectiveness of **preexposure prophylaxis** (PrEP) as a strategy for stopping the HIV infections.

<table>
<thead>
<tr>
<th>Confidence Level</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Low</td>
<td>15%</td>
</tr>
<tr>
<td>Low</td>
<td>21%</td>
</tr>
<tr>
<td>Neutral</td>
<td>28%</td>
</tr>
<tr>
<td>High</td>
<td>23%</td>
</tr>
<tr>
<td>Very High</td>
<td>12%</td>
</tr>
</tbody>
</table>

Are insurers justified in restricting coverage of **Wegovy** (semaglutide), the weight-loss drug?

- Yes: 55%
- No: 33%
- 12% had no opinion
Was it a mistake for the FDA to approve Aduhelm (aducanumab), the Alzheimer’s treatment drug?  
13% had no opinion

Did CMS make the right decision when it restricted coverage of Aduhelm to patients enrolled in clinical trials?  
12% had no opinion

Do the rules for accelerated approval by the FDA need to be strengthened so post-approval studies are conducted in a timely manner?  
8% had no opinion
### SLOWING THE GROWTH IN DRUG EXPENDITURES

Respondents picked the two they felt were most effective.

- Revised benefit design to create an incentive for patients to choose the most cost-effective option (47%)
- Narrower, simpler formulary design with more exclusions (31%)
- Value-based contracting between payers and drugmakers (48%)
- Formularies based on cost-effectiveness assessments by groups such as the Institute for Clinical and Economic Review (ICER) (25%)

### WHICH OF THESE PROPOSED POLICIES REGARDING PBMS DO YOU AGREE WITH?

<table>
<thead>
<tr>
<th>Policy</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restrict rebate contracting so PBMs don’t favor expensive medications because of rebates</td>
<td>36%</td>
</tr>
<tr>
<td>Require formulary tier placement to reflect total cost of drugs to the healthcare system</td>
<td>44%</td>
</tr>
<tr>
<td>Impose transparency rules on PBMs</td>
<td>49%</td>
</tr>
<tr>
<td>Consider antitrust action to break up the dominant PBMs</td>
<td>21%</td>
</tr>
<tr>
<td>Strengthen auditing rights for employers and government payers</td>
<td>15%</td>
</tr>
</tbody>
</table>

**DO NEGOTIATIONS BY PHARMACY BENEFIT MANAGERS (PBMS) HELP LOWER NET DRUG PRICES?**

- Yes: 62%
- No: 28%
- 10% had no opinion
MCG Health Replaces 21 Ventilator-Day Guideline: Your Cheat Sheet to What This Means for Patients

MCG Health's Revised Clinical Indications for Admission to LTACHs

What Revisions Were Made?
In March 2022, MCG Health published new Clinical Indications for Admission to LTACH, replacing the 21 ventilator-day standard with a more clinical guideline - three failed spontaneous breathing trials (SBTs).1

Why did the guidelines change?
A review of the latest research revealed that SBTs are considered a best practice for evaluating clinical necessity of long-term ventilation, and that delaying discharge of ventilated patients to an LTACH may negatively influence the probability of liberation.2,3

How does this change help ventilated patients?
The revised guidelines promote transferring patients to LTACHs as soon as clinically appropriate, allowing for earlier access to specialized ventilator care that can improve outcomes.

Who is MCG Health?
MCG Health is a healthcare group that publishes guidelines for patient treatment and transition, based on the latest research.

Unique Aspects of LTACHs Such as Kindred Hospitals That Can Improve Outcomes for Ventilated Patients

EXPERTISE IN VENTILATOR CARE
• Ventilator-supported patients make up more than 25 percent of LTACH admissions4
• Kindred is pursuing certification from The Joint Commission in Respiratory Failure in all hospitals

INTERDISCIPLINARY CARE TEAMS
• Teams of pulmonologists, ICU-level nurses, respiratory therapists, and rehabilitation specialists collaborate to develop customized care plans
• At Kindred, these teams meet at the patient’s bedside daily to discuss goals and progress

SPECIALIZED REHABILITATIVE CARE
• Rehabilitation services provided at an LTACH are led by PTs, RTs, OTs and SLPs and are integrated with specialized acute care
• Kindred’s Move Early Program incorporates mobilization in the treatment plan as early as possible, even for ventilated patients

Visit kindredmanagedcare.com to request a conversation about how Kindred Hospitals’ level of service can help manage your critically complex patients.

REFERENCES
Across the country, Americans are feeling the squeeze of an inflation rate not seen since the early days of the Reagan administration. The Bureau of Labor Statistics (BLS) reported that July 2022’s rate of inflation was 9.1%, five-tenths of a point higher than June. A trip to the grocery store will cost 12.2% more than last year; a new car, 11.4% more; and gas, 60% more.

But healthcare is one segment of the economy that isn’t feeling the effects of inflation so far. While the rest of the economy sloshes about in a stormy sea of uncertainty, healthcare is a 3.2%-rate-of-inflation island of stability, according to BLS and the Peterson Center on Healthcare-Kaiser Family Foundation (KFF) Health System Tracker.

“So far, healthcare prices are not rising particularly rapidly,” says Matthew Fielder, a senior fellow at the University of California Brookings Schaeffer Initiative for Health Policy at the Brookings Institution. “In fact, (healthcare costs) are, if anything, only barely up relative to where they were in recent years.” That hasn’t always been the case. Since 2000, healthcare prices, including insurance, drugs and equipment, have risen 109.2%, whereas consumer goods and services during that time rose 68.8%, according to the Peterson-KFF Health System Tracker. In the past 20 years, inflation in the general economy has outpaced healthcare prices only five times, and in three of those years, the difference was less than 1%, according to the tracker.

So why are healthcare costs protected against inflation so far? The reasons are numerous, Fielder says, including the index used to measure inflation.

The BLS publishes data from the consumer price index (CPI), which gathers information for out-of-pocket consumer healthcare expenses. Based on that, BLS says for medical services (doctors and hospitals) has ticked up to roughly 4.8% while inflation for medical care commodities (over-the-counter and...
Fielder believes data from the personal consumption expenditures price index (PCEPI) paints a more nuanced picture of inflation. Like the CPI, the PCEPI tracks out-of-pocket consumer healthcare expenses but adds in expenditures made for consumers by employers, insurers and the government. Crunch the PCEPI stats and healthcare prices are up only 2% ending in May 2022.

“We’re talking about unit prices for service, which ultimately translate to what consumers actually pay because their cost sharing is typically based on what their insurance plan or what Medicare is paying their providers,” he says.

Turns out, timing is everything and may explain healthcare’s antibodies to 2022’s soaring inflation. Medicare sets its rate schedule for the coming year during the summer and fall of the year before. The projections for inflation it uses are usually finalized early in the year. Consequently, CMS’ rate increases for 2022 were finalized sometime in 2021, and the increases to provider input costs were small because CMS didn’t factor in an historic inflation rate.

“CMS didn’t increase those prices very much for 2022,” Fielder says. “As a result, the price growth in Medicare was pretty small for 2022, probably considerably smaller than what we have actually seen in provider input costs.” While Medicare publishes its prices, private insurers negotiate rates and sign contracts with hospitals and doctors’ offices months before the new year.

With inflation on the uptick most of this year — and showing little sign of receding — will it be reflected in Medicare’s 2023 rates and those of private insurers? Not necessarily. Just because CMS missed its projections this year doesn’t necessarily mean it will make up the difference next year.

“On the Medicare side, there may not be another shoe to drop,” Fielder says. “And to the extent that Medicare rates actually directly influence private negotiations, that may restrain rates to some degree” on the private side.

But Mark Pauly, professor emeritus of health care management at The Wharton School of the University of Pennsylvania in Philadelphia and the Leonard Davis Institute of Health Economics, says the days of healthcare’s low rate of inflation relative to the rest of the economy are numbered.

“The current slow pace of healthcare prices, which the last CPI data I saw had doctor and hospital prices among the lowest, if the not the lowest, components, that is not likely to last because (of) the input prices, particularly labor that has to be covered by hospitals and doctors,” he says. “They have to pay, more or less, the same wage rates as everyone else.”

Hospitals have been able to absorb some of those wage increases, Pauly says, because of COVID-19 pandemic money from the federal government. When that dries up, things may change.

“My guess is healthcare costs will come back closer to average in terms of growth rate,” Pauly says. However, he adds, compared to goods like gasoline, healthcare is not experiencing any major supply glitches except for a few things like vaccines.

Robert Calandra is an independent journalist in the Philadelphia area.

---

**Premiums are going up in 2023**

The full force of inflation may not be hitting healthcare this year, but there are signs that might change in 2023.

Every year at about this time, health insurers are required to notify state-level insurance regulators what their premiums will be in the coming year.

The Peterson Center on Healthcare and the Kaiser Family Foundation (KFF) recently reviewed the filings of 72 insurers in 13 states and the District of Columbia. They focused on plans being sold in the individual market on the Affordable Care Act (ACA) exchanges because, they said, the filings for those plans tend to more detailed and are publicly available.

According to Peterson-KFF calculations, the median increase in premiums from 2022 to 2023 among these plans is 10%. The insurers that quantified the effect of the COVID-19 pandemic on their costs and therefore their proposed — state regulators must approve the rates — premiums said it was a relatively small factor, accounting for between 1% and 2%.

The larger factor is the overall health cost trend, which reflects both prices (the amounts that doctors, hospitals and drug companies charge) and utilization (the use of medical services and pharmaceuticals). Many insurers are projecting an increase in the healthcare cost trend of between 4% and 8% next year, according to the Peterson-KFF researchers, who noted the trend is likely to affect premiums in other insurance markets, not just those in the ACA individual market.

Some insurers mentioned in their filings that inflation in the rest of the economy is likely to start working its way into healthcare. Hospitals and physician practices are likely to experience the effect of labor shortages, resulting in wage increases, and supplies becoming more expensive.

— Peter Wehrwein
Finding value in value-based agreements: a real-world success story

Authors

Darren Gettings, RPh
Vice President and Chief Supply Chain Officer, IngenioRx, Morristown, NJ, USA

Hani Sefain, PharmD
Pharma Contracting Strategies Director, IngenioRx, Morristown, NJ, USA

Mark Cziraky, PharmD, CLS
President, HealthCore, Inc., Wilmington, DE, USA

Jay Visaria, PhD, MPH
Director, Pharmacy Economics at HealthCore, Inc., Wilmington, DE, USA

Cory Grevenitz, PharmD
Associate Director Strategic Partnerships, Takeda Pharmaceuticals U.S.A., Inc., Lexington, MA, USA

Kyle Null, PharmD, PhD
Senior Director Outcomes Research and Data Science, Takeda Pharmaceuticals U.S.A., Inc., Lexington, MA, USA
Value-based agreements (VBAs) aim to improve evidence-based patient access to new medicines, promote medication compliance, and provide a risk-sharing mechanism between pharmaceutical manufacturers and payers. When thoughtfully executed, VBAs use evidence-based medicine practices and effectiveness data to promote appropriate utilization of therapies. This in turn leads to improved patient health, reduced resource waste, and lowered overall expenditures for all stakeholders, which make healthcare more affordable and cost-effective.

VBAs can be complex and require extensive knowledge of the clinical treatment approaches, medical adjudication system, and cooperation between contracting parties. A successful VBA requires experience in managed care, sophisticated analytical expertise, and a trust-based relationship between a payer and pharmaceutical manufacturer. Using real-world VBA examples, in this article we provide insights into one such evolving successful cooperation between a pharmaceutical manufacturer and a payer, and describe how their unique, collaborative VBA approach was successful in improving healthcare delivery and patient access to appropriate medication. We hope that by encouraging transparency and by sharing this innovative example, payers and pharmaceutical manufacturers can collaborate to promote use of evidence-based medicine and improve access to appropriate therapies. This innovative VBA approach enhances traditional payer–manufacturer transactional relationships to extract meaningful insights to inform and evolve VBA strategies, ultimately delivering additional value for all stakeholders.

**Figure 1.** Executing successful value-based agreements requires specialist expertise and a trust-based partnership
Background:
the evolving VBA landscape

In recent years, the implementation of VBAs has gained widespread attention in managed care because of a common aim among industry stakeholders for these agreements to increase the value derived from the healthcare system. However, this terminology has proven to be a catchall for agreements that have been shown to deliver highly variable levels of utility. Even a seemingly rudimentary task, such as defining VBAs, has proven difficult to gain consensus; even more challenging has been the effort to translate discussion to real-world action.

In 2017, a panel of Academy of Managed Care Pharmacy members convened and agreed a consensus definition for VBAs: “a written contractual agreement in which the payment terms for medication(s) or other healthcare technologies are tied to agreed-upon clinical circumstances, patient outcomes, or measures.” Since 2017, the VBA landscape has continued to evolve as manufacturers and payers work collaboratively to define new best practices and develop novel contract designs. This article outlines a real-world example of this definition and the application of a specific VBA.

VBAs provide a means for risk-sharing between a pharmaceutical manufacturer and payer. They are often implemented to address uncertainties surrounding the real-world effectiveness of new treatments relative to the efficacy upon which the medication was approved by the Regulators. Measures are typically linked to the outcome(s) of an agreed program of prospective data collection that is designed to assess the performance of the drug. The nature of data collection varies. For example, the VBA may address persistence issues by offering a ‘warranty’ to offset the uncertainties of real-world utility at the time of approval, potentially providing patients with faster access to new therapeutics, ultimately to expedite improvements in patient outcomes. More progressive applications of VBAs may assess treatment effectiveness by measuring outcomes related to the therapy. All parties share the cost risk if these desired outcomes are not achieved.

Implementation challenges, misaligned incentives, and a lack of trust between payers and manufacturers create barriers to successful implementation of VBAs.

However, when anchored by a trusting relationship between payers and manufacturers who seek to improve the lives of patients, VBAs can offer unique opportunities for insight generation. This allows payers and pharmaceutical manufacturers to gain a deeper understanding of the patient journey, which gives patients access to appropriate treatments. Using real-world examples, in this article we illustrate how a payer–manufacturer partnership evolved through the implementation of two VBAs that ultimately led to deeper insights and improved clinically appropriate access to one medication for patients with inflammatory bowel disease (IBD).
The challenge: partnering to improve persistence

Working together to improve patient management in IBD, IngenioRx (a pharmacy benefit management subsidiary of payer Anthem Blue Cross Blue Shield), HealthCore (a health economics and outcomes research subsidiary of Anthem), and pharmaceuticals manufacturer Takeda have taken a collaborative approach to refine and optimize their VBA development process.

Built upon principles of trust, transparency, and cooperation, the organizations are using novel, data-driven approaches to improve patient access to healthcare and to optimize resource utilization.

The collaborative alignment between one of the largest payers in the USA and one of the largest pharmaceutical manufacturers in the world provides a large demographic of patients across different regions with access to a broad range of therapeutics. Importantly, the ongoing collaboration also presents an opportunity to better understand how treatments are used in a diverse real-world population.

The payer–manufacturer relationship was built around shared values and a long-term vision of optimizing healthcare spend by focusing on the health of the whole patient. Optimizing patient care and resource utilization requires an evidence-based, holistic approach that goes beyond simply defining and sharing the risk of a particular event. Instead, this collaboration seeks to improve healthcare delivery by gaining a deeper understanding of the causes of treatment discontinuations. These learnings will be applied so that patients can access appropriate individualized treatment regimens to improve their clinical outcomes and treatment experience as quickly as possible.

The first VBA design that we describe was developed for an IBD treatment. A number of biological IBD therapies are currently available, but treatment persistence is often suboptimal, with up to 31% of patients discontinuing therapies within 6 months.7 The first iteration of the VBA was a warranty-type design based on treatment effectiveness and continuation, in which the economic risk of patients discontinuing treatment was shared between the manufacturer and payer. All parties were aligned in their objective to help promote the appropriate use of treatments in patients who benefit after the decision to implement therapy was made by the clinician. Treatment continuation data were collected as part of the VBA and provided an opportunity to gain real-world insights into the reasons for treatment discontinuations, which could support patient management moving forward.
The VBA solution: collaborating for success

The VBA was intentionally kept both simple and inclusive to ensure that the measure was operational and conferred mutual value in the arrangement. A common pitfall in executing mutually beneficial VBAs is making them overcomplex, which creates insurmountable barriers to successful adoption and could cause the administrative burden to outweigh the benefits of the agreement. To create a successful VBA environment, all parties must be willing to accept a share of the risk. Introducing too many caveats and stipulations (e.g. decision rules, restrictive inclusion and exclusion criteria, and excessive data requirements) adds to the administrative burden of measuring outcomes and tracking claims, which ultimately detracts value for all parties.8

It is crucial that the right balance is found between identifying a measure that is clinically meaningful and one that is straightforward to operationalize.

Striking this balance requires a multidisciplinary approach that combines: sophisticated analytical capabilities for administrative claims data analysis; enhanced data assets allowing for more extensive and relevant analyses; therapy area expertise for the identification of meaningful endpoints; and clinical experience to ensure that the measures are fully operational in a real-world setting. Ensuring simplicity in the agreement also allows for a more accurate forecast and prediction of VBA performance, creating a more informed environment in which all parties can assess their share of the risk before entering into the agreement.

In the early development stages of the VBA, rates of treatment discontinuation from clinical trials were discussed and claims data were utilized to evaluate how those numbers translated to real-world populations. This bilateral transparency and clarity in the early stages established a solid foundation of mutual trust, which has grown into a long-term working relationship between the two organizations.

The results: information exchange and actionable insights

This initial agreement and the data generated allowed for a deeper exploration of claims data to identify the costs associated with various sites of care. To maximize the potential of the data, a routine analysis of the VBA data was conducted to assess the performance of the therapy. This analysis demonstrated that the average cost per claim was heavily influenced by geographical location and the site of care. Patients located in the northeast region of the USA incurred higher costs. In these high cost-per-claim scenarios, patients received treatment infusions in an outpatient hospital setting, rather than in lower-cost alternatives (such as the home or physician’s office). At-home administration might not be suitable for all patients, for example, people with disease complications; however, the data also revealed...
that a large proportion of patients who were receiving treatment in the hospital were free of complications and therefore might be candidates for home administration, if appropriate.

**Figure 2.** Place of service influences relative claim cost

![Relative claim cost by place of service](image)

With these learnings, further analyses were conducted to estimate the potential impact on spending if a proportion of patients with no complications switched to infusions at home or in the physician's office.

**These additional data analyses identified a simple, yet effective, means of reducing costs without compromising patient outcomes.**

Translating data to action, IngenioRx shared the results with appropriate stakeholders to help initiate care management changes to optimize cost-per-claim expenditures and improve care delivery.

The site-of-care findings may also be applicable to other therapeutics with similar characteristics, which could yield additional cost savings across broader populations further down the line. Patients may also benefit directly from these findings. Studies indicate that home administration of infusion-based treatments may offer quality-of-life benefits over hospital-based administration, potentially providing convenience, fewer unnecessary hospital trips, and reduced out-of-pocket costs for the patient.

**The VBA evolution: a holistic approach to patient care**

While the first phase of the VBA was considered a success, all parties wanted to evolve the agreement to align with their broader objective of focusing on the health of the whole patient. Using the detailed diagnostic categories for ulcerative colitis and Crohn’s disease in the International Statistical Classification of Diseases and Related Health Problems 10th Revision, a model was developed to assess how medical costs varied depending on the patient’s diagnostic category, using real-world data. Based on this model, the parties collaboratively developed a next-generation VBA based on the predicted total cost
of care; whenever a patient’s total IBD-related medical expenditures exceeded the expected value based on their clinical characteristics, the risk for the excess cost was shared between manufacturer and payer.

Because this type of methodology is more complex, execution requires additional resources from all parties. Trust and transparency are also critical, the groundwork of which had been laid during the initial agreement phase. To pressure-test the model, each organization conducted an internal independent validation analysis to verify the findings. These additional steps gave all parties the confidence to move forward with the new model.

The second generation of this VBA is now in use, and initial outputs indicate that the model is performing as forecasted, with patients in high-risk groups incurring higher average total medical costs than those in low-risk groups. The hope is that a rich data set will be yielded to help provide a better understanding of how the therapy performs across different IBD patient subgroups, which will ultimately help to predict outcomes and further improve patient management in the future.

Finding value in VBAs

In conclusion, based on our real-world experience with this initiative, we have found that “YES!” there is value to be found in VBAs. VBAs apply evidence-based medicine practices and data analytics to promote appropriate utilization of therapies. Successful execution of a VBA seeks to improve patient health and access to medicine, reduce wastage to the system, and lower overall expenditures for all stakeholders, making healthcare more affordable. The important enablers of these aims and their success are collaboration and strategic alignment. As discussed in this article, the three main components to a successful agreement are: (1) managed care expertise; (2) sophisticated analytical expertise; and (3) a trust-based relationship. We have demonstrated that VBAs are an important tool for improving patient access to medicines and ensuring that we continue to have affordable healthcare plans that provide for existing and newly approved therapeutics. This arrangement demonstrates that with a shared vision of putting the patients’ needs first and through data exchange and collaboration, drug manufacturers and payers can uncover new learnings and actionable insights to improve and optimize healthcare delivery. These learnings have laid the building blocks for the next generation of VBAs.

Figure 3. Critical factors for value-based agreement success

- Real-world application: Measure must be easy to operationalize.
- Design with purpose: Secure product access while considering data opportunities.
- Transparency: Clearly communicate the measure and the expected outcome.
- Trust: The foundation of a long-term relationship and successful agreement.
Acknowledgments

Takeda would like to acknowledge Jeff Jeffrey, Corporate Account Director; Rebecca Williams, Corporate Account Director; Kellyn Moran, Associate Director Outcomes Research and Data Science; and Timothy Downing, Senior Director Strategic Partnerships & Managed Markets Analytics.

IngenioRx would like to acknowledge Barbara Minton, Staff Vice President Pharma Contracting, and Aruna Naik, Financial Consultant SR.

References


In summer 2020, hospitals were reeling from the COVID-19 pandemic. Personal protective equipment was in short supply. Revenues cratered with the cancellation of elective surgeries. Frontline workers tried not to get sick as they treated waves of infected patients.

Also during that tough summer, five drug manufacturers announced they were potentially ending 340B Drug Pricing Program discounts to hospitals and other types of providers — “covered entities,” in the parlance of the program — for any medications dispensed by contract pharmacies. Now the number of manufacturers actually or considering restricting discounts has grown to 17, including big names like Johnson & Johnson, Merck, Bristol Myers Squibb, AstraZeneca and Pfizer.

The restrictions have spawned a flurry of lawsuits, 16 so far, mostly manufacturers suing the federal government to vacate its order to comply with 340B discounts.

The program has so many lawsuits that Emily Cook, a partner at McDermott Will & Emery started a 340B litigation tracker. The contract pharmacy issue makes up almost half of the 37 340B lawsuits.

As these legal issues slowly get resolved, hospitals and other providers participating in the program have seen a significant source of funds vanish. 340B Health, a membership group and lobbying organization for more than 1,400 participating hospitals and health systems, conducted a survey of 500 hospitals in March 2022. It showed that larger, mostly urban hospitals anticipate an annual median loss of $2.2 million due to the missing 340B discounts and that 10% of the health systems expect at least a $21 million loss in savings each year. Smaller, mostly rural hospitals expect a median $448,000 loss in savings annually, with 10% of them anticipating at least $1.3 million in losses annually.

Hospitals participating in the 340B program provide 60% of the country’s uncompensated care and 75% of the hospital care for those with Medicaid, according to 340B Health. “These are some of the largest drug companies in the world,” and the restrictions include some of the most important drugs patients rely on, including chemotherapy drugs, says Bharath Krishnamurthy, senior associate director of health policy and analytics at the American Hospital Association (AHA). “Hospitals rely on these relationships they have with community pharmacies to ensure that their patients have access to these drugs.”

Proponents of retaining the discounts say that the loss is harmful to hospitals’ abilities to provide services to individuals with lower incomes and to even keep the health system’s doors open. Critics of the program, most of whom are drug manufacturers, say the program has grown too large, with for-profit pharmacies and health systems reaping profits and not sharing evidence of whether the funds are used to help the intended patients.

Expansion under the ACA

The 340B program was created in 1992 to replace the voluntary discounts manufacturers provided to some safety-net clinics. Pharmaceutical companies that want their medications covered by Medicaid or Medicare Part B must offer 340B discounts, usually 25% to 50% — and sometimes higher — to organizations that participate in the program. Healthcare providers receiving the discount are then reimbursed by payers at normal prices. They pocket the difference, with the understanding that the funds should be used to provide that charitable care for people who are
uninsured or underinsured.

In 1996, hospitals and clinics without their own pharmacies were allowed to designate one contracted pharmacy. In 2010, the Affordable Care Act (ACA) allowed entities covered by 340B to contract with an unlimited number of pharmacies to dispense outpatient medications. The thinking was that additional pharmacies would mean greater access for patients in socioeconomically disadvantaged communities.

But that change led to rapid growth in contracting pharmacy arrangements under the 340B program and, say the critics, a distortion of what the ACA and the 340B program were trying to accomplish. The University of Michigan Health System had three pharmacy contracts in 2011. By 2021, that number had grown to 598 contracts. The Cambridge Health Alliance in Massachusetts went from 77 contracts in 2012 to 563 in 2021. Rush University Medical Center in Chicago went from four in 2012 to 468 in 2021.

According to the Government Accountability Office, about one-third of the 12,000-plus covered entities in 2018 had agreements with contracted pharmacies. In 2010, there were 1,300 contract pharmacies. Over the next decade, the number skyrocketed, and by 2021, there were 31,000, according to Kaiser Health News.

The program mushroomed for other reasons. In its early years, not all healthcare organizations knew about 340B. Also, in addition to allowing an unlimited number of contract pharmacies, the ACA made critical access hospitals eligible to participate, expanding the number of participants. Critical access hospitals, a CMS designation, are smaller hospitals in rural areas.

According to the Government Accountability Office, about one-third of the 12,000-plus covered entities in 2018 had agreements with contracted pharmacies. In 2010, there were 1,300 contract pharmacies. Over the next decade, the number skyrocketed, and by 2021, there were 31,000, according to Kaiser Health News.

The program mushroomed for other reasons. In its early years, not all healthcare organizations knew about 340B. Also, in addition to allowing an unlimited number of contract pharmacies, the ACA made critical access hospitals eligible to participate, expanding the number of participants. Critical access hospitals, a CMS designation, are smaller hospitals in rural areas.

The University of Michigan Health System had three pharmacy contracts in 2011. By 2021, that number had grown to 598 contracts. The Cambridge Health Alliance in Massachusetts went from 77 contracts in 2012 to 563 in 2021. Rush University Medical Center in Chicago went from four in 2012 to 468 in 2021.

Karyn Schwartz, vice president of policy and research for PhRMA, a trade organization representing the pharmaceutical industry.

**Why now?**

Although the loosening of the rules to allow for an unlimited number of contract pharmacies in the 340B program began in 2010, it took a decade for pharmaceutical companies to decide to restrict the discounts. Why the delay?

“The very short answer as to ‘Why now?’ is that the drug manufacturers are likely to get a more favorable outcome now than they would have if they (had) litigated this probably five years ago,” says Cook. Several recent Supreme Court cases resulted in regulated entities gaining opportunities to challenge federal interpretation of statutes, including a ruling in June in favor of the AHA, which challenged cuts to drug reimbursement to hospitals in the 340B program.

With 340B, “we have a statute that does not have defined terms in it, and it is open to a very wide range of interpretations that have not previously been litigated. And so the parties are now having to turn to the courts to interpret that statute,” Cook says.

The statute’s lack of clear definitions, such as the role of the contract pharmacy and how the funds are spent, is causing many of the problems leading to the current issues. “There are 15 entities listed in the statute that manufacturers are required to provide discounts to, and contract pharmacies are not listed,” says Nicole Longo, senior director of public affairs for PhRMA.

Not everyone agrees. “We think
the statute is clear,” says Aimee Kuhlman, vice president of advocacy and grassroots at AHA, adding that it was concerning — and wrong — for the drug companies to eliminate payment discounts for drugs dispensed at contracted pharmacies. The 340B statute doesn’t specifically mention contract pharmacies, but it does say that pharmaceutical companies must provide these discounts to eligible hospitals through pharmacies, says the AHA’s Krishnamurthy. The statute is necessarily broad because when creating the program, Congress recognized that each participating hospital’s situation was unique, so it gave the hospital flexibility to use the savings as they saw fit, he says.

**Reporting requirements**
The government does not require covered entities to share how they use the 340B funds. “It’s certainly possible they’re spending it investing in more care for low-income communities, but we’ve seen no real evidence of that,” Schwartz says. “I think that the biopharmaceutical industry’s main concern is that we provide tens of billions of dollars in discounts every year with no way of knowing how that money is being used to help patients, and we just have to take hospitals at their word.”

In 2018, the AHA issued 340B good stewardship principles recommending that participating hospitals annually share the estimated savings amount and the services funded with the savings. “As far as any additional calls for mandatory transparency, I think that there is some concern about cherry-picking information that doesn’t necessarily tell the full picture of what hospitals are doing to serve their communities,” Kuhlman says.

Some manufacturers are offering the discount for drugs dispensed at contract pharmacies if the healthcare organization provides additional information not required by the government. “Each manufacturer has its own requirements in terms of what they’re allowing and not allowing and what types of data they want and need,” says Krishnamurthy of the AHA. That might be detailed claims-level data. “For hospitals, the biggest concern is burden. They have to aggregate the data from different vendors that they contract with, (put the data) all together in a format that is different for each manufacturer and then submit (the) data, and then wait to see if there are any issues with the data they’ve submitted and correct that.”

Some manufacturers — Novartis, for example — are offering the discount only for contract pharmacies located within a 40-mile radius of a covered entity, which can be difficult if a patient in a rural area needs specialty drugs. Others have reverted to allowing only one contracted pharmacy to be included, Krishnamurthy says.

**The future of 340B**
The swarm of controversy and litigation surrounding the 340B program isn’t going away any time soon. At a minimum, the lawsuits are putting a fresh spotlight on the program and raising questions about whether it benefits patients, says PhRMA’s Longo. When measured by the amount of money paid by payers and patients, the 340B program is the second-largest federal prescription drug program after Medicare Part D, and by 2026, it is anticipated to be the largest drug program in the country.

In addition to mandatory transparency requirements, Schwartz would like to see regulatory require-ments allowing patients accessing drugs through a covered entity to have access to a sliding scale for purchases, so they don’t have to pay list prices. Not all medication discounts are directly passed on to patients. “As we’re having a broader discussion in the United States about addressing health inequities, it’s even more important to make sure our safety-net programs are working,” says Longo. “We hope that all the stakeholders can come together and find ways to fix the program because the industry continues to be committed to this program. But it needs to work for patients.”

The AHA says that these actions are hurting hospitals and affecting their ability to care for patients. “It’s just a very poor decision of manufacturers to enact these policies and hurt the providers and patients that need the most,” says Krishnamurthy.

**What are contract pharmacies?**
The contract pharmacies are not directly covered by the 340B program and do not receive the discounts from the manufacturers themselves. The discounts are given to “covered entities,” such as hospitals and federally qualified health clinics. These pharmacies have contracted with the covered entities. They can dispense the medications for these covered entities and get paid for doing so. If the drug manufacturer does not provide the discount for these pharmacies to dispense, the covered entity receives no financial benefit from the 340B program to use for its charitable care. Pharmacies receive payment for dispensing the medications.
Are primary care physicians an endangered species?

Providing regular care for a panel of patients is becoming a team effort, with the team captain not necessarily an M.D. or a D.O. by TIMOTHY KELLEY

You didn’t hear it here first. The role of the primary care physician (PCP) is changing — and in some vexing ways. Long gone, of course, is the all-knowing, black-bag-carrying (middle-aged White male) Marcus Welby of two generations ago. But the gatekeepers of the 1990s and early 2000s also seem to have left the building. What’s left is a beleaguered, dwindling profession facing too many patients, too much paperwork and not enough pay — or minutes in the day.

Why, then, do two leading PCPs asked about this crisis — while no Pollyannas — sound unexpectedly hopeful?

Ishani Ganguli, M.D., M.P.H., of Harvard Medical School and Brigham and Women’s Hospital, and co-authors sounded an alarm in an article published in the Journal of General Internal Medicine in 2019. They noted that five national surveys had shown declines of 6% to 25% in primary care visits from 2008 to 2016. They cited ways that the Affordable Care Act and other reform efforts have tried to bolster PCPs’ role, increasing reimbursement and promoting such innovations as the accountable care organization and the patient-centered medical home. “The decline,” they wrote dryly, “implies they have fallen short.”

“There is clear evidence,” says Ganguli, “that burnout rates are higher among primary care clinicians compared to other specialties.”

But pressure on PCPs shouldn’t be confused with a lessening need for primary care. Megan Ruth Mahoney, M.D., MBA, chief of staff at Stanford Health Care and a Stanford professor, says the way to solve today’s primary care crisis is to apply more fully the “team” model already used in many offices.

Asked what care will look like 20 years from now, she predicts that “higher-risk, medically complex patients” will see doctors for assessment, diagnosis and conditions involving multiple organ systems. But other patients, says Mahoney, will likely be managed by other health professionals, including advanced practice providers (nurse practitioners and physician assistants), but also pharmacists, nutritionists, nurses, behavioral health specialists and even medical assistants. The PCP will play an important role as “the captain of care, coordinating care. But I’m not sure that needs to be a physician,” says Mahoney.

Both physicians believe in the team approach, but they admit its downside: the potential “dilution,” as Ganguli puts it, of the personal trust between patient and physician that has long been considered vital to adherence and quality care. Mahoney agrees. The big hurdle, she says, is the change patients face when they encounter the team.

“Trust obviously is foundational,” she says, but her group has succeeded “in transferring that trust to an entire team.” And seeing more individuals for care means more people — potentially — to bond with. “I have patients who love the nurse I work with,” says Ganguli. “They see us as a unit.”

The team approach is also good for health equity, Mahoney contends. A team of providers increases the likelihood that patients will find someone in the office with a similar cultural background. Moreover, she says, a care team can convene to discuss all aspects of a patient’s health: food security, social access to community resources, drug-drug interactions. “Longitudinally, it’s better when you have more minds thinking about the patient.”

Teams are no panacea. Ganguli sees an urgent need for a payment system that better reflects what primary care providers — doctors or not, in teams or not — actually do. “It’s a misconception that primary care is easier than specialty care,” she stresses.

Timothy Kelley is an independent journalist in New York.
The private equity bet on healthcare

Private equity firms have pulled back some this year, but money has been pouring into the healthcare sector. Will the cash infusion make healthcare more efficient or drive up costs as investors seek returns? by SUSAN LADIKA

A record amount of private equity flooded into the healthcare sector in 2021. This year, investors seem to be proceeding with a little more caution.

Even so, the investment is a major development in how healthcare gets financed and the makeup of the sector’s ownership interest. Some are thumbs-up on the healthcare push by private equity firms, arguing that the surge in investment will improve management and operations. Others see the entry of the profit-seeking enterprises as driving up healthcare costs and, especially in the United States, further fracturing an already fragmented healthcare system.

After declining in 2020 as the COVID-19 pandemic swept the world, the total disclosed value of private equity investment in healthcare more than doubled globally last year. It reached $151 billion in 2021 compared with $66 billion in 2020 and $79 billion in pre-pandemic 2019, according to Bain & Company, a Boston management consulting company. At the same time, the number of healthcare deals involving private equity surged from 380 in 2020 to 515 in 2021, Bain reported.

Maximizing return
But not everyone believes private equity is a boon for the healthcare sector. Private equity investors “exist to make money. They invest in companies that they believe will have a significant return,” argues Elizabeth Mitchell, president and CEO of the Purchaser Business Group on Health. Private equity firms aim, she says, to “increase healthcare costs to maximize return.”

Her organization is a nonprofit coalition of almost 40 private employers and public entities that are major purchasers of healthcare services. Members include companies such as Microsoft and Walmart.

Some private equity-backed staffing companies, for example, tend to utilize surprise billing, which drives up healthcare costs, says Mitchell. Surprise billing is shorthand for patients receiving bills from providers who are out of network even though they were seen in an in-network facility.

Another of Mitchell’s concerns is what she sees as the focus of private equity investment on relatively narrow areas of care (emer-
emergency department physicians, for example, or radiologists). Her group wants to see more integrated care, she says, and with private equity undercutting integration, healthcare in the U.S. is "harder to navigate and harder to manage," Mitchell says.

**Ripe for change**

A recent survey of leaders of private equity firms by McDermott Will & Emery and WSJ Intelligence, part of The Wall Street Journal, found that 40% of respondents had the most interest in investing in healthcare IT and telehealth in the next three years, followed by 37% interested in partnerships with large health systems. More than 30% were interested in investing in pharmaceuticals and biotechnology, and in physician practice management. "Large health systems have been struggling recently because of the pandemic," Sokol says, adding that even before the pandemic, "a lot of profitable procedures migrated out of hospital settings."

The survey respondents said they were most interested in healthcare industry inefficiencies, the expansion of value-based care models and reducing costs. Nearly three-quarters agreed that "the healthcare sector was ripe for structural change prior to the onset of the pandemic, which has accelerated opportunities for investing in new modes of healthcare delivery."

Mitchell agrees that "there is certainly need for innovation" in healthcare. Some private equity investment leaders have expressed support for value-based care, and Mitchell says "incumbents have failed miserably" when it comes to implementing value-based care models. "It’s not that the incumbents don’t require some disruption." But she is skeptical that private equity investors will improve the situation. Findings from a study conducted by researchers at Weill Cornell Medical College might stoke Mitchell’s skepticism. They compared nursing homes owned by private equity firms to those owned by other for-profit entities. Patients who stayed in nursing homes owned by private equity investors had more emergency room visits and hospitalizations, and that drove up Medicare costs for patients from those facilities, according to the results, reported last year in the journal *JAMA Health Forum*. Residents of private equity-owned nursing homes were 11% more likely to need care at an emergency room and almost 9% more likely to experience a hospitalization. Those services translated into Medicare costs that were 4% higher — $1,080 more per resident — for residents of the private equity-owned nursing homes than those of residents at the other for-profit homes.

The pressure to generate profits for private equity investors could result in a reduction in staff, services, supplies or equipment at those nursing homes, researchers said. "Our findings indicate that private equity firm-owned facilities offer lower-quality long-term care," Mark Unruh, M.S., Ph.D., associate professor of population health science at Weill Cornell Medicine, said in a press release. "The majority of revenue that pays for care in nursing facilities comes from public sources. After private equity acquisition, quality of care declines and Medicare spending goes up for residents, and that should be a concern for policymakers."

**Smaller appetite**

The largest private equity deal announced in 2021 was the $34 billion investment in Medline, a medical supply company headquartered in Northfield, Illinois. The money came from private equity firms Blackstone, The Carlyle Group and Hellman & Friedman. The second largest of the year was Bain Capital and Hellman & Friedman investing $17 billion in Athenahealth, a health tech company headquartered in Watertown, Massachusetts.

But during the first part of this year, private equity lost some of its appetite for healthcare investment. A report by KPMG found that from the fourth quarter of 2021 until the first quarter of 2022, activity by private equity investors in healthcare fell by as much as 50%. "Deal activity in 2021 was at a feverish pace that was unsustainable," says Ross Nelson, principal and national healthcare strategy leader for KPMG.

The KPMG report found that private equity companies slowed their investments in hospitals and health systems due to rising labor and supply costs, although interest in healthcare IT and physician practices remained strong. The Russian invasion of Ukraine also was a factor and raised further supply chain concerns. Nelson says the continued switch of patients from traditional Medicare to Medicare Advantage plans "will continue to drive deal activity longer term. At the same time, for many corporations, "balance sheets remain strong ... and (private equity) still has a lot of money to deploy."

Susan Ladika is an independent journalist in Tampa, Florida, who writes about healthcare and business.
CAR-T therapies are a new and promising treatment for cancer. The global market for CAR-T therapies is projected to increase from $2.9 billion in 2020 to $11.8 billion by 2025, according to MarketsandMarkets.

But some major obstacles loom ahead, cost being one of them. A single CAR-T treatment can run into the hundreds of thousands of dollars. Although CAR-T therapy is a relative rarity now and therefore not a huge burden on payers, as the number of patients receiving it increases, so will the cost and payer scrutiny. The enthusiasm about the promise of CAR-T is also tempered somewhat by the risk of cytokine release syndrome, an adverse effect that can be life threatening.

**Approvals**

CAR-T therapies involve genetically engineering a patient’s own T cells so they recognize and kill tumor cells.

Approved by the FDA in 2017, Kymriah (tisagenlecleucel) was the first CAR-T therapy to get the agency’s OK. Yescarta (axicabtagene ciloleucel) was next, approved a few months later as a treatment for large B-cell lymphoma in adults after at least two other kinds of treatment failed.

In 2021, the agency approved Abecma (idecabtagene vicleucel), the first CAR-T for multiple myeloma. And in February 2022, the FDA approved a second CAR-T therapy for multiple myeloma, Carvykti (ciltaclabtagene autoleucel).

Sankalp Sethi, the cell and gene therapy practice lead at ZS Associates, has helped more than 25 oncolgy manufacturers commercialize cancer innovations and notes that this approval marks a strong gain in efficacy outcome.

“Nearly all patients (98%) in the study of Carvykti achieved a clinical response, and 78% achieved a stringent complete response,” he says. “Time is needed to determine how the product impacts overall survival, though many say that these results represent a new gold standard in CAR-T efficacy.”

Abhinav Deol, M.D., a hematologist-oncologist at Karmanos Cancer Institute in Detroit, says in the third-line setting shows that about 30% to 40% of patients can have sustained remission after CAR-T cell therapy, Deol says. “Heavily treated (patients with multiple myeloma) can have disease control for over a year after one infusion of CAR-T cell therapy.”

**Limited availability**

For many patients, CAR-T represents their best potential option at a key moment of treatment eligibility. However, availability has been limited.
“These advancements mean these products can be more safely administered, more patients will be able to receive them and patients will be able to receive them earlier,” Sethi says. “Remember, when CAR-Ts first came out, only a select number of centers of excellence were certified to administer. Given the complex nature of the products as well as the serious potential (adverse) effects, there was a need for providers to build more experience with the products before allowing for wider distribution.”

Progress has been made in overcoming some of the chief barriers to access to CAR-T, says Sethi, which include traveling distance for patients, management of adverse effects and financial viability of the administering centers.

“We are now reaching a stage where access is much more widespread — at this time, 70% of the U.S. population lives within 50 miles of a center that administers a CD19 CAR-T,” he says. “Geographic access to these products will no longer be a major barrier for most patients.”

Additionally, providers have become more comfortable handling the adverse events that come with CAR-T, he says. “This means that for the right patients, outpatient administration is possible. Patients can stay with their families and caregivers while being monitored, improving their quality of life.

A recent study by ZS Associates also found that around 90% of CAR-T providers today are profitable overall with CAR-T administration.

“When first approved, CAR-Ts negatively impacted treatment centers’ finances, as reimbursement rates and mechanisms were still being sorted out,” Sethi says. “But we are now seeing that these centers have been able to become profitable through better management of (adverse) effects, applying markups and manufacturer discounts, and where applicable, receiving hospital-specific Medicare reimbursement adjustments. As a result, we expect more providers to be able to scale their capacity over time and offer CAR-Ts to more patients in the future.”

Supply chain issues

The supply chain and manufacturing challenges of CAR-T are center stage in discussion today.

Maria Whitman, global head of the pharmaceutical and biotech practice at ZS Associates, notes that Carvykti launched with a more limited number of certified centers (32) and limited manufacturing slots. “This means that although patients and providers are eager for these products, the benefit is limited to a very small proportion of patients deemed eligible.

“Looking forward, it is also a source of budding innovation in support of patients,” she says. “Limited capacity and commercial availability are not only a challenge for meeting demand, but for scaling accessibility.”

For instance, Novartis recently unveiled T-Charge, a next-generation CAR-T platform that is expected to develop the cancer-finding T cells in the patient’s body instead of in a cell culture, reducing manufacturing time.

Gracell Biotechnologies Inc.’s proprietary FasTCAR platform is currently being evaluated in trials in China, and the company claims it has “next-day manufacturing” capabilities.

“Manufacturing turnaround times have long been a barrier to broader accessibility of CAR-T, and these developments are a strong sign that we are moving toward a future where patients are no longer waiting weeks to receive product,” Whitman says.

The high cost of CAR-T is another obstacle. CMS announced in 2019 that Medicare would cover CAR-T, but some provider groups have expressed discontent with what they say are low rates.

“One important thing to note is the cost for these advanced therapies can lead to sticker shock,” says Deol. “But the cumulative cost of other cancer therapies over a period of time is very high too, and CAR-T therapy is generally a one-time cost.”

Keith Loria is a writer in the Washington, D.C., area who covers healthcare.
How employers, insurers are coping with abortion after Dobbs

Some are offering travel benefits.

by SUSAN LADIKA

An already-complicated patchwork of abortion coverage laws has become even more complex with the U.S. Supreme Court’s ruling to overturn Roe v. Wade. “It really is all over the place,” says Fabiola Carrión, J.D., director of reproductive and sexual health for the National Health Law Program’s Los Angeles office. “It really is all over the place,” she says. Some states had abortion bans that kicked in immediately after the court’s 5-4 ruling in June 2022. Others have seen their abortion bans temporarily blocked by the courts. And another group of states has moved in the opposite direction, strengthening their abortion rights statutes. “The legal landscape is changing rapidly,” says Meera Shah, M.D., M.P.H.,M.S., the national medical spokeswoman for Planned Parenthood Federation of America. Even before the Supreme Court ruling, laws governing insurance coverage of abortion varied widely from state to state. As of July 1, 2022, seven states required private health plans to cover abortions, 11 states restricted insurance coverage from private insurance plans and 25 restricted coverage from plans offered on state health exchanges, according to Guttmacher Institute, a research and policy organization committed to supporting sexual and reproductive rights. Coverage also varies tremendously for women who are insured through a health insurance. The 1977 Hyde Amendment forbids using federal funds for abortions unless a woman’s life is endangered or she is a victim of rape or incest, and many state Medicaid programs hew to that rule, which has been extended to include the military’s Tricare program, Medicare and the Indian Health Service. But 16 states get around the Hyde Amendment by using state funds to pay for abortions for women covered by their Medicaid programs. Fully insured health plans are subject to state insurance regulation, but self-funded plans fall under the Employee Retirement Income Security Act and aren’t governed by state insurance law. Instead, they fall under the jurisdiction of the U.S. Department of Labor.

Travel benefits
With all the differences among states, “for insurers, it could mean one version of a plan in one state and another in another,” observes Sarah Raaii, J.D., an associate in the law firm McDermott Will & Emery in Chicago who focuses on employee benefits. A number of health insurers, including CVS Health (the parent of Aetna), Cigna and Blue Shield of California have already come out in support of abortion rights and in support of their employees and clients. CVS Health said in an email: “We’ve made out-of-state care accessible for covered CVS Health employees residing in states that have instituted laws that limit access in their state. With the new (Supreme Court) decision, we are evaluating how we can best support the coverage needs of colleagues, clients and customers.” That includes, said the email, providing them “with the flexibility to choose medical and pharmacy benefits to best suit their needs. This includes, subject to plan terms and customer direction for self-funded plans, making out-of-
state abortion health care services more accessible and affordable.

Other payers, such as Blue Cross Blue Shield of Michigan and Blue Cross Blue Shield of Massachusetts, are developing or have developed a travel benefit for those who need to go out of state for an abortion. The Michigan Blues plan said in an email that group customers had requested expanded travel benefits for a number of services, including behavioral health and substance abuse disorder treatment, and that the payer was including an option for abortion coverage in the new benefit. The benefit will be available in the next month or two and will reimburse travel between the patient’s home and location at which they receive care.

But there are concerns that states in places where abortions are banned might try to restrict residents from traveling out of state for an abortion. “It’s potentially murky legal territory,” Raaii says. In a concurring opinion in Dobbs v. Jackson Women’s Health Organization, Justice Brett Kavanaugh said he didn’t think a state could prevent a woman from traveling to another state for abortion care. Raaii says when she has discussed Kavanaugh’s opinion with employers, “this has helped increase their confidence in an abortion travel benefit.” A number of major companies, including Tesla, Starbucks, JP Morgan Chase and Amazon, have said they will cover travel expenses for employees.

Much, though, remains unclear about the travel benefits and insurance coverage of abortion services in general. Carrión says even when companies and health plans say they will offer a travel benefit, it’s not clear the type of transportation that will be covered — the cost of gas if someone drives to another state, a bus ticket or an airline ticket. Will food and lodging be included? If so, for how many days? Carrión notes that some states have a waiting period of 24 to 72 hours before a woman can receive an abortion. Other variables include whether there will be coverage or consideration of loss of income and extra child care expenses.

Some statistics
In 2020, the most recent year for which figures are available, more than 930,000 abortions were performed in the United States, according to Guttmacher Institute. That was up slightly from 2019, when more than 916,000 abortions were performed. But it was far below the more than 1.5 million abortions that occurred in 1991. The abortion rate in 2020 was 14.4 per 1,000 women between the ages of 15 and 44. The rate has declined by half since 1981, when there were 29.3 abortions per 1,000 women. Access to contraception is believed to have helped reduce the abortion rate, and most private health insurance plans are required to cover contraception under the Affordable Care Act. Centers for Disease Control and Prevention data from 2019 for 47 states and the District of Columbia show that 57% of those who had abortions were in their 20s and that teens had just 9% of abortions.

President Joe Biden signed an executive order on July 8, 2022, that directed the U.S. Department of Health and Human Services to protect and expand abortion access, including to medication abortions; ensure access to all women for emergency medical care; and protect access to contraception. The order does not address issues such as costs and insurance.

An abortion in the first trimester costs about $600, Carrión says. Even those with health insurance may need to cover that cost because many policies have high deductibles. “It’s a big amount for people with low and middle incomes,” she says. “Hundreds of thousands of people can no longer access the abortion care that they need, and even more are living in confusion about what options are available to them,” says Shah of Planned Parenthood.

Carrie Baker, Ph.D., J.D., M.A., a professor of women and gender studies at Smith College in Northampton, Massachusetts, says her concern is: “Will women be doing dangerous things to get an illegal abortion?” With the bans in effect, Carrión says that “the people who are going to be most affected are people on the margins who don’t have access to healthcare and services already. “It will result in two Americas,” she adds. “One with abortion and one without.”

Susan Ladika is an independent journalist in Tampa, Florida, who writes about healthcare and business.
For someone has spent decades navigating the jagged regulatory and medical landscape of abortion in the United States, Beverly Winikoff, M.D., M.P.H., finds herself uncomfortably unsure about the future. “It’s not something you can ask me to enlighten you about because I don’t know which way it’ll go,” she told Managed Healthcare Executive® in a phone interview just days following the U.S. Supreme Court’s ruling in Dobbs v. Jackson Women’s Health Organization.

The 5-4 decision that the Constitution does not confer a right to abortion overturned Roe v. Wade and returned authority to regulate abortion to the states. The ruling had the effect of enacting so-called “trigger laws” in some states that made abortion illegal contingent upon the court’s rulings. Other states moved to take swift legislative action, either to protect the right to an abortion or to restrict it. All of which puts Winikoff in an odd position. She is president of Gynuity Health Projects, which since 2003 has made it its business to expand access to abortion by researching ways to make the procedure safer and more efficient. In a post-Dobbs world, Winikoff says the push to make abortion care more efficient has become even more urgent. She believes telemedicine could be a key part of the solution, even if patients have to travel across state lines to access it.

**TelAbortion study**
Winikoff has good reason for being a proponent of telemedicine abortion. One of Gynuity’s landmark accomplishments was the TelAbortion study, which showed that abortions using video consultations and medication abortion (most commonly mifepristone and misoprostol) were a safe, effective way to expand access to early abortions. The study was launched in 2016. Back then, “telemedicine” typically meant going to a clinic and then connecting with a doctor at another one. It was cumbersome and contrived, Winikoff says. “Why do you have to get them to go to a clinic, which has no doctor and a lockbox that’s going to pop open, and they’re allowed to take pills?” she asks. “It doesn’t make any sense.”

In results published in March 2021 in *Contraception*, the study’s investigators revealed that 95% of patients who received mifepristone and misoprostol by mail did not require further procedures and that 99% of patients who completed a questionnaire said they were satisfied by their experience. The findings were partially responsible for the FDA permanently lifting a requirement that abortion pills be dispensed in a clinic. Before that, the pills could only be mailed to patients within the context of the clinical trial. The percentage of abortions in the US performed via medication crossed 50% for the first time when the COVID-19 pandemic hit, according to the Guttmacher Institute.

Abortion by telemedicine might have become mainstream like telemedicine for primary care has become. The Dobbs decision has complicated matters, to put it mildly, because it means many patients might not be able to access abortion via telemedicine — at least not legally.

**The Irish experience**
Perhaps the closest one can come to predicting the role of telemedicine abortion in a post-Dobbs world is to look at the experiences of women in Ireland and Northern Ireland, where abortion was illegal until 2019.
A 2017 study published in *BMJ* examined the self-reported outcomes of 1,000 women in Ireland and Northern Ireland who sought abortion medications through Women on Web, an online telemedicine service that provides abortion medication to women in areas where abortion access is restricted. Like the TelAbortion study, this study — which included patients who used the Women on Web telemedicine service between 2010 and 2012 — had a 94.7% success rate of ending the patient's pregnancy without the need for surgical intervention.

The study results showed that users of self-sourced abortion pills tended to be older, possibly because they were more likely than their younger counterparts to recognize their pregnancies early enough to use medication abortion. The findings also suggested that women with adequate economic means were more likely to travel to other jurisdictions for abortions. However, the results showed some patients preferred telemedicine because it was perceived as more private or because they feared prosecution.

“Women who have had a self-sourced abortion and those who have had an early pregnancy loss are clinically indistinguishable, but these events raise the concerning possibility of a chilling effect, whereby women might be reluctant to seek care for fear of being reported,” wrote the study’s corresponding author, Rebecca Gomperts, M.D., M.P.P., Ph.D., who founded Women on Web.

**Post-Dobbs**

In the U.S., people seeking abortions who live in states where abortion is illegal will face difficult decisions. A February 2022 report by the Guttmacher Institute showed six states already had laws in force or tied up in courts that banned the mailing of abortion pills to patients. However, Winikoff says it is unclear how a state would go about enforcing such a ban.

“Honestly, if people can't get services in a reliable U.S.-based way, they're going to order it from the internet,” she says “And, I mean, there's too much mail. Nobody's going to be able to figure out what's in the packages.”

Aid Access, an organization founded by Gomperts, has said it will provide abortion pills to women in all 50 states. In 20 states, abortion drugs can be prescribed by U.S. doctors and delivered within a few days. Women outside those 20 states who use the service will have their prescription ordered by a doctor in Europe, and delivery of the medications can take one to three weeks.

Short of circumventing local laws, women in states with tight abortion prohibitions might have to travel out of state to receive care. Even if they do, telemedicine might still play an important role.

Winikoff notes that one problem clinics in legal-abortion states are having is a backlog of patients seeking appointments as clinics in prohibition states shut down and force patients to drive across state lines for care.

"People are waiting a week — two weeks sometimes — to get an appointment," she says "Even for telemedicine, sometimes there’s a delay."

Winikoff says converting more in-person meetings to telemedicine would help unburden the system because it would eliminate some of the waiting time and lead to faster visits.

Still, Winikoff has her eye on an even faster model of care: asynchronous delivery. “In other words, the person who wants the service goes online and fills out a form that is read later by a medical provider,” she says “And if that person is cleared by the answers on the form, then the drugs are sent without actually any face-to-face (conversation).”

Such a system would be faster, in part, because there would be no need to find appointment times that worked for both patient and provider. Asynchronous abortion telemedicine is already happening. Winikoff says. Gynuity is providing the service to collect data and prove it is safe and effective. Meanwhile, a California-based telehealth startup called Choix is offering asynchronous abortion-pill services in four states. The service is based on a questionnaire that is presented as taking only five minutes to fill out and costs $289. The company recently closed a $1 million round of seed funding.

Although Winikoff says she does not know where the regulatory framework around abortion is heading, she believes the future of abortion needs to be both safe and streamlined.

"I think we have to be cognizant of the frustrations of the consumers," she says. "When you want an abortion, you want it as fast as you can get it."

*Jared Kaltwasser is a healthcare writer in Iowa and a regular contributor to Managed Healthcare Executive.*
For plaque psoriasis treatment, abundance gets more company

Nonsteroidal topical agents and TYK2 inhibitors may join an already full armamentarium. by ROSANNA SUTHERBY, PHARM.D.

People with plaque psoriasis have a number of treatment options: topical agents, phototherapy, oral treatments and biologics. And now drugmakers are vying to create even more.

In front of the queue is Vtama (tapinarof) cream 1%, the first nonsteroidal topical agent approved to treat plaque psoriasis. Developed by Dermavant Sciences, a biotech company in Morristown, North Carolina, Vtama is a cream containing an aryl hydrocarbon receptor agonist. Aryl hydrocarbon receptors play a crucial role in the immune response and the body’s response to pollution and other exogenous factors.

Nonsteroidal alternatives

Otezla (apremilast), an oral phosphodiesterase 4 (PDE4) inhibitor developed by Amgen, was approved by the FDA in December 2021 as a treatment for plaque psoriasis in adults. Adverse effects, such as severe vomiting and diarrhea or depression, may preclude certain patients from using this medication.

Roflumilast cream is a topical PDE4 inhibitor developed by Arcutis Biotherapeutics, a Southern California biotech company. PDE4 is an enzyme that promotes inflammation; inhibiting it downregulates the inflammatory cytokines responsible for symptoms of plaque psoriasis. Following positive results from phase 3 trials DERMS-1 and DERMS-2, the company filed a new drug application with the FDA for the use of roflumilast cream 0.3% once daily in the treatment of plaque psoriasis in adults and adolescents. An FDA decision is expected soon. If approved, the drug would join Vtama as a nonsteroidal topical agent for plaque psoriasis.

Meanwhile, Bristol Myers Squibb is developing deucravacitinib, an oral treatment that the company says would be the first tyrosine kinase 2 (TYK2) inhibitor. TYK2 is member of the Janus kinase (JAK) family. By homing in on TYK2, deucravacitinib inhibits signaling of interleukin (IL)-23, IL-12 and type 1 interferons, which are heavily involved in plaque psoriasis pathology. Bristol Myers Squibb says that deucravacitinib’s selectivity — it doesn’t affect JAK1, JAK2 or JAK3 — could mean that it won’t have the risk of serious side effects, such as heart attack and blood clots, that other JAK inhibitors do.

In phase 3 trials, more participants taking deucravacitinib achieved clear or almost clear skin compared with those taking placebo or Otezla. Moreover, fewer participants taking the TYK2 inhibitor discontinued treatment due to adverse events than those taking placebo or Otezla.

Deucravacitinib is under review by the FDA, with a decision expected by September 2022.

Bimekizumab bumps in the road

Bimzelx (bimekizumab) is a selective IL-17A and IL-17F inhibitor developed by UCB, a Belgian pharmaceutical company. IL-17A and IL-17F are highly active cytokines in the inflammatory process of plaque psoriasis. In phase 3 trials, bimekizumab, which is administered by injection, showed promising results compared with other systemic biologics.

But UCB has run into problems gaining FDA approval for Bimzelx. COVID-19 restrictions prevented the agency from inspecting the UCB manufacturing facility, and then the FDA issued a complete response letter because of problems it identified during the inspection. But Bimzelx has been approved as a treatment of plaque psoriasis in the European Union, Great Britain, Japan, Canada and Australia.

Pfizer has two plaque psoriasis drugs that are earlier in development. PF-07038124, another topical PDE4 inhibitor, is in phase 2 studies. PF-06826647 is an oral TYK2 inhibitor, and results from a phase 2 study showed that it was significantly more effective than placebo in treating plaque psoriasis.

Rosanna Sutherby, Pharm.D., is a medical writer and community pharmacist in High Point, North Carolina.
The 2022 PBMI Annual National Conference is just around the corner, so make sure to register today!

WHO'S SPEAKING?
Industry leaders from the following organizations:
- CVS
- Gemini Health, LLC
- Milliman
- ArmsRx
- Coriell Life Sciences
- Alliance Rx
- Codoxo
- Novo Nordisk
- OptumRx
- And more!

WHAT'S ON THE AGENDA?
- U.S. Pharmaceutical Trends, Issues, and Outlook
- Digital Therapeutics: Platform as a Service panel discussion
- The Role of the PBM: Processing Claims or Protecting from Risk?
- And more!

To learn more and register, visit events.pbmi.com/AnnualConference or scan the QR code.

PBMI INNOVATION CHALLENGE 2022
Do you accept this challenge?
Do you have innovative solutions for improved clinical and economic processes and/or technologies that can benefit various stakeholders across the patient care continuum? If so, accept this challenge and submit your idea today.

To learn more Scan or visit: bit.ly/PBMIInnovationChallenge

For more information on Pharmacy Benefit Management Institute®, please visit PBMI.com
Reduce Your Risk of Costly HAIs

Surgical site infections, often caused by contaminants in OR air, cost U.S. hospitals between $3.5 and $10 Billion annually and roughly $34,000 per case.

Aerobiotix created Illuvia® Sense with reporting technologies—the first and only directional flow surgical air disinfection system that reduces the risk of infection and improves overall environmental safety in the OR.

Peer reviewed and trusted by leading centers for nearly a decade, Illuvia Sense has been shown to reduce surgical site infection rates, airborne bacterial levels and viable contamination levels during surgical procedures. One study demonstrated Illuvia Sense reduced SSIs following total joint arthroplasty from 1.9% to 0%.*

Schedule your OR air quality assessment today