Although utilization increased due to the expanded indications for Remicade®, the plan realized an estimated savings of about 12 percent or $2.3 million over the two-year period. This was accomplished through the lower total costs per visit in the two years following implementation of the Remicade® program. However, this does not take into account the additional savings achieved from moving some patients from outpatient facilities to office-administered settings, as this was difficult to quantify.

**IVIG Results**

In an analysis similar to that for Remicade®, the average total cost per visit for IVIG claims in physician group A was $2,799 in the year prior to the program and $2,313 in the post-implementation year, showing a 17 percent decrease. By contrast, physician offices that were not managed under the program, physician group B, had an average total cost per visit of $3,492 prior to implementation of the program, rising to $3,953 post-implementation, resulting in a 13 percent increase in cost per visit (see Figure 3).

Prior to the program, average per member per month (PMPM) costs were increasing at a rate of 10 percent. Post-implementation, average PMPM costs decreased 14 percent and the number of claims also decreased 11 percent during the first year. This improvement was due in large part to more appropriate utilization through the program.

Based on the improved utilization, as well as lower total costs per visit that resulted in the year following implementation of the IVIG program, estimated savings were approximately $5 million.

**Conclusion**

Significant savings were achieved by utilizing Medmark to manage physician office administration of Remicade® and IVIG. This was accomplished by creating a model that decreased cost, minimized physician network disruption, and allowed the plan to continue managing medication therapy under the medical benefit.

**Objective**

To explain how a very large health plan, through partnership with Medmark, A Walgreens Specialty Pharmacy, changed the model for the reimbursement and administration of the infused biologics Remicade® (infliximab) and intravenous immunoglobulins (IVIG). This study will elaborate on strategies implemented that decreased cost through reimbursement and utilization controls embedded in the medication delivery model, while minimizing physician network disruption.

**Background**

Remicade® is in the biologic response modifier class of medications. Since it was first approved for adult Crohn’s disease in 1998, indications have been expanded to include rheumatoid arthritis (1999), anklyosing spondylitis (2004), psoriatic arthritis (2005), ulcerative colitis (2005), pediatric Crohn’s disease (2006), and psoriasis (2006).

Based on a retrospective claims analysis for Remicade®, it was determined that per member per month (PMPM) spend on the medical benefit in this class was one of the highest for the plan. Additionally, 40 percent to 45 percent of the claims were from outpatient facilities.

**IVIG**

IVIG is used for the FDA-approved indication of primary immune deficiency, as well as many off-label indications that have supporting documentation in the literature.

Remicade® and IVIG were being administered one of three ways:

1. In-office infusion where the physician traditionally acquired the medication and was reimbursed for an office visit, infusion-administration fees, and medication administered
2. Outpatient hospital-based setting, which was the most costly site of care for such infusions due to the total hospital reimbursement including, but not limited to, medication reimbursement, facility and infusion-administration fees, and other associated charges incurred
3. Home infusion

It was determined through discussion with physicians that the majority who sent their patients to the hospital did so because they could not or did not want to incur the cost and burden of space, equipment, and liability to administer infusion therapy in their office.

The health plan determined there was a need to develop a program to ensure the appropriate utilization of certain infused biologics, gain timely and improved visibility related to the costs and uses of such biologic agents, provide additional access to clinical and patient care support services, and promote the physician office and/or home infusion settings over the outpatient hospital-based care setting.
Methods

Input was sought from network physicians, pharmaceutical manufacturers, and consultants through various venues to define and agree upon the product distribution, reimbursement, accessibility, quality of care, and educational needs for a successful model change to allow the health plan to maintain therapy access and cost visibility. With input from network physicians and key stakeholders, a new infused biologics program was launched for Remicade® in March 2004, and the IVIG program rolled out in September 2004.

For Remicade®, the new program included a change in the reimbursement model for physician office infusion, along with an educational campaign mainly targeting physicians to encourage the therapy, and an additional reimbursement model for physician office infusion, based on need for the medication plus administrative costs for pharmacy services and utilization management.

An increase in the administrative reimbursement rate was agreed upon by the health plan and network physicians to fairly compensate physicians for their administrative and clinical management services provided during the infusion of the medications. It is important to note that outpatient facilities administering Remicade® and IVIG were not included in this program and thus not affected by the new reimbursement model, based on contract terms (physician group B). Since the dosage varies by diagnosis, medical claims were divided into arthritis and Crohn’s disease-ulcerative colitis claims (which has a higher dosage), based on the diagnosis at treatment.

Average total visit costs for arthritis claims were $4,567 and $4,595, respectively for the pre- and post-period (see Figure 1 on previous page).

Similarly, average total visit costs for Crohn’s disease and ulcerative colitis claims in physician group A were $3,222 pre-implementation and $2,903 post-implementation, a 10 percent decrease, compared with physician group B total average visit costs of $4,659 pre-implementation and $4,933 post-implementation, a 6 percent increase. Outpatient average visit costs for Crohn’s disease and ulcerative colitis claims were $4,978 and $5,537, respectively for the pre- and post-period (see Figure 2).

To assess the impact of the new reimbursement model and the educational program, Remicade® claims by site of care were analyzed. The analysis showed that even though the total number of Remicade® claims increased over the period by 5 percent, the percentage of claims from the outpatient setting decreased from 35 percent to 30 percent.

Remicade® Results

To assess the new reimbursement model, average total visit costs for Remicade® (medication and administration) were analyzed for two years prior to the program and two years post-implementation for both physician offices that operated under the new model (physician group A) and physician offices that were not required to follow the model based on contract terms (physician group B). Since the dosage varies by diagnosis, medical claims were divided into arthritis and Crohn’s disease-ulcerative colitis (which has a higher dosage), based on the diagnosis at treatment.

Average total visit costs for arthritis claims for the physician office managed group (physician group A) were $2,668 in the year prior to the program and $2,428 post-implementation, a 10 percent decrease. By contrast, the physician offices that were not managed under the program (physician group B) had average total visit costs prior to implementation of $3,087, rising to $3,555 post-implementation, a 15 percent increase. Outpatient average visit costs for arthritis claims were $4,567 and $4,395, respectively for the pre- and post-period (see Figure 1 on previous page).
Methods

Input was sought from network physicians, pharmaceutical manufacturers, and consultants through various venues to define and agree upon the product distribution, reimbursement, accessibility, quality of care, and educational needs for a successful model change to allow the health plan to maintain therapy access and cost visibility. With input from network physicians and key stakeholders, a new infused biologics program was launched for Remicade® in March 2004, and the IVIG program rolled out in September 2004.

For Remicade®, the new program included a change in the reimbursement model for physician office infusion, along with an educational campaign mainly targeting physicians utilizing outpatient settings to encourage physicians to fairly compensate physicians for their administrative and clinical management services provided during the infusion of the medications. It is important to note that outpatient facilities administering Remicade® and IVIG were not included in this program and thus not affected by the new reimbursement model. Additionally, certain physician groups could not be required to operate under the new reimbursement model. Additionally, certain physician groups could not be required to operate under the new reimbursement model, based on contract terms (physician group A) and physician offices that were not required to follow the model based on contract terms (physician group B). Since the dosage varies by diagnosis, medical claims were divided into arthritis and Crohn’s disease-ulcerative colitis (which has a higher dosage), based upon the diagnosis at treatment.

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Average total visit cost for physician group B increased 10 percent after the first year versus a 10 percent decrease for physician group A when compared with one year prior to the program. Average visit costs were unadjusted for inflation.

The new physician office reimbursement model required that Medmark provide infused biologics to the participating network physicians and bill the health plan directly. A new medication reimbursement rate was established that covered Medmark’s acquisition cost of the medication plus administrative costs for pharmacy services and utilization management.

An increase in the administrative reimbursement rate was agreed upon by the health plan and network physicians to fairly compensate physicians for their administrative and clinical management services provided during the infusion of the medications. For analysis purposes, home infusion was not included.

All claims continued to be processed under the medical benefit, as opposed to being processed under the pharmacy benefit portion of the plan.

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Based on the improved utilization, as well as lower total costs per visit that resulted in the year following implementation of the IVIG program, estimated savings were approximately $5 million.

**Conclusion**

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**Objective**

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