

Benefits of Home IVIG Therapy



IVIG infusions performed in the home have been associated with increased quality of life and decreased healthcare costs, but reimbursement for this site of care remains a challenge.

By Ashlea E. Cook, RN

WITH THE INCREASING use of immune globulin (IG) replacement therapy as long-term therapy for patients with varying diseases, the number of IG units administered yearly in the United States now reaches into the millions. IG replacement therapy is approved by the U.S. Food and Drug Administration (FDA) to treat idiopathic thrombocytopenic purpura, B-cell chronic lymphocytic leukemia, HIV infection, bone marrow transplantation, Kawasaki disease and primary immunodeficiency disease (PI)¹ — with the latter disease state utilizing the greatest amount of the drug. Where IG is administered — in the home versus other sites of care — is essential to patients' quality of life,² as well as to the efficiency and cost-effectiveness of the healthcare system.³

IVIG Treatment

The introduction of intravenous IG (IVIG) 30 years ago has had a dramatic impact on the health and lives of patients who require long-term IG replacement therapy. With IVIG, increased doses of the drug can be administered (compared with the earlier intramuscular route), allowing patients to achieve normal serum IgG concentrations.⁴ Initially, IVIG treatments were administered only in hospitals as a safety precaution. However, as knowledge of the safety profile of IVIG increased, administration moved to outpatient care settings. With safe outpatient track records, increased safety controls and training of homecare nurses established, home IVIG administration was explored in an effort to increase patients' health and quality of

life.³ In the home setting, potential adverse side effects of IVIG infusions are handled much the same as they are in the hospital. Skilled home infusion nurses are trained to administer IVIG, assess for signs of anaphylaxis and other adverse effects, and treat appropriately. Anaphylaxis treatment protocols include continued monitoring of vital signs, and adverse effects are treated with the administration of appropriately prescribed medications such as Tylenol and Benadryl.²

Quality of Life Benefits

The benefits of home IVIG infusions have been brought to the forefront in a number of studies.^{3,5,6,7} One study that compared rates of pneumonia and bronchitis in PI patients receiving IVIG therapy in outpatient hospitals versus in the home demonstrated significantly lower rates of infection in patients receiving treatment at home.³

Beyond the medical benefits, patients receiving IVIG infusions at home are noted to have increased quality of life due to greater control over day-to-day activities.^{2,3} For instance, home IVIG infusions have eliminated many of the hurdles surrounding scheduling conflicts for patients.³ And, they have been noted to be especially important in pediatric immunodeficiency care because they increase family functioning and provide greater independence.^{2,5}

The ability to receive treatment in the comfort of one's home and on one's own schedule has resulted in improvements in patient treatment satisfaction.² It has also been shown that with home IVIG treatment, patients and their families become active participants in their lifelong therapy, leading to greater compliance and improved medical outcomes.⁶ On the flip side, frequent trips to the hospital for IG administration can have a detrimental effect on the patient and family's quality of life, requiring continual interruption of daily activities, frequent absences from school and work, inability to participate in travel and leisure activities, and a general loss of control over their lives.² These factors have been noted to lead to a decrease in adherence to the prescribed treatment plan, which in turn has repeatedly shown to lead to increased hospitalizations, physician visits, nursing home admissions and avoidable healthcare costs.³ In short, home IVIG infusions have generated positive effects on healthcare, leading to improved health outcomes, decreased healthcare expenditures and increased participation of patients in the workforce and society as a whole.^{2,5}

Cost-Saving Benefits

It has been shown that both healthcare and pharmaceutical costs are significantly less for home infusions than those administered

in outpatient infusion centers. One observational study noted a statistically significant difference in cost (in 2010 dollars) per home IVIG infusion at \$1,452, which is 31 percent less than per outpatient infusion. This difference in cost per infusion is an estimated annual savings of between \$18,876 and \$26,136 for one patient receiving 13 to 18 home infusions per year. Not only are these savings considerable for insurance companies and healthcare providers, patients benefit as well in the form of lower co-pays, co-insurance and out-of-pocket costs.³

Costs are further decreased with improved adherence by patients receiving home infusions. As referenced above, deviation from the recommended treatment plan, which is often seen in patients who receive their treatments outside of the home, leads to increased emergency room visits, hospitalizations, physician visits, nursing home admissions and overall higher healthcare costs. In addition, there are indirect costs such as patients' lost work time and overall decreased societal productivity.³

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Healthcare Implications

The National Home Infusion Association estimates there are approximately 700 to 1,000 home infusion companies in operation, and those numbers continue to increase as the trend of decentralized healthcare expands.⁷ The needs of chronically ill patients such as those with PI are gaining more attention both from healthcare providers and healthcare business leaders.⁸ Alternative sites of treatment such as home infusions are becoming key solutions to improved clinical and financial management of chronic care patients.⁹ However, the convoluted details of insurance coverage are creating headaches for patients and providers who wish to utilize this treatment option, especially those covered under Medicare and Medicaid.⁷

Presently, the Centers for Medicare and Medicaid Services offers coverage for an increasing number of infusion drugs such

as IVIG, but it fails to cover the required services, equipment and supplies necessary to provide home infusion therapy. Many efforts like the Medicare Home Infusion Therapy Consolidated Coverage Act of 2006 have attempted to shed light on the need for comprehensive coverage of both the drug and services under Medicare Part B; however, they have been unsuccessful to date. (It should be noted that, currently, the Medicare IVIG Access

independence and medication adherence for a significant number of PI patients. PI patients receiving home IG infusions are able to be productive members of society with a reduction in the number of hours and days missed in educational and vocational activities.^{1,2} They are also associated with significant financial benefits, including a cost savings of almost 30 percent per infusion, which benefits patients and the healthcare system as a whole.³

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Act is studying the impact of providing payment and items for services needed for in-home IVIG treatment of PI.) As such, many Medicare/Medicaid beneficiaries are unable to benefit from home infusions because they can't afford expensive out-of-pocket costs.⁹ With approximately 30 million Americans enrolled in Medicare/Medicaid¹⁰ and approximately 500,000 cases of PI in the United States,³ this adds up to a great number of missed opportunities for home IVIG infusions.

Patients with private insurance or Advantage Medicaid plans are fortunate to be able to receive comprehensive insurance coverage of in-home IVIG infusions. But those who do not are forced to receive therapy in hospitals or outpatient treatment centers. This imbalance of options keeps providers from prescribing the best individualized care for many of their patients.

Site-of-Care Option Is a Necessity

The need for IG replacement therapy is a reality for over half a million Americans diagnosed with PI today, and the need is continuing to increase.^{3,5} For PI patients, IG replacement therapy is a lifelong partner in their health and well-being.⁵ To maximize the therapy benefits, healthcare providers should ensure that site-of-care options for IG therapy that lead to improved quality of life and well-being are presented to patients and their families.²

Home infusions have been shown to improve quality of life,

Healthcare providers are encouraged to identify patients who are suited to receive home IVIG therapy and educate them and their families about this option. Patients need up-to-date information pertaining to the benefits, safety and adverse effects of both hospital and home IG infusion options.² And, the power of insurance companies to overrule what patients and their physicians consider the best site-of-care option due to uncomprehensive insurance coverage needs to be eliminated. ■

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