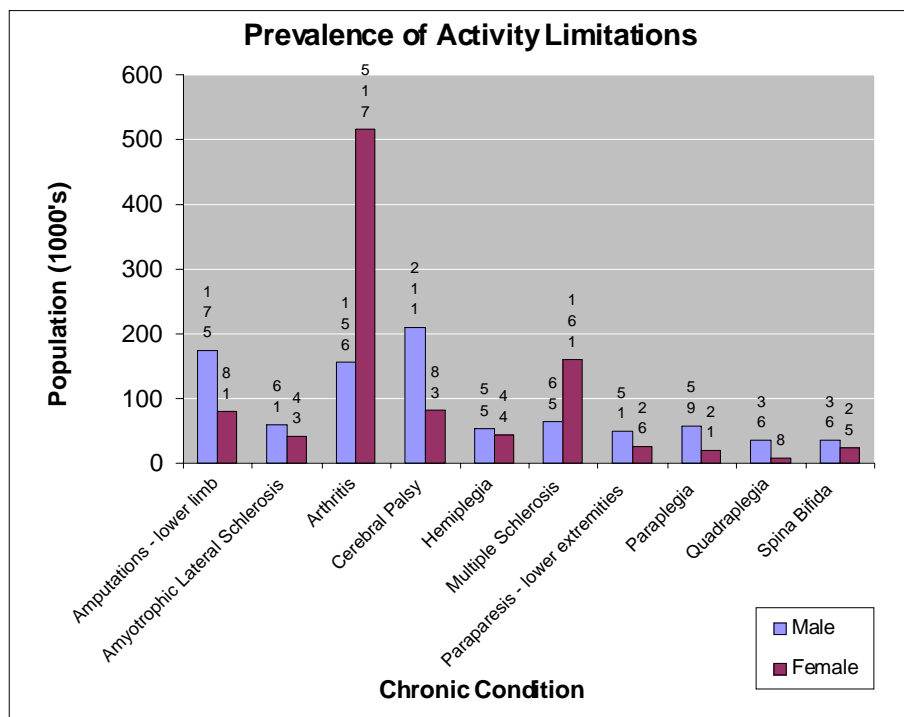


THE WHEELED MOBILITY MARKET

The following is a brief summary of the wheelchair and scooter market in the United States. It is intended to provide the reader with a basic understanding of the market's size based on potential users of these devices. This section also presents information on the wheelchair/scooter market in relation to the home medical market, including reimbursement issues that may affect the overall sale of the product(s) within the industry.

Users of wheelchairs and scooters include people who are unable to walk, or who have difficulty walking due to neurological dysfunction or muscular weakness. Individuals who might be likely users include those with spinal cord injuries (SCI), hemiplegia, and other types of paralysis, multiple sclerosis (MS), cerebral palsy (CP), amyotrophic lateral sclerosis (ALS), spina bifida, arthritis, and lower limb amputees.

Figure 1.



Disability in the United States: Prevalence and Causes, 1992 (LaPlante, 1995)ⁱ

Jones & Sanfordⁱⁱ (1996) reported that there were 1,363,026 manual wheelchair users in the United States. In addition, there were 93,467 power wheelchair users. This totals 1,459,493 wheelchair users in the USA alone, which is the equivalent of 38% (Figure 2) of equipment purchases for the entire home medical market.

Figure 2.

Approximately Home Medical Equipment Market by Major Product Category	
Wheelchairs	38%
Home Care Beds	27%
Bathroom Safety Supplies	15%
Ambulatory Aids.....	10%
Miscellaneous Patient Aids	10%

Market share of the home medical market by major category. Source: Find/SVP Inc., New York, 1998ⁱⁱⁱ

The scooter market is smaller than wheelchairs. According to Jones & Sanford^{iv} (1996), there are 63,636 scooter users in the United States. Typical users of power scooters include individuals in need of mobility assistance outside of the home, in particular for travelling long distances. This condition can be temporary, permanent and stable, or permanent and progressive.

Product Classifications

Medicare, Medicaid, Department of Veterans Affairs and insurance companies consider wheelchairs and scooters as Durable Medical Equipment (DME). Reimbursement is provided depending upon whether it is a manual wheelchair base, a power wheelchair base, or wheelchair options and accessories.

Durable Medical Equipment consists of items - usually "hardware" - that is used at home (Duff, 1997^v). It must be able to stand up to repeat use, used in the home environment, and be medically useful (that is, its first use must be medical, something a healthy person wouldn't ordinarily need).

Medicare and other health care insurance companies classify scooters for reimbursement as a power operated vehicle (P.O.V.).

A) Manual Wheelchairs

The key functional ability needed to use a manual wheelchair is the use of at least one arm. According to reports from Medicare (Health Care Financing Administration, Office of Information Services)^{vi}, the major reimbursement party for both manual and power wheelchairs, manual wheelchairs are one of the top 20 reimbursed products in the USA. Medicare expenditures over a three-year period for a manual wheelchair grew at a steady rate from \$95 million in 1995, to \$97 million in 1996, to \$103 million in 1997.

B) Power Wheelchairs

The key functional ability that is required to use a powered wheelchair is voluntary control over some body function that can be utilized to control switch technology when maneuvering the chair. Medicare^{vii} sources showed a three-year growth rate starting at \$24 million in 1995, \$64 million in 1996, and \$140 million by 1997.

C) Wheelchair Options & Accessories

Wheelchair accessories and options are considered any modifications or additions made to an existing wheelchair due to medical necessity or recreational purposes and are not sold as part of the original chair. Options and accessories can include the following items: arm, back, foot and legrests; specialty seats; handrims; rear wheels and wheel

locks; batteries/chargers and parts for motorized/powered chairs; misc. accessories, such as cup holders, tote bags, and umbrellas. While all are optional, reimbursement for coverage will depend on the item as well as the individual's needs.

D) Scooters

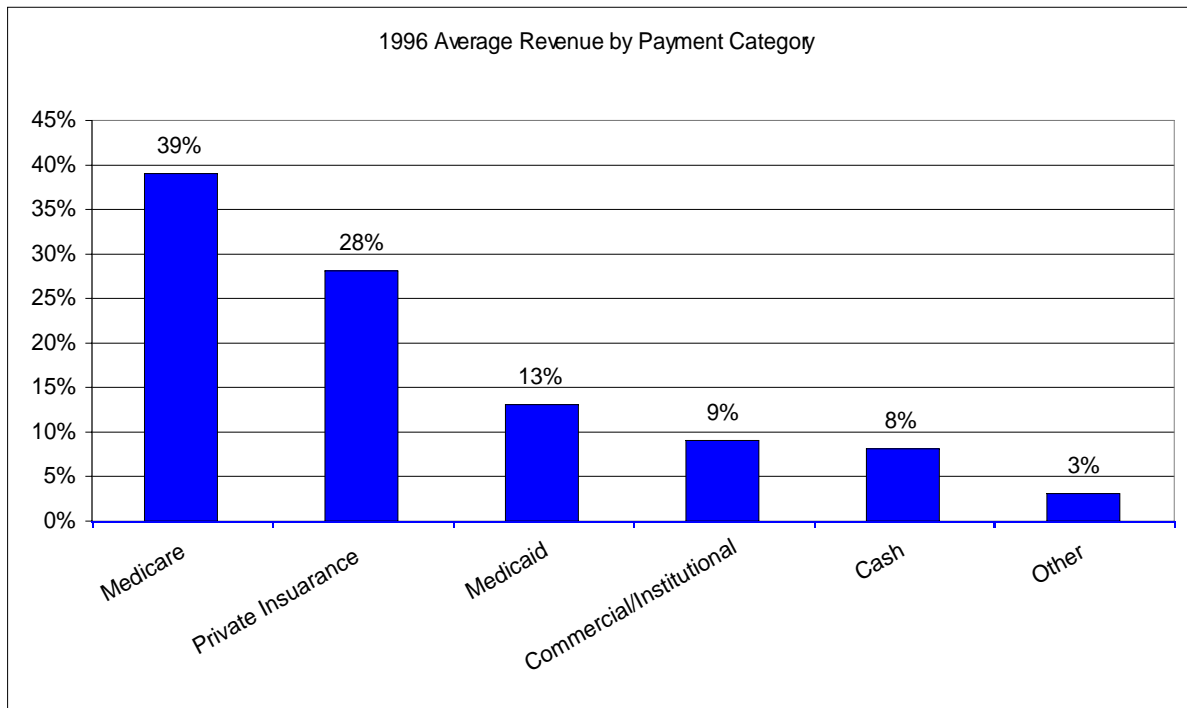
Scooter operation requires the use of at least one arm (for steering and controlling the speed), trunk control for sitting and balance, and the ability to transfer into/out of it. "The USA scooter market is expected to grow from \$129.6 million in 1997 to \$154.4 million in 2001 according to analysts Frost & Sullivan."^{viii}

Reimbursement

When purchasing Durable Medical Equipment, such as manual and power wheelchairs, there are several avenues for reimbursement consumers can consider, both public and private. These options include Medicare, the major reimbursement source (Figure 3), as well as, Medicaid, the Veterans Administration, private insurance, workers' compensation, and community service groups (for example, Lions, Kiwanis, and so on).

It should be noted that, private insurance normally takes precedence over any government-sponsored programs. In these situations the secondary payer, for example, Medicare, will pay the remaining balance if the primary payer does not cover the full amount, or, if the claim is refused by the primary payer: providing the claimant qualifies for Medicare coverage in the first place^{ix}.

Figure 3.



Expenditures in the wheelchair market according to methods of payment: Source: NAMES Industry Survey, 1997, & HIDA Home Care Financial Performance Survey, 1997^x

According to the US Census Bureau^{xi}, 162 million Americans were covered by private insurance related to employment of self or by family members. During the same study period (results gathered from 1987 to 1995), the number of people on Medicaid coverage was 34 million, and those with Medicaid coverage was 32 million. There were approximately 41 million people reporting no health coverage of any type.

Since scooter users may have some ability to walk scooters are often deemed leisure or recreational items and not medical necessities, and are therefore not reimbursable by some insurance companies or programs. However, the difference in acceptance may be as simple as the doctor stating that the scooter is required for use indoors and outdoors -- thereby justifying a medical necessity.

A summary of the major funding sources, including information on the legal basis, eligibility requirements, and payment policy can be found in [Figure 4](#). Specific reimbursement rates are not included in this report due to the individual requirements of each wheelchair prescribed, in particular wheelchair prices and coverage of powered chairs. Most reimbursement agencies responded the coverage was heavily dependent upon the ability to prove "medical necessity".

According to Medicare^{xii}, it requires a physician's prescription for DME. Also required is supporting documentation, called a certificate of medical necessity that identifies the client's diagnosis, prognosis, the reason that the equipment is required and an estimate from the doctor on the duration that the equipment will be used.

Figure 4 – Overview of Key Funding Sources for Wheelchairs & Scooters

Funding Source	Legislative/ Legal Basis	Eligibility	Payment Policies
Medicare, Part B	Title XVIII of the Social Security Act	Persons who are 65 years or older and persons who are under 65, but disabled enough to qualify for Social Security Disability Insurance (SSDI) for at least 25 months.	Durable Medical Equipment (DME) is equipment which can withstand repeated use, is primarily and customarily used to serve a medical purpose, generally is not useful to a person in the absence of an illness or injury, and is appropriate for use in the home. If considered to be DME, a device is covered, whether purchased or furnished on a rental basis.
Medicaid	Title XIX of the Social Security Act	Categorically needy persons who are eligible for AFDC or Supplemental Security	Varies from state to state, but generally follows Medicare policies. Medical

		Income programs. Some states cover medically needy whose income, after medical expenses, fall below income threshold.	necessity is critical factor for payment
TEFRA	Tax Equity and Fiscal Responsibility Act of 1982 Birth through 6	Provides coverage for children diagnostically eligible (as established by SSI definition), but would be financially ineligible for SSI due to parent income. Children must meet medically necessity requirements for institutional care	The intent is to provide the necessary services, including equipment for the child, to remain in the home versus institution.
Private Insurance: Health, Disability Liability, and Self-Insured Employers' Insurance	Insurance Contract	Persons recognized as beneficiaries/dependents under particular insurance policy	Depends upon the terms of the contract. In some cases, equipment is specifically excluded, however, often is not explicitly specified in the contract. Payment then depends upon insurers' legal obligations, and the role of the desired equipment in meeting those obligations.
Federal/State Rehab: Title I: VR Services; Title VI: Supported Employment; Title VII: Independent Living; Title VIIC: Independent Living (Elderly Blind)	Rehabilitation Act of 1973 and Amendments (Title I)	Working age persons who are disabled and have some potential to benefit. Emphasis is on persons with severe disabilities. Other Titles of Rehab. Act stress Independent Living/Support Employment, where vocational potential is not the determining factor.	Equipment that is justified as expediting goal of vocational placement. Usually purchases reserved for clients who are at least job ready (Title I). In many states, rehab. agency retains ownership to equipment.

Veterans Administration	Title 38 of the U.S. Code	Veteran's service/ financial status - Category A: Service connected veterans or non-service connected, but with income below \$15, 000 (single); \$18,000 (with dependent). Category B: Veterans not in Category A, but with annual income below \$20,000 (single); \$25,000 (with dependent). Category C: all other veterans.	Equipment is paid for when deemed part of overall medical or rehabilitation intervention, which is dependent upon eligibility status. VA pays for equipment, such as mobility and transportation aids, when deemed necessary. Benefits provided to Category B vets on an as-available basis and to Category C vets as available, with some co-payment required.
Workers' Compensation	Individual state Workers' Compensation Laws	Workers covered under employer's workers' compensation policy, as mandated by state law.	Many states require physical and vocational rehabilitation benefits as means of helping return injured workers to the workplace. Equipment is often purchased as part of the rehabilitative process when deemed cost-effective
Credit Financing	Federal Reserve Regulations including anti-discrimination law (Reg. B), and Truth in Lending Law (Reg. Z)	Based upon applicant's credit history, collateral, and other assurance of the likelihood the loan will be repaid	Some equipment that would be difficult for bank to resell in event of default may need to be secured in other ways, however, borrower basically determines what is to be financed

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- ^{iv} Jones, M. L., & Sanford, J.A. (1996). People with Mobility Impairments in the United States Today and in 2010. Assistive Technology, 8 (1), 43-53.
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- ^x Schworm, Kimberly (1998). The Industry's Facts & Figures. HomeCare Magazine, 20(7), p. 51-58.
- ^{xi} U.S. Census Bureau of the Census; "Health Insurance Coverage: 1995 - Table B;" September, 1996
- ^{xii} CCH Incorporated, Medicare Explained, 1996, p 98 - 102.