



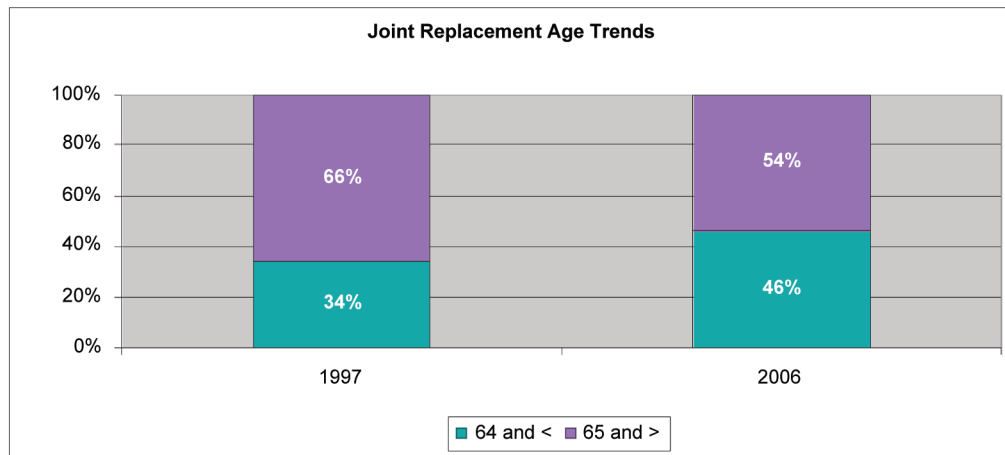
Effectively Targeting the Younger Joint Replacement Patient

White Paper Prepared and Presented By

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Over the last twenty years, the average age of the joint replacement patient has seen a gradual migration from 65 and older distribution to patients that are 64 and younger. In 1997, the 64 and younger joint replacement patients made up 34% of the entire joint replacement population. By 2006, that number increased to 46%.



The increase in the younger joint replacement patients can be linked to two primary reasons:

- 1.) The desire of the age 64 and younger patients to return to higher levels of activity that cannot be achieved with their current state of joint arthritis, and 2.) the improvement in the longevity and functionality of joint replacement implants. As we at Accelero Health Partners work with hospitals, the “targeting” of a younger joint replacement patient is often an initiative used to build volume for both the hospital and the joint replacement surgeons, as well as, improve the overall contribution margin of the joint replacement product line.

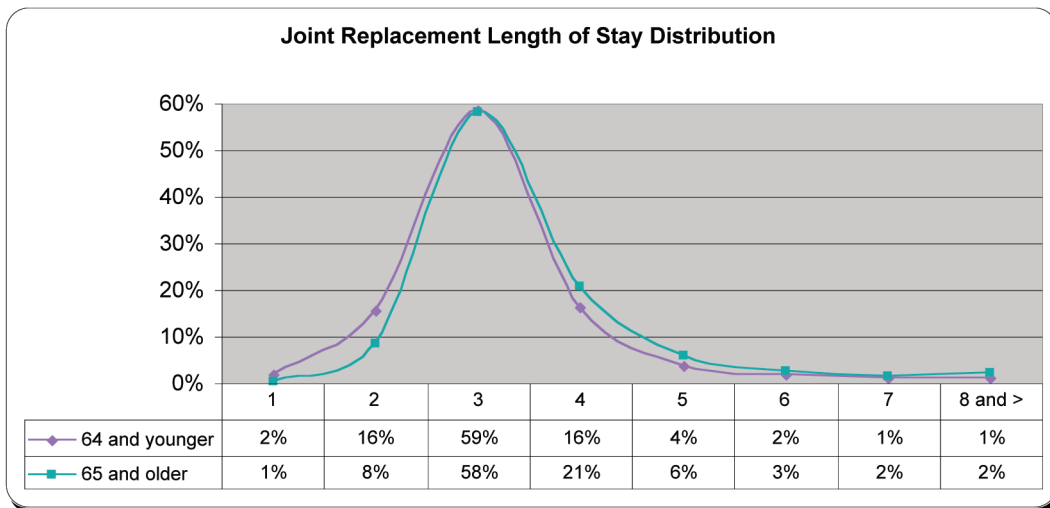
Profile of the Younger Joint Replacement Patient

During July to December 2008, Accelero Health Partners collected information from over 60 hospitals on their joint replacement patients. The data set included over 15,000 joint replacement cases and is limited to primary total hip and total knee replacements. The age and procedure distribution of the patients is shown below. In our data set, 43% of the joint replacement patients are age 64 and under. In both age cohorts, total hip replacement accounts for between 31-32% of the patients and total knee replacement accounts for between 68-69% of the patients.

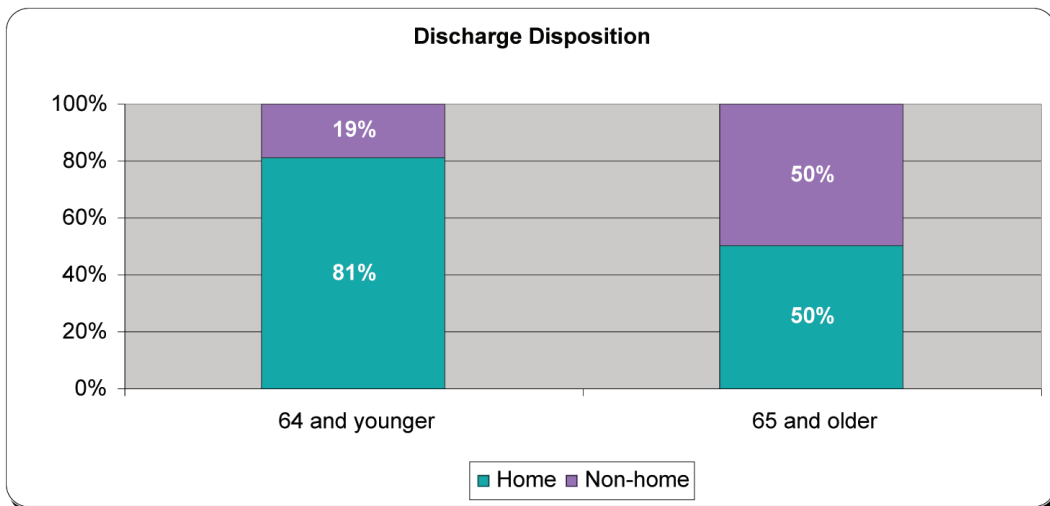
Age group	July-December 2008
44 and <	3%
45-64	40%
65-74	32%
75 and >	25%

2008 data	64 and younger	65 and older
Total hip replacement	32%	31%
Total knee replacement	68%	69%

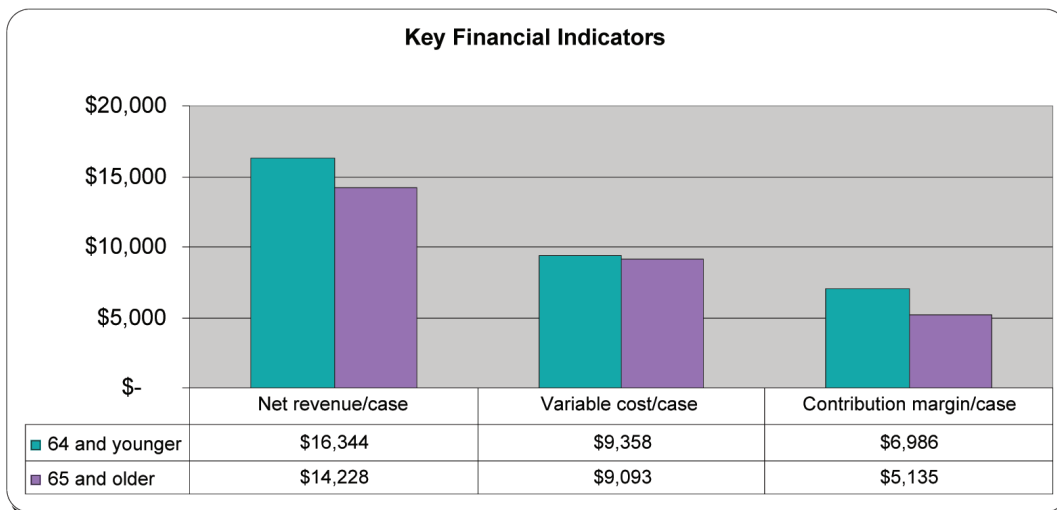
The 64 and younger joint replacement patient had a substantially lower average length of stay of 3.24 days compared to the 3.56 days for the 65 and older population. The length of stay distribution below shows that 24% of the joint replacement patients age 64 and younger have a length of stay of four days and greater while 33% of the 65 and older joint replacement patients have a length of stay of four days and greater.



In addition to the more favorable length of stay distribution, there is also a substantial difference in the discharge distribution between the two age cohorts. In the 64 and younger joint replacement patients, 81% were discharged to home while only 50% of the age 65 and older joint replacement patients were discharged to home. Comparatively, the 64 and younger joint replacement patients are clearly easier for the hospital to manage than the 65 and older population.

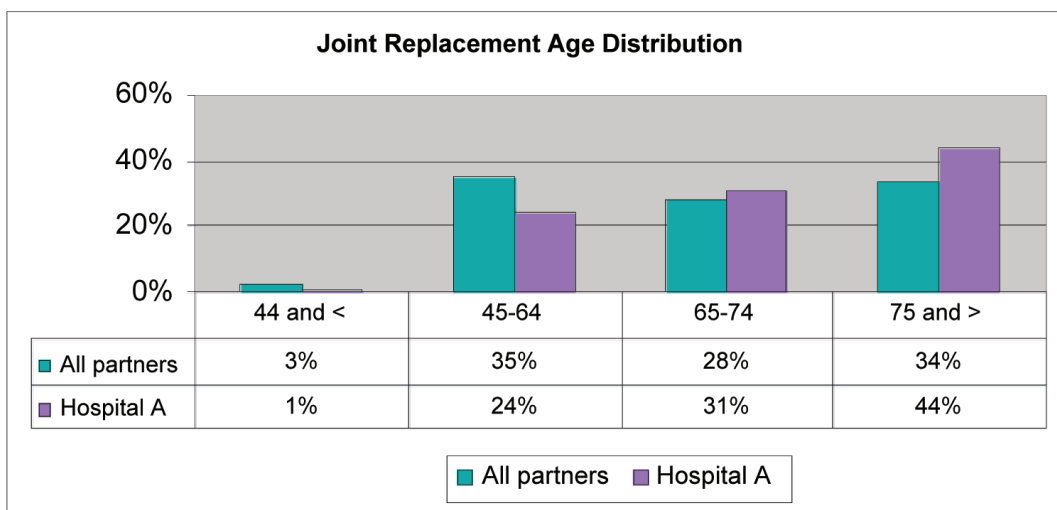


In addition to the easier management, the 64 and younger joint replacement population also had a better contribution margin for the surgical procedure. While the variable cost per case on the 64 and younger population is 3% higher than the 65 and older population, the net revenue per case is nearly 15% higher. This leads to a 36% higher contribution margin per case on the 64 and younger population compared to the 65 and older population. It is important to recognize that the payor, payor methodology (i.e., case rate, percent of charges, per diem with/without implant cost pass through) and payment for the 64 and younger population varies tremendously in different markets.



Strategies for Targeting the 64 and Younger Joint Replacement Population

For hospitals, the first step to strategically target the younger joint replacement population is to understand their joint replacement demographics as compared to the Accelero OrthoVal database. The chart below represents this demographic data for a sample hospital. In this market, the overall age demographics do not vary from a typical United States market. However, this hospital has a relatively lower percentage of joint replacement patients in the 45-64 year age range as compared to the Accelero all partner database. In addition, the contribution margin per case is 45% higher for the 64 and younger population as compared to the 65 and older population.



The next step for the hospital is to understand the capability, capacity and desire of their joint replacement surgeons to target this population and to get their buy-in on methods to be used. The joint replacement surgeon must be willing to consider higher levels of technology in order to serve this population and allow them to return to their desired level of activity.

When considering marketing strategies to the 64 and younger population, targeting referral sources such as primary care physicians should be the principal focus because the majority of this population, with significant joint arthritis, will most likely first consult their primary care physician as to their treatment options. A research study conducted in the United States showed that if primary care physicians understood the benefits of total joint replacement, they were better able to choose the correct treatment options for patients with joint arthritis (An exploratory study of primary care physician decision making regarding total joint arthroplasty; Ang et al; JGIM; January 2007). Anecdotally, patients will often comment that their primary care physician advised them “they are too young to have a joint replacement” even though their joint arthritis is substantially impacting their health and quality of life.

For referral source education, several venues can be considered including formal continuing medical education sessions sponsored by the hospital or informal “lunch and learn” type initiatives that can be held at the primary care physicians’ office. These “lunch and learn” sessions are more practical when there are larger groups of primary care physicians in the region. Typical items that the joint replacement surgeon should discuss during these educational offerings include:

- Advancements in joint replacement for the younger, more active patient population
- Features and benefits of the hospital’s joint replacement program (focus is on how the program benefits the primary care physician and their patients)
- Functional outcomes measures on the 64 and younger joint replacement patients
- Referral guidelines; when to refer patients with joint arthritis to the surgeon and appropriate use of diagnostic imaging

In addition to education, referral sources can also be involved in the development of treatment algorithms so that they better understand the use of non-surgical treatment options such as medications, injections, or physical therapy and appropriate referral to the joint replacement surgeon.

Another target referral source, for more complex joint replacement procedures, is general orthopaedic surgeons in the a hospital’s secondary service area. Often times, these surgeons are looking for progressive joint replacement surgeons to perform more complicated or higher demand joint replacement cases.

While the majority of the emphasis should be placed on referral source integration, there is also the need to focus on direct to consumer programming to the 64 and younger patient population. This mostly “baby boomer” population is value-driven and are looking for means to resist the aging process. In addition, given the current economic state, they will most likely have to consider the time off from their job and greater out of pocket expenses for their surgery.

Community programming to this group will need to concentrate on the improvement in activity level possible following total joint replacement surgery and the time commitment away from work. They will need a compelling reason to have their joint replaced.

In our experience, neither hospitals nor joint replacement surgeons have implemented defined strategies to target this important population of younger joint replacement patients. As hospitals implement these strategies, in addition to the potentially improved case margins, both the hospital and joint replacement surgeons associated with the hospital will also benefit from the additional volume.

For more information:

Accelero Health Partners works with its hospital partners to create sustainable service line competitive advantages. Organization’s have benefited from our in-depth operational experience gained from working with over 165 of health care facilities across the country. If you have questions about or want more information about our services, please contact us at www.accelerohealth.com or by phone at 724-743-3760.



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