

Ceiling lifts at a glance

Ceiling lifts are essential for any patients with limited independent mobility. From patients who are paralyzed and need to transition from the hospital to the home to elderly patients who do not feel steady on their feet, ceiling lifts are proven to significantly reduce the risk of injury to the patient and caregiver while also increasing a patient's comfort during movement.

The days of manually lifting patients are over with an increased number of clinical studies urging healthcare facilities to adopt comprehensive “no manual patient lifting” policies. For the caregiver, the risk of back strain or injury is virtually eliminated. The question should no longer be “Do we need ceiling lifts?”, the question should now be **“What is the best solution for our patients?”**

The market

- Estimated at \$424.5 million (Frost & Sullivan).
- With an unprecedented rate of an aging population opting for home care over hospital and nursing home care, the demand for patient lifts will continue to rise.
- The increasing awareness about caregiver safety and know-how about advantages of using a patient lift are expected to boost the sales of patient lifts.

Science. Safety. Simplicity – Savaria ceiling lifts

- Intuitively designed from the ground up to perform better, last longer and cost less over time than its competitors.
- Use lithium ion batteries with an optimized transmission system to create a powerful, reliable lift with an expected battery life of 5 years and product life of 10 years.
- Deliver a lower cost of ownership as a result of superior technology that's built for longevity
- Designed for easier installation with a patented track bracket and tool design to assure the installer that brackets are secure with a simple turn.
- Simple, intuitive controls are the hallmark of the Savaria ceiling lifts. Caregivers will quickly know how to use the lift thus reducing compliance issues.



Why ceiling lifts?

Savaria developed a ceiling lift product line to meet an unprecedented rate of an aging population and their need for mobility products. Designed by long time industry veterans, Savaria ceiling lifts deliver a plethora of competitive advantages for all stakeholders: the patient, caregiver, installer/technician and the healthcare facility management.

A new R&D center located in Magog, Quebec (near Montreal) is home to a team of highly experienced staff who are focused solely on the design and production of this product line including a development road map of additional products over the next 2 years.

The Savaria ceiling lift is not a “me too” product. It is intuitively designed from the ground up to perform better, last longer and cost less over time than its competitors.

The marriage of Savaria and Span brings together product with distribution. Savaria products are well suited for the homecare market as well as the institution market including long term care, rehab hospital, acute care, nursing home and discharge/outpatient needs.

Just as Span benefited from adding beds to their therapeutic surface offerings, Span should reap benefits to offer the package of bed+mattress+lift.

Market key facts¹

- Approximately 80% of the total lifts purchased in healthcare facilities are fixed ceiling lifts.
- With growing awareness about caregiver safety and increasing burden of compensation claims, hospitals are expected to fast adopt ceiling lifts into their systems.
- The acute care hospital segment for patient lifts contributed the highest share in terms of revenue, followed by the long-term care and home care markets. This hospital market is expected to grow fastest among all the end-user segments described.
- The overall market for ceiling lifts is also expected to grow in the long-term care markets owing to the benefits of easy movement (less or no use of floor space) and relatively easy patient handling when compared to floor lifts.

- Fixed ceiling lifts are predominantly used in both acute care and long-term care set-ups. However, the market for portable ceiling lifts is expected to increase in the acute care hospital set-up due to their flexibility of movement to other locations and relatively lower cost of installation.

Market drivers

- Growing awareness about prevention of caregiver injuries.
- Widening adoption of patient lifts in acute care hospitals due to increasing compensation claims and loss of work days owing to caregiver injuries.
- Increase in aging population with mobility issues.
- Increasing adoption of ceiling lifts in long-term care and home care.
- Recurring revenue generated from sale of slings and batteries.

Other revenue sources

- In addition to revenue from lifts, revenue from sale of accessories like slings, batteries, annual and preventive maintenance contracts, and installation of ceiling lifts can account for up to 35% of total revenue, especially in the acute care hospital market for patient lifts. This is because hospitals (with high patient workload) replace the slings per every patient use.

Competition¹

Key competitors include Prism, ArjoHuntleigh and Liko (Hill-Rom). ArjoHuntleigh and Hill-Rom lead the market with a significant presence in the acute care segment. In addition to their networking with group purchasing organizations (GPOs) and national distributors, they also often bundle their products with other patient mobility solutions.

Typical sales channel (by care setting)¹

Acute care hospitals	Long-term care	Home care
<p>Acute care hospitals typically purchase through the following modes:</p> <ul style="list-style-type: none"> • Directly from companies • GPOs • National distributors 	<ul style="list-style-type: none"> • Long-term care settings and nursing homes predominantly purchase through GPOs. • Direct from company and through dealers are other modes of purchase. 	<ul style="list-style-type: none"> • The home care systems use is determined via prescription and individual assessment of the patients' need and condition. • Purchases are predominantly from dealers.

Portable vs. fixed ceilings lifts

Portable ceiling lifts	Fixed ceiling lifts
<p>Portable ceiling lifts are relatively easy to maneuver, can quickly be attached to a gantry or track, and can be rapidly set up wherever resident/patient handling is required.</p> <ul style="list-style-type: none"> • 1 lift can serve multiple rooms • Transported from room to room • Manual displacement in the track or gantry • Suitable for: Residential homes, nursing homes and long-term care facilities 	<p>Fixed ceiling lifts take up very little space when installed in the patient room and are always available. In hospitals in particular, there is very little space to use ceiling lifts or even store them versus an overhead ceiling lift.</p> <ul style="list-style-type: none"> • 1 lift per room • Lift intended to stay in the fixed track • Manual or motorized displacement • Suitable for: Hospitals, rehabilitation facilities, nursing homes, long-term care facilities, and residential homes

Key selling features

Savaria ceiling lifts are designed from the ground up for simplicity and purpose. They are thoughtfully designed to meet the needs of the patient and the caregiver.

We looked at everything. We knew that we could make a better product by looking at the details and questioning ourselves on how to improve everything we could. Hearing that lifts are not reliable and ready to use is most often due to the old technology of lead acid batteries.

The difference

Features that differentiate the Savaria fixed and portable ceiling lifts from the competition include:

- Faster lift speed – lifts up to 30% more quickly than other models.
- Li-ion battery – recharges twice as fast as average competitor products.
- Lightweight – at just 17 lbs (fixed) and 11 lbs (portable) they are one of the lightest on the market and up to 35% lighter than leading competitors.

- Soft start and stop – enhanced motor transmission enables soft start and stop for smooth operation
- Low lift clearance – slim profile means more room to maneuver patient.
- Easy to service – the ultra lightweight design makes everything easier and faster. Servicing can be done on a fixed lift without removal from the track, often without any tools.
- Fray-resistant strap – the long-lasting lift strap eliminates one of the most common early life service issues of replacing a frayed strap.
- Lower cost of ownership – Savaria ceiling lifts use lithium ion batteries with an optimized transmission system to create a powerful, reliable lift with an expected battery life of 5 years and product life of 10 years.

Battery

Savaria ceiling lifts are one of the only ceiling lifts on the market using reliable lithium ion (Li-ion) battery technology. Most competitor products use lead-acid (heavy, toxic, low cycle life) or NiMh.

Benefits of Li-ion include:

- More lift cycles: delivers 50% more lift cycles per charge than industry average
- Less charging time: recharges from full depletion in only 2 hours, with daily charge needed of only 15 to 30 minutes
- Fewer replacements: battery replacement estimated at every 5 years with normal usage
- More reliable: fewer service calls for dead batteries
- Greener: no lead acid disposal issues and longer life of battery
- No memory effect: battery does not deteriorate from constant charging
- Power: fast lift speed even at maximum capacity lifting weight

SureClip

It's different for safety. Traditional designs use a clip that opens inward. While that makes the clip easy to push, it also introduces a common misuse issue whereby the caregiver mistakenly believes the sling has been securely fastened when in fact the sling loop is not inside the clip. The Savaria SureClip system opens outward to ensure the sling loops can only be attached intentionally.

Should the loop move on top of the latch between lifting operations when tension is removed, the sling loop will automatically slide back into place. Competitor products use latch-in attachment which presents the risk of inadvertent or incorrect loop attachment, as well as accidental detachment.

FastTrack system

Savaria Fast Track is designed for easier installation with a patented track bracket and tool design to assure the installer that brackets are secure with a simple turn. With a full array of track and hardware, configurations for virtually room design can be accommodated. From wood, to concrete or steel, Savaria offers complete hardware to suit the structural requirements.

Choose straight track in convenient length or curved track for 45 or 90 degree turns. Simple or more complex room covering designs are easy to configure, as are multi-room designs for residential or institutional settings.

Operation and safety

- Intuitive operation – simple, intuitive controls are the hallmark of the Savaria ceiling lifts. The lifts are operated using simple up and down buttons to raise and lower the lift. This can be done from the lift itself, or from the hand-held control unit. Caregivers will quickly know how to use the lift – reducing compliance issues.
- Dual safety features – the lifts are equipped with an emergency manual lowering device that can be used in the event of electrical failure, as well as an emergency stop cord that engages the emergency safety brake to keep the user and patient secure. Restarting the lift is done from the motor unit switch. Other systems allow the cord to both start and stop the lift leading to confusion and continuous pulling of the cord.
- Waterproof handset – easy to clean and waterproof (IP67), the handset is designed with hospital standards in mind. A robust enclosure prevents moisture ingress and the durable design with a cord strain relief is built for long life.

Slings

Savaria offers a range of sling types and sizes to suit most patients and needs. The universal sling features adjustable head support and breathable mesh fabric. For bath and toileting needs, choose the narrow cut hygienic sling with solid fabric for easy cleaning. A walking sling is also available for those using the ceiling lift in an assistive device capacity for rehabilitation needs.

Three hooking options on each of four attachment points allow for proper positioning to accommodate patient mobility requirements. Easily adjustable, slings can be customized for optimum patient comfort. All slings are rated for up to a 600 lbs (272 kg) capacity and flexible fabric hooks make it easier to ensure secure contact onto the lift clips. Because they are free of rigid reinforcement materials, machine washing and water extraction is easily done.

For healthcare settings, inventory management is made easier with the limited number of sling models offering greater flexibility for patient use with their built-in adjustments. Costly custom slings may almost never be required.

Please refer to the charts on the following page for sling sizing information and part numbers.

Guidelines to select a proper sling size

Sling size guide	Height	Weight
Extra Small (XS)		< 75 lb
Small (S)	<5 ft	< 125 lb
Medium (M)	5–6 ft	125–250 lb
Large (L)	6–7 ft	250–440 lb
Extra Large (XL)	>7 ft	350-450 lb
Extra Extra Large (XXL)		450-600 lb
Bariatric (BARI)		1,200 lb

Sling size color coding

Some slings may incorporate a colored liner in addition to the size label. The color code is as follows:

Size	Color
XS	White
S	Red
M	Yellow
L	Green
XL	Blue
XXL	Orange

Accessories and other components



Trolley

The Savaria trolley for portable ceiling lifts is attached to the track of the lift, to act as wheels for the lift mechanism. At least one trolley is needed for each track.





Reacher






The Savaria extendable reacher aids in hooking the portable ceiling lift unit to the trolley. Designed with simplicity and safety in mind, the reacher is separate from the trolley hook to prevent the extendable arm from accidentally injuring the patient or caregiver.

Savaria ceiling lifts features comparison

	Savaria PL (portable lift)	Savaria FL (fixed lift)
		
Product weight	11 lb	<ul style="list-style-type: none"> • 17 lb manual lateral displacement • 21 lb motorized lateral displacement
Weight capacity	<ul style="list-style-type: none"> • 286 lb – suitable for home care (minimal structural reinforcement) • 440 lb – suitable for healthcare (structural reinforcement required) 	<ul style="list-style-type: none"> • 286 lb – suitable for home care (minimal structural reinforcement) • 440 lb and 600 lb – suitable for healthcare (structural reinforcement required)
Strap length	91 inches	91 inches
Lifting speed (inches/second)	<ul style="list-style-type: none"> • 2 in/sec at 286 lbs • 1.8 in/sec at 440 lbs 	<ul style="list-style-type: none"> • 2 in/sec at 286 lbs • 1.8 in/sec at 440 lbs • 1.6 in/sec at 600 lbs
Number of lifts with an avg. charge at 200 lbs load	80	80
Number of lifts with an avg. charge at 600 lbs load	N/A	30
Max recharge time	2 hours	2 hours
Lifting clearance	13.5 inches	13.5 inches
Strap length	91 inches	91 inches
Warranty	2 year	2 year

Competitive comparisons

SAVARIA PL PORTABLE CEILING LIFT					
		Arjo Voyager	Arjo Maxi Sky 440	Handicare (Prism) P-440	Handicare RisePorto 450
Product weight	11 lb	12.5 lb	14.3 lb	11 lb	12.8 lb
Speed (in/s) with 264.5 lb	2	1.6	1.6	-	1
Speed (in/s) with 440 lb	1.8	1.2	1.2	-	0.7
Travel (in)	90.5	86.6	86.6	78.7	66.9
Number of lifts with an avg. charge at 198 lb load	80	26	27	35	50
Lifting clearance	13.5 in	13.5 in	15.8 in	18 in	18 in
Soft start/stop	✓	✓	✓	✓	-
Weight capacity	286 lb / 440 lb	440 lb	440 lb	440 lb	308 lb / 452 lb

SAVARIA FL FIXED CEILING LIFT						
		Liko Likorall 250	Guldmann GH3	Handicare (Prism) C625	Tollos (T.H.E.) Cirrus 600	Arjo Maxi Sky 2
Lifting speed with max load (in/sec)	1.6	1.2	1.6	1.2	1.2	1.3
Lifting clearance (in) (the lower the better)	13.6	14.6	16.7	10.5	12.8	14.2
Max recharge time (h)	2	8	2	8	8	8
Travel (in)	91	79	98	87	96	91
Number of lifts with 200 lb	80	60	55	100	55	100
Number of lifts with 600 lb	30	20	21	35	25	35
Product Weight (lb)	17	28	23	22	28	27
Weight Capacity (lb)	600	550	550	625	600	600

Competitive comparisons



SAVARIA HC CEILING LIFT		Arjo Maxi Sky 2 Plus	Arjo Maxi Sky 1000	Liko Ultra Twin	Guldmann GH3 Twin	Handicare (Prism) C-1000
Maximum weight capacity (lb)	1,200	1,000	1,000	1,100	1,100	1,000
Motorized track movement	✓	-	✓	-	✓	✓
Motorized lift rotation	✓	-	-	-	-	-
Tilting spreader bar	✓	✓	-	✓	✓	-
Compatible with track curves	✓	-	✓	-	✓	✓
Constant charging system	✓	✓	✓	-	✓	-
Lifting speed with max load (in/sec)	1.6	1.3	1.3	1.2	1.6	1.2
Max recharge time (h)	4	8	8	8	4	8
Lifting clearance (in)	22.6	20	21.6	19.6	25.7	15.9

Savaria HC ceiling lift

The strongest lift on the market

The Savaria HC ceiling lift is designed to easily lift and move heavier patients – up to an industry-leading capacity of 1200 pounds (544 kg). Designed from the ground up to better serve caregivers and patients, the Savaria HC uses a new-in-its-class motorized lift rotation feature for superior maneuverability even in tight spaces. The uniquely designed motorized 4-point tilting spreader bar provides enhanced patient positioning comfort during transfers. The Savaria HC ceiling lift is fully compatible with standard Savaria low profile track and the sleek motor design means the tight turning radius

will be the same as other Savaria fixed lifts. The built-in constant charge system for the high efficiency lithium ion battery delivers faster lifting speeds and an always ready-to-use lift.

When higher capacity lifting is needed, the Savaria HC lift packages together a strong, fast lift that's easy to maneuver. Maintaining a patient's dignity and safety has never been simpler with this well-designed high capacity ceiling lift.

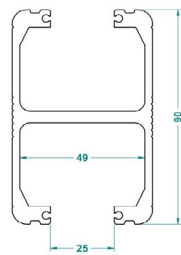
Track Compatibility

For greater installation flexibility

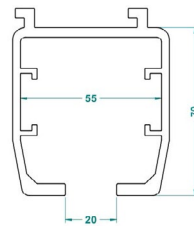
Savaria knows our clients need flexibility when selecting ceiling lifts systems, and that's why we are committed to delivering open and integrated solutions. Our fixed ceiling lifts play nice with existing tracks of other ceiling lift manufacturers thanks to our selection of conversion kits. These kits are available readily available to help facilities retrofit our lifts into existing track

Requirements

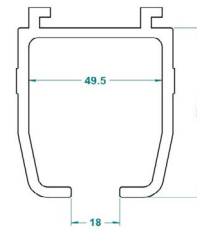
Any track used with Savaria ceiling lifts must first be free of any active track accessories such as turntable, exchangers or gates. Track system shall also be adequately inspected and successfully weight tested by a Savaria trained/authorized installer to confirm proper installation technique and carrying capacity prior to use.



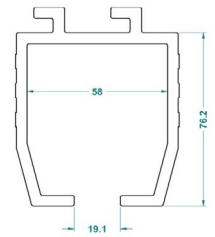
Arjo Kwiktrak



Handicare

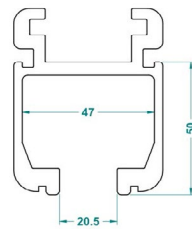


Waverly / Prism / Tollos

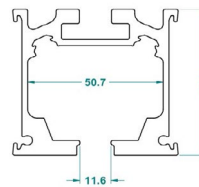


BHM

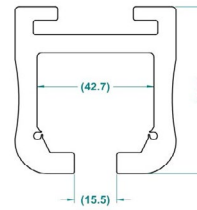
Compatible Portable Trolley	Part Number	M920109	M920670	M920555	M920109
		Not Required	Not available	M920685	M920690
		Not Required	M929XXX-01	M929XXX-02	M929XXX-04



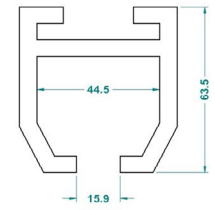
Liko



Guldmann GH3



Surehands



Horcher/Barrier Free

Compatible Portable Trolley	Part Number	M920670	M920555	M920555	M920555
		Not available	Not available	Under evaluation	Under evaluation
		M929XXX-05	M929XXX-06	Under evaluation	Under evaluation

FAQs

A When is it time to use a ceiling lift?

Ceiling lifts are designed for increased patient safety and to minimize the physical effort required by the caregiver to transport patients of varying degrees of mobility. Therefore, anyone whose job it is to move a person as they go about their daily lives can benefit from the additional assistance a ceiling lift provides.

Gone are the days when ceiling lifts were too bulky or expensive to reasonably add to the equipment arsenal of a person living at home. Over the years, ceiling lifts have become lighter, safer, less expensive, and much easier for both the patient and the caregiver. The Savaria ceiling lifts are compact enough to easily maneuver around furniture and tight spaces in both a home and clinical environment.

What's the difference between a floor lift and a ceiling lift?

Patient lifts come in a variety of types: floor lifts, ceiling lifts and free-standing (portable) lifts. Floor lifts have a wheeled base and require extra space around beds for patient transfer. Ceiling and portable lifts can often be found in hospitals and nursing homes and use less space than floor lifts. The fixed ceiling lifts are supported by tracks that are permanently affixed to the ceiling, utilizing an electric motor to lower and raise the patient as needed.

Ceiling lifts require less time to transfer and are commonly found to be more comfortable for the residents than floor lifts. Ceiling lifts usually take less time to use than floor lifts.

What are the advantages of portable lifts vs. fixed ceiling lifts?

Portable lifts offer more flexibility for patient and caregiver alike, allowing the lift to be moved from the bedroom or hospital room to another location and back again as the patient goes about their daily activities. Fixed ceiling lifts are usually limited to horizontal movement, depending on the placement of the overhead tracks. Portable ceiling lifts are often less costly than fixed ceiling lifts and can also be moved with the patients as they go from room to room.

What are the most important factors to consider, or features to look for, when a customer is looking for a ceiling lift?

Depending on the patient's or facility's individual needs, you'll need to consider the types of positions the patients will need assistance with. Do they need help moving from sitting to standing position and back again? Do they need to go from lying down to sitting up, or moved from a bed or a chair and back again?

Weight capacity: Savaria offers ceiling lifts with a weight capacity ranging from 286 lb (130 kg), 440 lb (200 kg) and 600 lb (272 kg). The new bariatric ceiling has a safe working load (SWL) of 1,200 lb (544 kg).

Range of lift height: Lifts should offer a wide range of lift heights to reach low enough so patients who have fallen to the floor can be lifted up, and high enough to lift patients up to a high mattress height (generally up to 66 inches). Savaria ceiling lifts feature a lifting clearance of 13.5" for the portable lift and 13.5" for the fixed lift and feature a 91" long strap. The new bariatric has a lift clearance of 22.6".

Slings: Specialized slings include padded slings, full body slings, disposable slings, stretcher slings (for supine transfer), divided leg slings, mesh bathing slings and commode slings. A number of Savaria slings are available to suit each patient's unique needs including universal, hygiene, walking, repositioning and disposable slings. Slings come in a variety of size (XS, S, M, L, XL, XXL)

Does Medicare cover the cost of patient lifts?

Medicare Part B (Medical Insurance) covers patient lifts as durable medical equipment (DME) that doctors prescribe for use in patient's homes. Visit Medicare for more information².

What is the clinical effectiveness of patient lifts and transfer equipment for the prevention of injury?

Evidence from studies supports the clinical and cost-effectiveness of mechanical patient-handling devices (e.g., ceiling lifts) and the adoption of minimal lift policies for reducing musculoskeletal injuries (MSI) in health care workers.

(continued...)

FAQs (continued)

What is the cost-effectiveness of patient lifts and transfer equipment for the prevention of injury?

Overall, studies³ from Canada, the United States, and Australia have shown patient-handling interventions to be an effective option for reducing the incidence of musculoskeletal injuries in health care workers. Cost-benefit analyses have also been favorable and shown that initial investments in patient-handling interventions can be recovered relatively quickly in savings resulting from reduced injury claims.

What are the guidelines for the use of patient lifts and transfer equipment?

The Registered Nurses' Association of Ontario has published evidence-based recommendations regarding the risk assessment and prevention of pressure ulcers⁶. The use of lifting devices is addressed in the section devoted to practice recommendations as a mechanism to reduce friction on the patients' skin and wounds. It was also recommended that lifting devices be used to avoid dragging individuals confined to beds during transfer and position changes. They also recommend that slings of the ceiling lifts should not be left underneath the individual after repositioning.

Where can I find out more about patient lifts and safety?

The FDA offers a lot of helpful information and safety tips on how to safely transfer patients from place to place. This document⁴ is a great primer to proper caregiver safety tips.

Can the track take someone from a bed into a bathroom?

A single track can take someone from the bedroom into the bathroom. A notch must be created at the top of the door to allow for the track and sling to get from one room to the next. A sliding door will not allow for this, because of the track rail.

What about maintenance?

Maintenance is generally simple with the Savaria ceiling lifts and could be done by a technician with access to service manuals. Savaria ceiling lifts feature a Li-ion battery which require less maintenance and will last 50% longer (5 years) than regular lead acid batteries.