





Target audiences for the

Vein-Eye® Carry



Vein-Eye Carry

• "Near-infrared technology allows visualization up to 1 cm. depth as compared to deeper visualization with ultrasound technology. Placement of peripheral IVs in the more superficial veins allows for the preservation of deeper veins for patients who may require future fistula placement." - *St. Elizabeth Healthcare*

- "A study showed a potential cost savings of \$475,000 over two (2) years when using a vein visualization system." St. Elizabeth Healthcare
- The Vein-Eye Carry is the only portable vein finder that can penetrate very dark skin, layers of fat, and excessive hair and show FHD images of veins. Perfect for home infusion and home therapy.



Obesity leads to diabetes, cardiovascular diseases, and other diseases.

- "Vein visualization technology has the potential to significantly improve patient comfort and safety." –
 Medical Device News
- "There is a direct correlation of failed vein puncture attempts to the patient's BMI. In the USA, 35% 40% of adults are obese." *Centers for Disease Control and Prevention*
- Our unique chipset penetrates layers of fat to find veins, even in the most obese patients, making home infusion of all patients a reality.



Obesity, Diabetes, Cardiovascular Diseases

The growth of diabetes, obesity, and cardiovascular diseases worldwide make finding a vein extremely difficult.

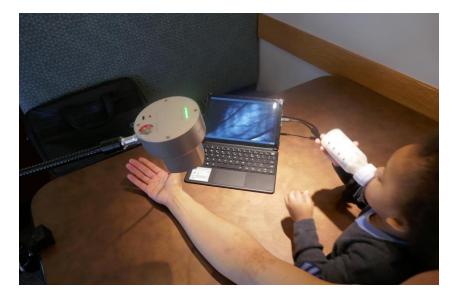
"In 2022, 2.5 billion adults aged 18 years and older were overweight, including over 890 million adults who were living with obesity ... About 16% of adults aged 18 years and older worldwide were obese in 2022. The worldwide prevalence of obesity more than doubled between 1990 and 2022. – World Health Organization

"Cardiovascular diseases (CVDs) are the leading cause of death globally, taking an estimated 17.9 million lives each year. CVDs are a group of disorders of the heart and blood vessels and include coronary heart disease, cerebrovascular disease, rheumatic heart disease and other conditions. More than four out of five of these deaths occur prematurely in people under 70 years of age. "<u>https://www.who.int/health-</u> topics/cardiovascular-diseases#tab=tab_1



Target audience Demand for the Vein-Eye Carry

- "67% of IVs infusions fail, requiring moving the catheter or the IV bag." National Library of Medicine
- Care delays occur in approximately 20% of all patients due to the lack of vein visibility.
- Below is a woman who is a certified "hard stick." The Vein-Eye Carry easily sees her veins under a severe skin rash and hematomas from prior missed vein puncture attempts.



Very good vein visualization solves problems

With very good vein visualization, the verifiable data is quite convincing:

- There is a 39% decrease in pain experienced by the patient.
- The chance of a successful puncture on the 1st attempt increases by 350%.
- There is a reduction by 45% of expensive escalations to Radiologists.
- Dublin, Aug. 28, 2023 (GLOBE NEWSWIRE) --"The global vein illuminator market is set for substantial growth, escalating from \$19.74 billion in 2022 to a projected \$24.05 billion in 2023, reflecting an impressive Compound Annual Growth Rate (CAGR) of 21.8%. The market's momentum is anticipated to continue, culminating in a valuation of \$53.27 billion by 2027, with a CAGR of 22.0%." *Research and Markets 2023*





Mobile CT scan, MRI scan, and IV Hydration

"Vein visualization technology has come a long way in recent years. The ability to see veins clearly makes it easier for doctors and nurses to insert IVs and draw blood." – *Medical Device News*

Mobile MRI and mobile CT scan: The Vein-Eye Carry can easily attach to any mobile device

"Mobile imaging is evolving and gaining more widespread usage throughout the healthcare industry. When compared to fixed CT scanners, mobile CT scanners were found to have very positive outcomes. The incidence of adverse events, while transporting critically ill patients for CT imaging, is as high as 71%.

Using mobile CT scanning is a great help in reducing adverse events and saving lives." -Neurologica



Skilled Nursing Facilities and ambulances – Vein-Eye Carry stands alone

"More than 1.6 million patients are cared for in the 15,000 licensed skilled nursing facilities (SNFs) in the United States" - *Centers for Disease Control and Prevention [CDC], 2016).*

- Approximately 3% (48,000) of patients in these facilities require vascular access for intravenous therapy (LTC Pharmacy Provider, source).
- Skilled nursing facilities face staffing challenges due to high staff turnover and nurse-topatient ratios.
- The majority of the direct care staff in SNFs is unlicensed (over 60%)
- 23% are licensed practical nurses and only 12% are registered nurses.

Ambulances, Emergency rooms

"ESTABLISHING vascular access is a critical component of resuscitation during a cardiac arrest. It is clear that the benefits of early vascular access must be considered in conjunction with the importance of uninterrupted CPR." - *Jonathan A. Anson, M.D.,* **Anesthesiology** *April 2014, Vol. 120, 1015–1031.*

Vein-Eye Carry in the Operating Room

There is a growing school of thought that operating rooms need NIR technology. If a surgeon accidentally cuts into tissue, he/she may not see the bleeding. It can go undetected.

- This is comparable to flying an airplane and relying 100% on visual capabilities.
- Most skilled pilots use both visual and instrument (IFR) for flying and landing.
 - The Vein-Eye Carry would pick up the hemoglobin in any small cut right away.
 - The Vein-Eye Carry can see blood whether it is in the vein or outside of the vein.
 - The Vein-Eye Carry does not need its own cart, is lightweight and small, and can be placed anywhere in the operating room where there is a fixture.

