

INTRODUCTION

Currently, about 1.9 million people are living with limb loss in the United States. People lose their limbs for many reasons. Of the 1.9 million, 54 percent lost their limb(s) due to complications related to vascular disease (including diabetes and peripheral arterial disease), 45 percent lost their limb(s) due to a traumatic accident, and less than 2 percent had an amputation due to cancer. Non-whites make up about 42 percent of the limb loss population in the United States. The number of people living with limb loss in the country is expected to double by 2050 due to growing rates of diabetes and vascular disease. (1)

Each year, an estimated 185,000 amputations are performed in the United States. (2) The leading causes of amputation in adults are vascular disease (including complications related to diabetes and peripheral arterial disease), trauma and cancer. According to the Centers for Disease Control and Prevention, in 2009 there were 68,000 amputations due to complications from diabetes (3).

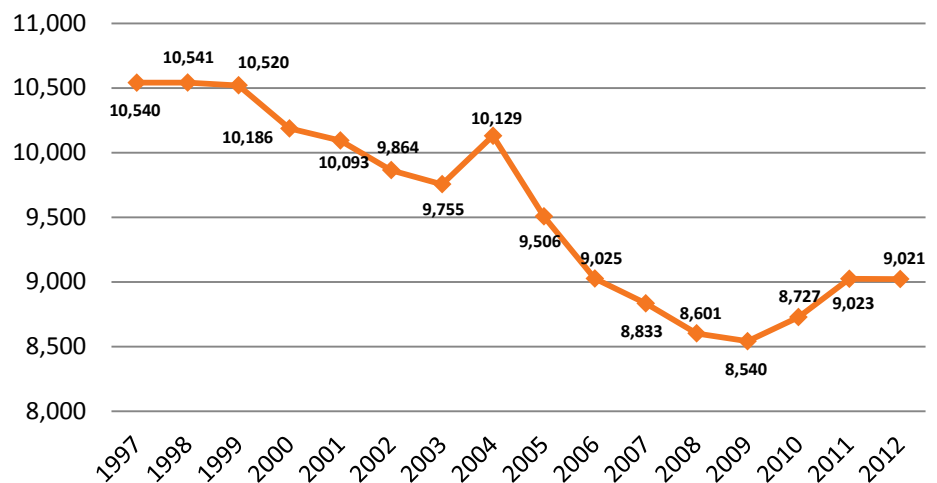
A total of 9,021 amputations were performed in New York hospitals in 2012. This fact sheet discusses the trends and most current incidence of amputation in New York.

1. AMPUTATION TRENDS (1997 – 2012)

According to national hospital discharge data, the number of amputations performed in New York decreased by 26.4 percent from 1997 to 2012 (see Graph 1.1) During this time period, the number of amputations performed in the United States increased by 3.6 percent.

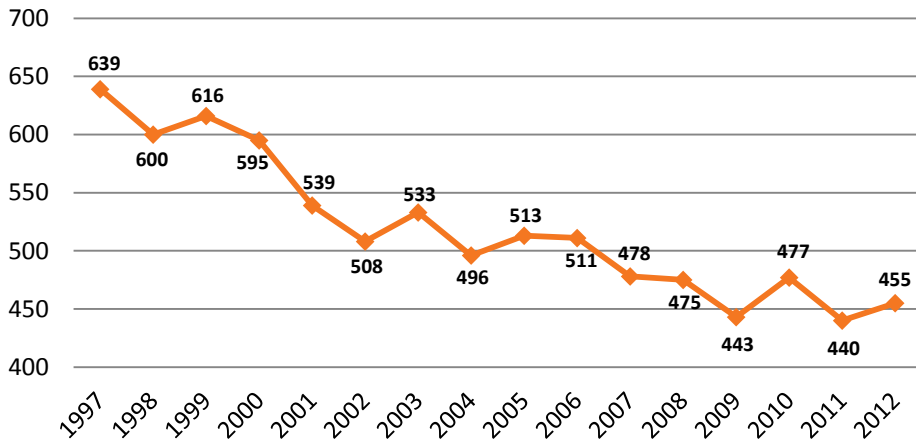
A total of 152,904 amputations were performed in New York from 1997 to 2012. This represents 6.7 percent of the 2,294,679 amputations performed in the U.S. during this time period.

Graph 1.1: Amputation Trends, New York (1997-2012)



Source: Healthcare Cost and Utilization Project HCUPnet database
 hcupnet.ahrq.gov

Graph 1.2: Upper-Limb Amputation Trends, New York (1997-2012)



Source: Healthcare Cost and Utilization Project HCUPnet database
hcupnet.ahrq.gov

From 1997 to 2012, a total of 8,318 upper-limb amputation procedures were performed in the state of New York (see Graph 1.2). This represents 5.4 percent of all amputations performed in the state during this time period.

From 1997 to 2012, 162,382 upper-limb amputations were performed in the United States. The number of upper-limb amputations performed in the state of New York represents 5.1 percent of this national total.

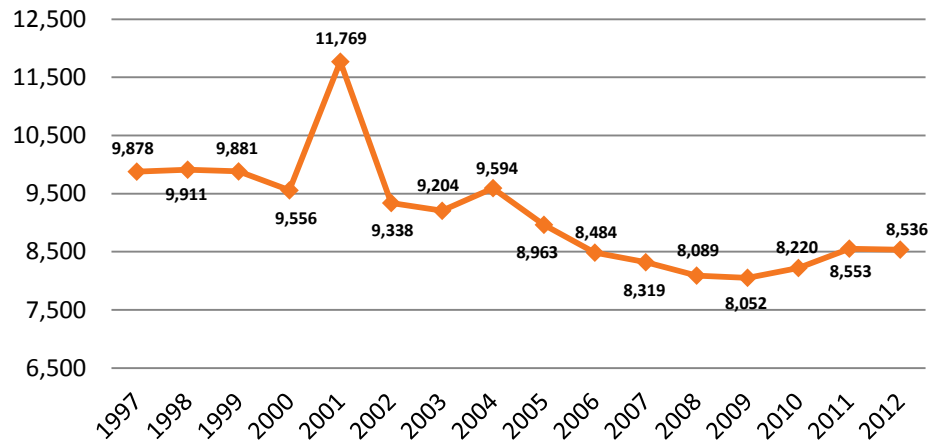
The incidence of upper-limb amputations decreased by 28.8 percent in these years. The leading causes of upper-limb loss are trauma, cancer, and congenital anomaly (1, 4, 5).

From 1997 to 2012, a total of 146,347 lower-limb amputation procedures were performed in the state of New York. This represents 95.7 percent of all amputation procedures performed in the state during this time period.

From 1997 to 2012, 2,132,297 lower-limb amputations were performed in the United States. The number of lower-limb amputations procedures performed in New York represents 6.9 percent of this national total.

The leading causes of lower-limb amputation are complications resulting from dysvascular diseases such as diabetes, and the number of people who lose a limb due to diabetes is expected to almost triple by the year 2050 (1, 4).

Graph 1.3: Lower-Limb Amputation Trends, New York (1997-2012)



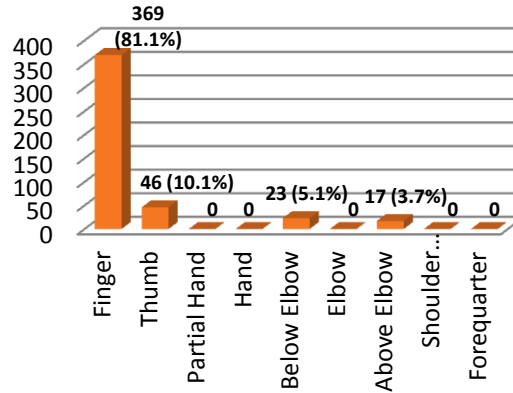
Source: Healthcare Cost and Utilization Project HCUPnet database
hcupnet.ahrq.gov

2. INCIDENCE OF AMPUTATION (2012)

A total of 9,021 amputation procedures were performed in the state of New York in 2012, including 455 upper-limb amputations (5% percent and 8,536 lower-limb amputations (94.6 percent).

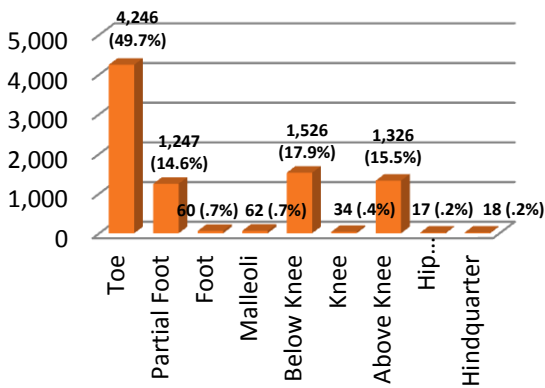
Most upper-limb amputations involved the fingers (81.1 percent). Amputations of the thumb accounted for 10.1 percent, below-elbow accounted for 5.1 percent, and above-elbow accounted for 3.7 percent of the upper-limb amputation procedures performed in the state of New York in 2012 (see Graph 2.1).

Graph 2.1: Upper-Limb Amputations, New York (2012)



Source: Healthcare Cost and Utilization Project HCUPnet database hcupnet.ahrq.gov

Graph 2.2: Lower-Limb Amputations, New York (2012)



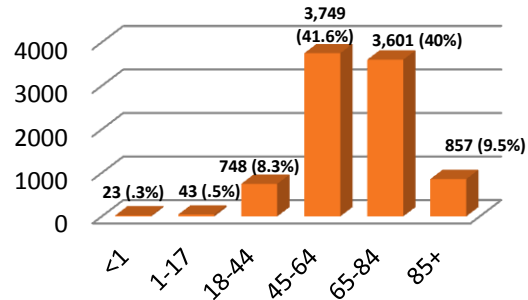
Source: Healthcare Cost and Utilization Project HCUPnet database hcupnet.ahrq.gov

A total of 8,536 lower-limb amputations were performed in 2012. Almost half involved the toes (49.7 percent). Below-knee amputations accounted for 17.9 percent and above-knee accounted for 15.5 percent of the lower-limb amputation procedures performed in the state in that year (see Graph 2.2).

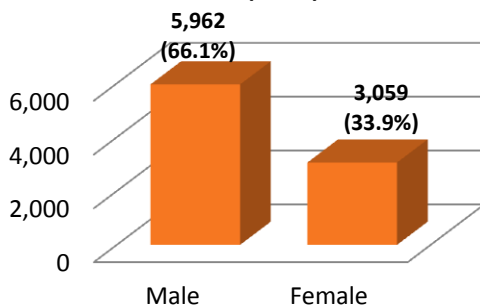
3. WHO LOSES A LIMB? (2012)

In 2012, almost half of the amputations in New York were performed on individuals aged 45-64 years old (41.6 percent), closely followed by the age group of 65-84 year olds (40 percent) (see Graph 3.1). These trends largely reflect the aging population, and cases of amputations resulting from dysvascular conditions, especially diabetes, which are more common in older individuals (1).

Graph 3.1: Amputations by Age group, New York (2012)



Graph 3.2: Amputations by Sex, New York (2012)

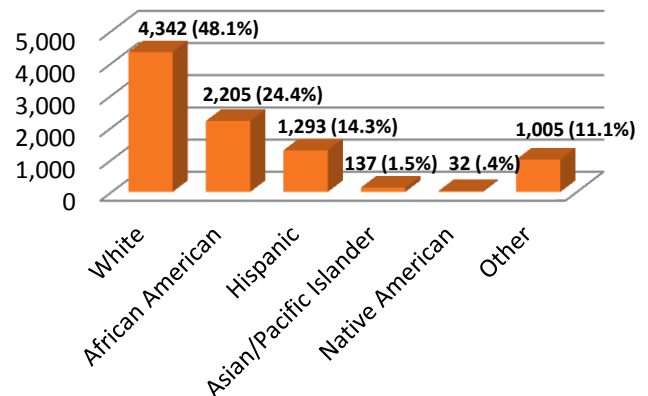


There were nearly 2 times more amputations performed on male patients in New York than on female patients (see Graph 3.2).

In 2012 most of the amputations in the state of New York were performed on patients who were White (48.1 percent), African American (24.4 percent), or Hispanic (14.3 percent) (see Graph 3.3).

Many studies have published research that shows evidence for inequalities in terms of amputation incidence among minorities when compared to the *proportion* of amputations in the White population. A few studies offer suggestions for why this happens, such as certain ethnic populations being genetically more likely than others to experience diseases such as diabetes that can lead to amputation. Various socioeconomic factors and a population's access to healthcare can also affect these numbers. (4, 6, 7)

Graph 3.3: Amputations by Race/Ethnicity, New York (2012)



Source: Healthcare Cost and Utilization Project HCUPnet database hcupnet.ahrq.gov

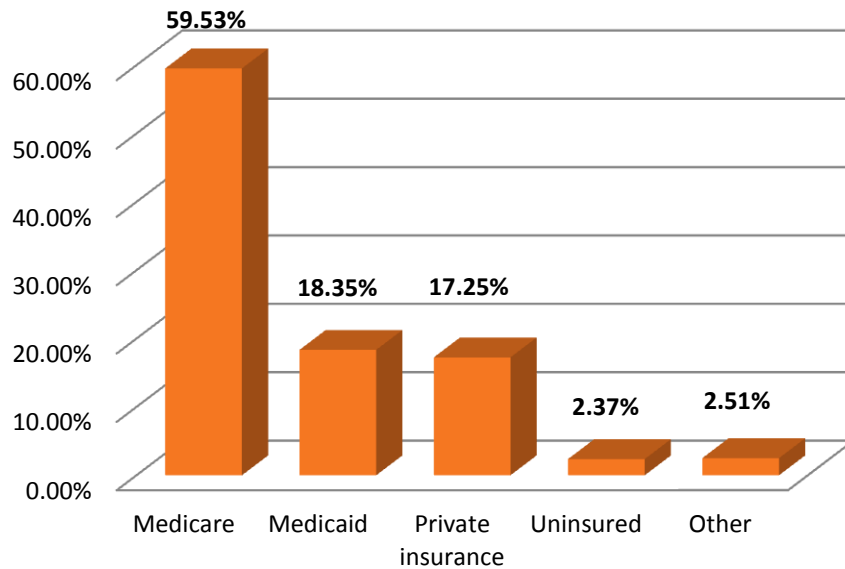
4. AMPUTATION COSTS

Paying for an amputation can place a large burden on the patient. For people with a unilateral lower-limb amputation, the two-year healthcare costs, including initial hospitalization, inpatient rehabilitation, outpatient physical therapy, and purchase and maintenance of a prosthetic device, is estimated to be \$91,106. The lifetime healthcare cost for people with a unilateral lower-limb amputation is estimated to be more than \$500,000. (8)

Many factors contribute to the variation in healthcare costs for people with limb loss. Having a higher amputation level and multiple amputations can lead to increased costs for prosthetic devices. For example, the two-year healthcare costs for a person with an above-knee amputation are estimated to be \$110,039, compared to \$86,244 for a person with a below-knee amputation (8).

For 2012, the burden of costs associated with limb loss were largely experienced by Medicare, which paid for nearly half of the amputation procedures performed in the State of New York (see Graph 4.1).

Graph 4.1: Amputations by Payer Type, New York (2012)



Source: Healthcare Cost and Utilization Project HCUPnet database
hcupnet.ahrq.gov

5. REFERENCES

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