

I.V. House TLC® Splint TOUCH / LOOK / COMPARE



I.V. House TLC® Wrist Splint

Do you want to reduce infiltrates by up to 20%?

I.V. House is honored to announce the TLC® Splint has been selected as a **finalist in the 2019 Edison Awards**, which recognizes some of the most innovative new products in the world.

Although we appreciate the award, the feedback we get from our partner hospitals about how these revolutionary armboards improve patient safety and increase nurse efficiency is what really matters.

If you're in the UK and Ireland, please contact info@caragen.com for more information. For all other inquiries, please visit www.ivhouse.com.

Using I.V. House products, a US hospital saw a **20% reduction in moderate to severe infiltrates**.

Another hospital saw a **17% decrease in infiltrates** since converting to I.V. House products approximately a year and a half ago.

The **I.V. House UltraDome® and TLC Splint** were part of a bundle that reduced IV catheter loss from **21% to 2.7%**, extending dwell times for a pediatric hospital.

After a recent trial, nurses gave high marks to I.V. House products. 95% of nurses found the products easy to apply, but more importantly, **86% said they made it easy to assess the IV insertion site**.

Finally, the results of a trial at St. Louis Children's Hospital **showed ZERO IV infiltrates in patients wearing the TLC Wrist Splint** compared to 12 IV infiltrates in the patients wearing traditional armboards. [You can read more here.](#)

IRELAND

1st Floor, Suite 32 The Mall
Beacon Court, Sandyford, Dublin 18
+353 (0)1 568 8960 | info@caragen.com

UNITED KINGDOM

3 Seymour Court, Tudor Road
Manor Park, Runcorn Cheshire WA7 1SY
+44 (0)1928 571 801 | info@distinctivemedical.com



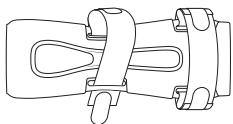
I.V. House TLC® Foot Splint



I.V. House TLC® Elbow Splint with Straps

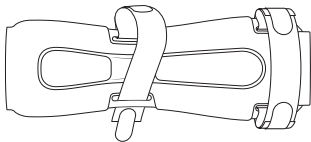
I.V. House TLC Splint Product Selection Guide

TLC® Wrist Splint with Straps

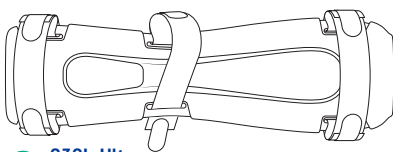


TLC Wrist Splint is also available in a Basic version without straps.

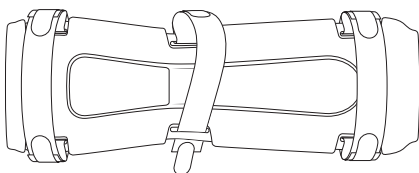
S 939S-Ultra
Infants 0–12 months, or 2.5–12 kg



M 939M-Ultra
Toddlers 12–36 months, or 9–15 kg



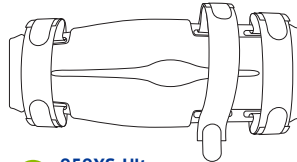
L 939L-Ultra
Children 3–10 years, or 12–41 kg



XL 939XL-Ultra
Youth/Adults 10 years and up, or over 40 kg

2018-10-12

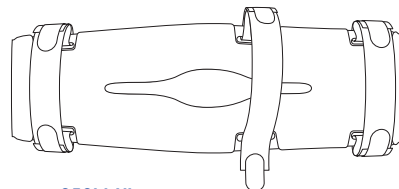
TLC® Elbow Splint with Straps



TLC Elbow Splint is also available in a Basic version without straps.

XS 959XS-Ultra
Newborns 0–4 months, or 2.5–7 kg
Small splint, shorter straps

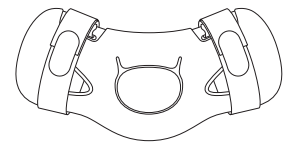
S 959S-Ultra
Infants 4–12 months, or 6–12 kg
Small splint, longer straps



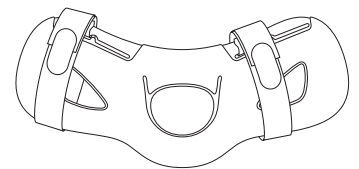
M 959M-Ultra
Toddlers 12–36 months, or 9–15 kg
Large splint, shorter straps

L 959L-Ultra
Children 3–10 years, or 12–41 kg
Large splint, longer straps

TLC® Foot Splint



XS 949XS-Foot
Newborns 0–4 months, or 2.5–7 kg



S 949S-Foot
Infants 4–12 months, or 6–12 kg
May fit larger infants.
Nonambulatory infants only

Reducing Complications of Intravenous Therapy in Infants and Toddlers



Sabra Wilson, BSN, RN, VA-BC | St. Louis Children's Hospital, St. Louis, Missouri

Background

- Peripheral Intravenous (PIV) catheters are a common delivery method for medications during hospitalization but carry a high incidence of complications and frequently require re-insertion.
- There are several contributing factors that may increase the incidence of PIV complications in infants and toddlers:
 - Children are active making securement more difficult.
 - Infants and toddlers may be unable to verbalize discomfort due to age or disease process.
 - Integrity of their skin and blood vessels may be compromised.
- For infants and toddlers, when a PIV is placed at a site of flexion (hand, foot, antecubital), stabilization is essential to minimize catheter movement inside the vessel.
- The current arm board composed of cloth, foam and cardboard does not allow insertion site visualization when taped and secured in place.
- Palmar infiltrates occur when the infiltrate or extravasation goes undetected and gravity pulls fluid into the palm, potentially causing serious injury.
- Arm boards are routinely used to immobilize extremities and minimize catheter movement.
- Assessment of the PIV site with the current arm boards obscures the palmar site and becomes a time consuming process.
- Nurses must be able to assess the site by looking, touching, and comparing to ensure safe administration of intravenous fluids and medications.
- With a range of 15.7% to 33.8% and the mean incidence of 23.9%, infiltration is the most common form of IV catheter failure.

Supporting Evidence

- Recommendations from the Infusion Nursing Society state that all attempts should be made to avoid placing PIVs in areas of flexion, which is extremely difficult with infants and toddlers.
- Micro movement both inside and outside the vessel wall lead to infiltration of the intravenous fluid and frequent re-insertions.
- The Centers for Disease Control (CDC) recommends evaluation of the insertion site by palpation through the dressing to discern tenderness and by visual inspection.
- If a transparent dressing is used, removal of an opaque dressing for visual assessment is recommended if tenderness is present.

Previous Interventions

- The Vascular Access team adopted the Cincinnati Children's Hospital's Pediatric Intravenous Extravasation Assessment System and provided education for all nursing staff.
- The Vascular Access team worked with pharmacy to identify medications that are caustic agents or vesicant; medications were classified as Green, Yellow & Red.
- The acronym TLC (Touch, Look and Compare) was introduced to be used with all site assessments.



Proposed Intervention

- To address the ongoing concern, a pilot was conducted to test an ergonomically designed splint (TLC® Splint) that incorporated an opening that would allow nurses to palpate, visualize and compare the insertion site with the opposite extremity.
- It was postulated that the TLC Splint would allow 360° visualization to quickly identify palmar infiltrations and support improved assessment to promote patient safety.



Implementation and Results

- Data were collected on the infiltrate/extravasation rates and nurse satisfaction.
- Vascular access consults were used to establish the rates of infiltrate/extravasation from 11/23/15 – 12/31/16.
- The splint clearly demonstrated support for adoption of the new product.



Evaluation Criteria	Yes	No	N/A	Not Scored
1. Instructions clear and easy to use	68.8%	0	22%	8%
2. Splint easy to apply and remove	62.2%	0	20%	17.7%
3. Splint remained secure	77.7%	2%	4%	15.5%
4. Effectively immobilized extremity	93.3%	2%	0	4%
5. Provides easy visualization	95.5%	0	0	4%
6. Facilitated hourly assessment	88.8%	2%	2%	4%
7. Safety improved: No skin breakdown	88.8%	2%	0	8%

INFILTRATION PERCENTAGE PRE AND POST INTERVENTION

Intervention	n	Percentage
Pre-Intervention	12	28.50%
Post-Intervention	0	0%