

VeinViewer® by Christie Case Study: Lifeblood Biological Services

THE HIGHLIGHTS:

Introduction

- Phlebotomy a major part of healthcare today; is instrumental in obtain blood specimens for lab tests and blood donation.
- There are approximately 1 billion venipunctures per year in the U.S.
- Problems associated with phlebotomy include inability to achieve successful cannulation on the first attempt, potential complications, and low patient satisfaction scores based on phlebotomy alone.

Purpose of the Study

- To determine if use of VeinViewer could assist healthcare workers at Lifeblood Biological Services in achieving successful venous access in patients who had previously been rejected as blood donors by Lifeblood Biological Services due to the inability of the lab to achieve successful venous access.

Results

- VeinViewer was used to provide an image of the potential donor's vasculature before each attempt.
- All 30 patients were successfully accessed and had blood drawn on the first attempt.

Conclusion

- Use of VeinViewer demonstrated an enhancement in the ability to success fully access veins in previously unsuccessful DVA patients.
- VeinViewer could potentially increase the efficacy of healthcare workers, increase patient satisfaction, and increase the number of blood donors.

IN SUMMARY:

In the technologically innovative 21st century, something as seemingly benign as having one's vein accessed for blood tests or blood collection is a minor issue with major implications. It has recently been estimated that there are approximately 1 billion venipunctures per year in the U. S. alone. Not only is venipuncture vital for obtaining blood specimens for testing, it is also a very important part of the blood donation process. Considering the number of venipunctures performed along with the dramatic shortage of donated blood, venipuncture should be considered of utmost importance in the scope and practice of modern medicine.

VeinViewer is a near-infrared light technology that projects a vascular "road-map" directly on a patient's skin as an adjunct for achieving intravenous cannulation. This study was performed to determine if use of VeinViewer could assist practitioners in performing successful venous access in patients who were previously rejected as blood donors due to DVA (difficult venous access).

The patient population chosen for the study consisted of 30 adults who had previously been rejected as blood donors by Lifeblood Biological Services due to the inability of the lab to achieve successful venous access for the purpose of blood donation. All 30 patients agreed to attempt blood donation with the aid of VeinViewer. VeinViewer was utilized to provide an image of the patient's vessels before each attempt. The Lifeblood staff, which had previously been unable to perform successful venipuncture on these patients, experienced 100% success in all of the enrolled patients. Additionally, the staff members were able to obtain venous access with the first attempt in all of the potential donors.

VeinViewer demonstrated the ability to help health care workers perform successful venipuncture in patients who have difficult-to-access veins. The end result is a greater number of successful donations leading to an increase in the donor blood population. VeinViewer could additionally prove to enhance the experience of all blood donors, thereby increasing new donor potential. Proper utilization of this technology could lead to greater patient satisfaction and higher venipuncture success rates in all healthcare scenarios.