

# *Making Connections in the OR*



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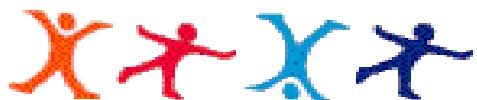


# Disclosures.....



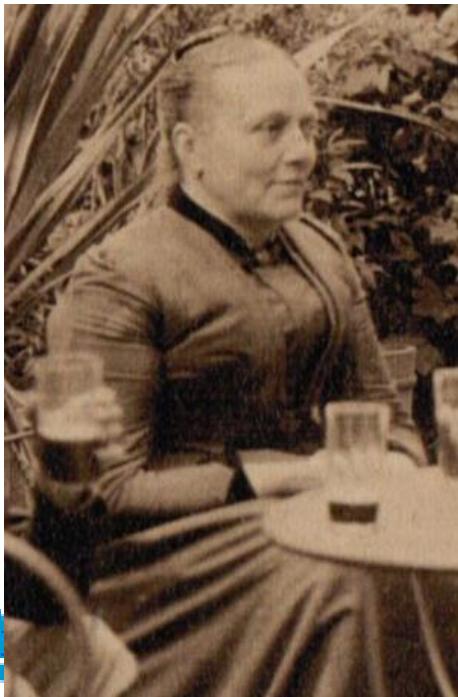
# Lecture Goals

- ✓ **A LITTLE HISTORY**
- ✓ **80369**
- ✓ **GEDSA: STAY CONNECTED INITIATIVE**
- ✓ **CA ASSEMBLY BILL 1867**
- ✓ **DO ALL THIS IN < 35 MIN!**



# Meet the Luers

Georg Wilhelm Amatus Lüer: 1802 - 1883



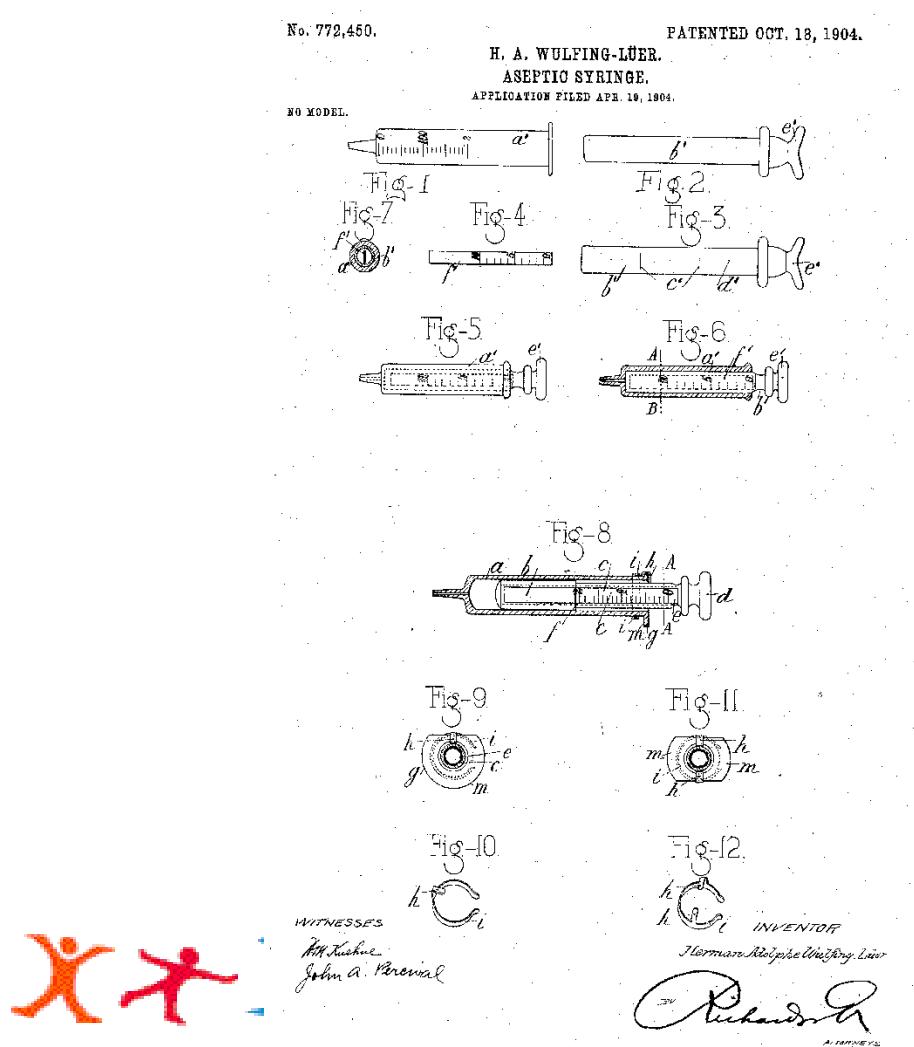
Jeanne



1896 Karl Schneider: Hermann Adolf Wulffing-Lüer



# 1897: Luer Meets B&D



Maximillian Becton

Fairleigh Dickinson



# Luer Universal Connectors



# 1988: Ramstein Air Show Disaster



Luer: 6% Taper

Rekord: 10% Taper



Figure 1. Tube delivering oxygen fell off nebulizer



Figure 2. The oxygen tubing was connected to a needleless port.







## **Misconnections in the Critically Ill: Injection of High-Dose Gadolinium into an External Ventricular Drain**

Sumit Singh, MD,\* Sepehr Rejai, MD,\* Zarah Antongiorgi, MD,\* Nestor Gonzalez, MD, FAANS, FAHA,† and Matthias Stelzner, MD, FACS‡



■ CLINICAL CARE

## **Unintentional Infusion of Phenylephrine into the Epidural Space**

Kress R. Townley, MD, Jason Lane, MD, Robyn Packer, NP and Rajnish K. Gupta, MD

■ EDITORIAL

## **J'Accuse! Failure to Prevent Epidural and Spinal Catheter Misconnections**

David J. Birnbach, MD, MPH,\* Sorin J. Brull, MD, FCARCSI (Hon),†  
and Richard C. Prielipp, MD, MBA, FCCM‡

# Underappreciation of Wrong Route Med Errors

- No mandatory reporting
- Few hundred cases/year - underreported
- Settled law suits
- Various agencies involved: FDA, ISMP, JC, etc
- 2011: 116 enteral to IV cases reported

## Invited Review

### **Tubing Misconnections: Normalization of Deviance**

Debora Simmons, RN, MSN, CCRN, CCNS<sup>1,2</sup>;  
Lene Symes, RN, PhD<sup>1</sup>; Peggy Guenter, RN, PhD, CNSN<sup>3</sup>;  
and Krisanne Graves, RN, MSN, CPHQ<sup>1</sup>

*Financial disclosure: none declared.*

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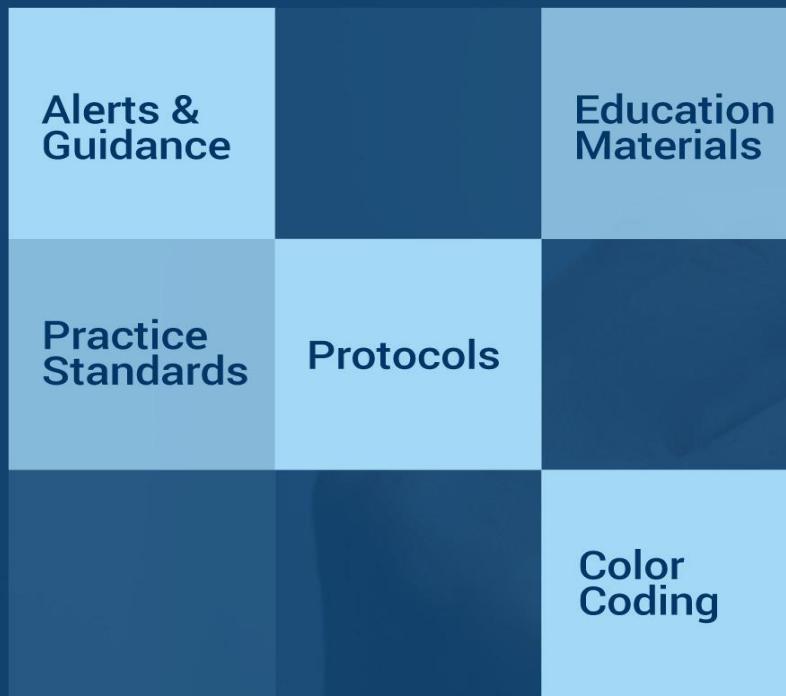
# This Can't Happen....



Unite. Connect. Deliver.



# Ineffective Attempts Demanded a Comprehensive Solution



2006

WHO recognized this as a Global  
public health issue and requested to  
ISO for an industry standard.



# 2006: JC Seminal Event

The Joint Commission

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Thursday 7:15 CST, March 24, 2016

## Topic Details

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### Sentinel Event Alert, Issue 36: Tubing misconnections—a persistent and potentially deadly occurrence

April 3, 2006

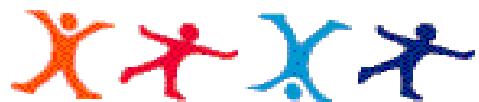
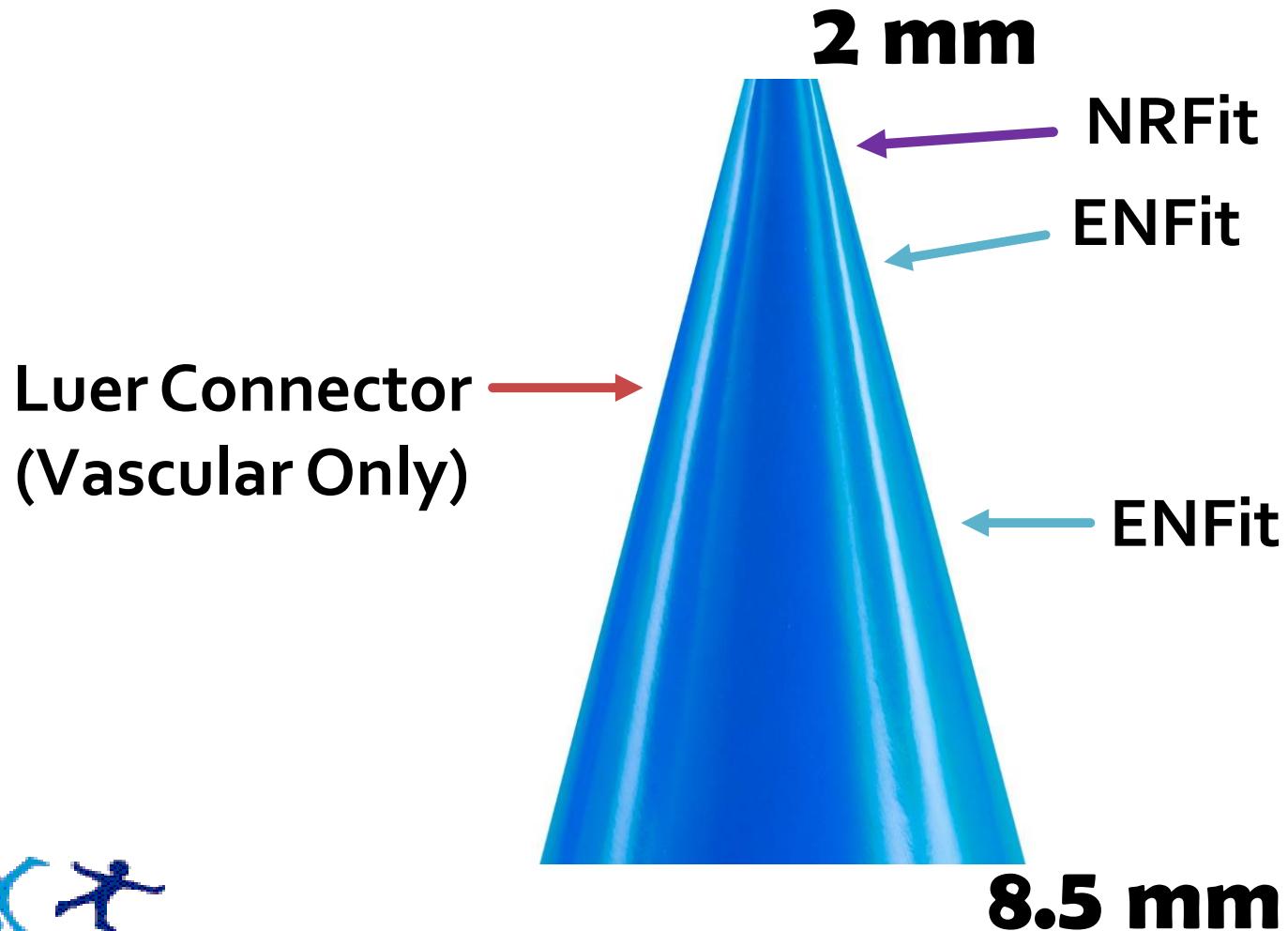
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**Editorial note:** As of August 20, 2014, please use the updated information and guidance on this topic that is in [Sentinel Event Alert Issue 53](#), "Managing risk during transition to new ISO tubing connector standards."

Tubing and catheter misconnection errors are an important and under-reported problem in health care organizations. In addition, these errors are often caught and corrected before any injury to the patient occurs. Given the reality of and potential for life threatening consequences, increased awareness and analysis of these errors—including averted errors—can lead to dramatic improvement in patient safety.



# ISO: 80369 Small Bore Standards



# 80369 Series Designations

- 80369-3: Enteral connectors
- 80369-5: Limb cuff inflation connectors
- 80369-6: Neuraxial connectors
- 80369-7: Luer 6% taper



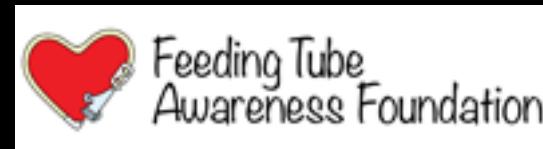


# Global Enteral Device Suppliers Association

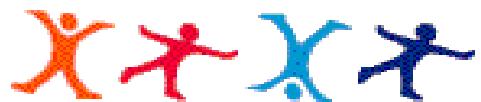
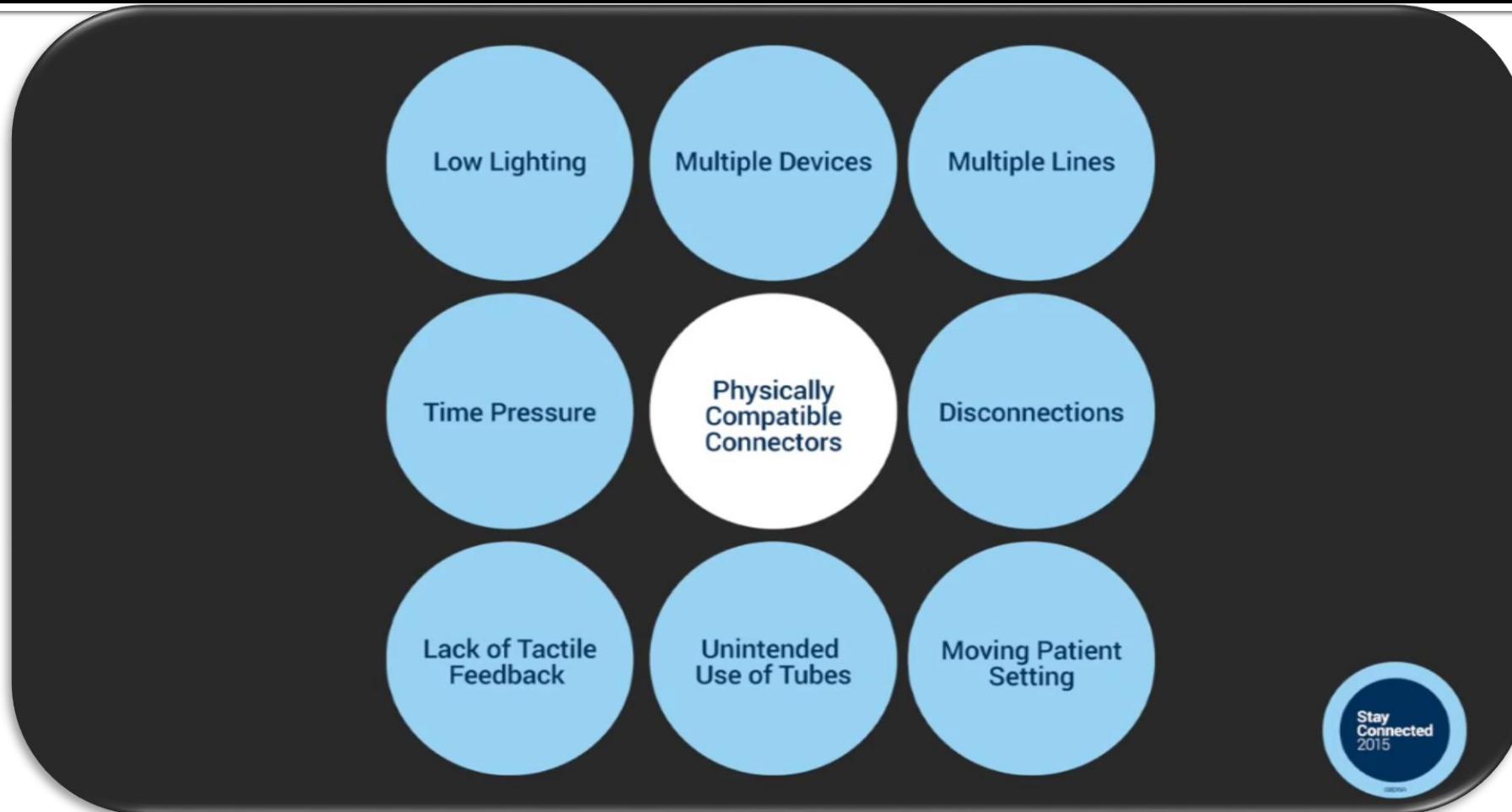


# GEDSA Supporting Organizations

Stay  
Connected

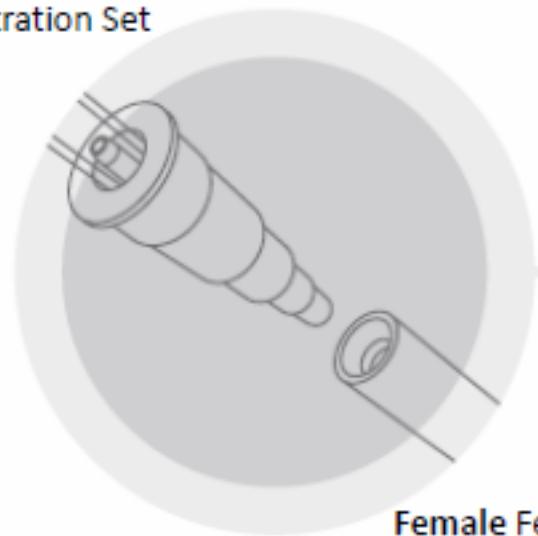


# Enteral Connection - EnFit



## CURRENT

Male Stepped or  
"Christmas Tree"  
Connector from  
Administration Set

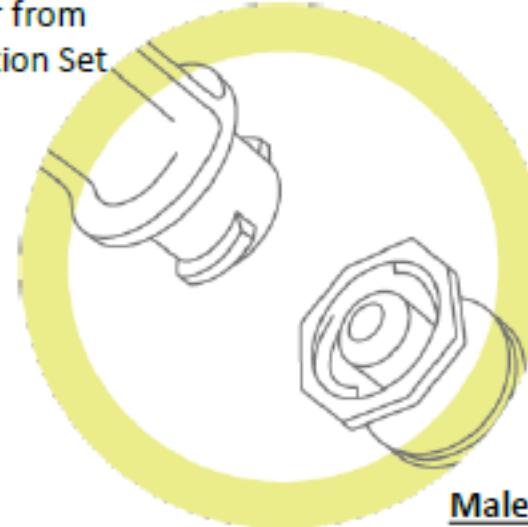


Female Feeding  
Tube Port

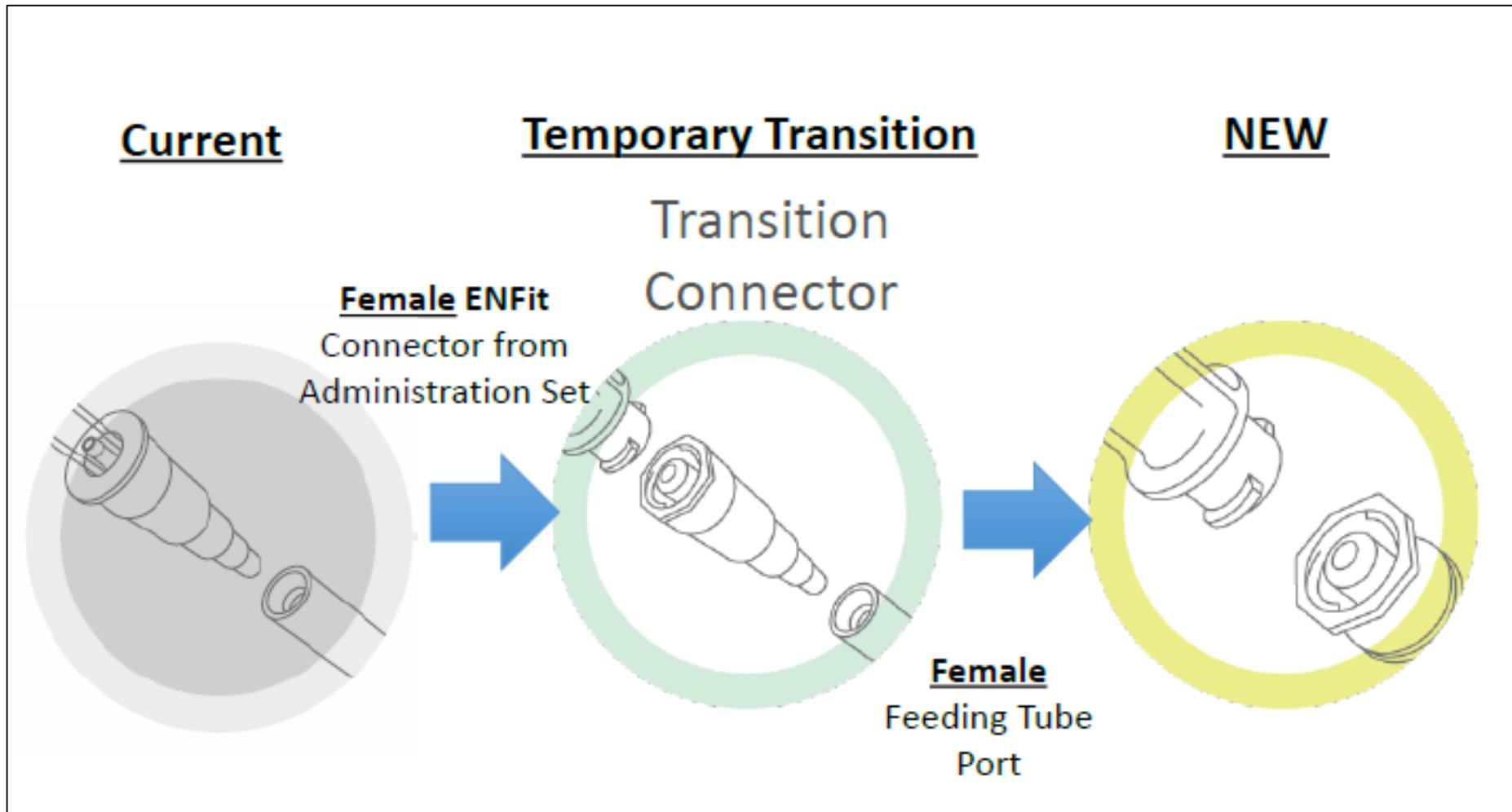
## NEW

# ENFit

Female ENFit  
Connector from  
Administration Set



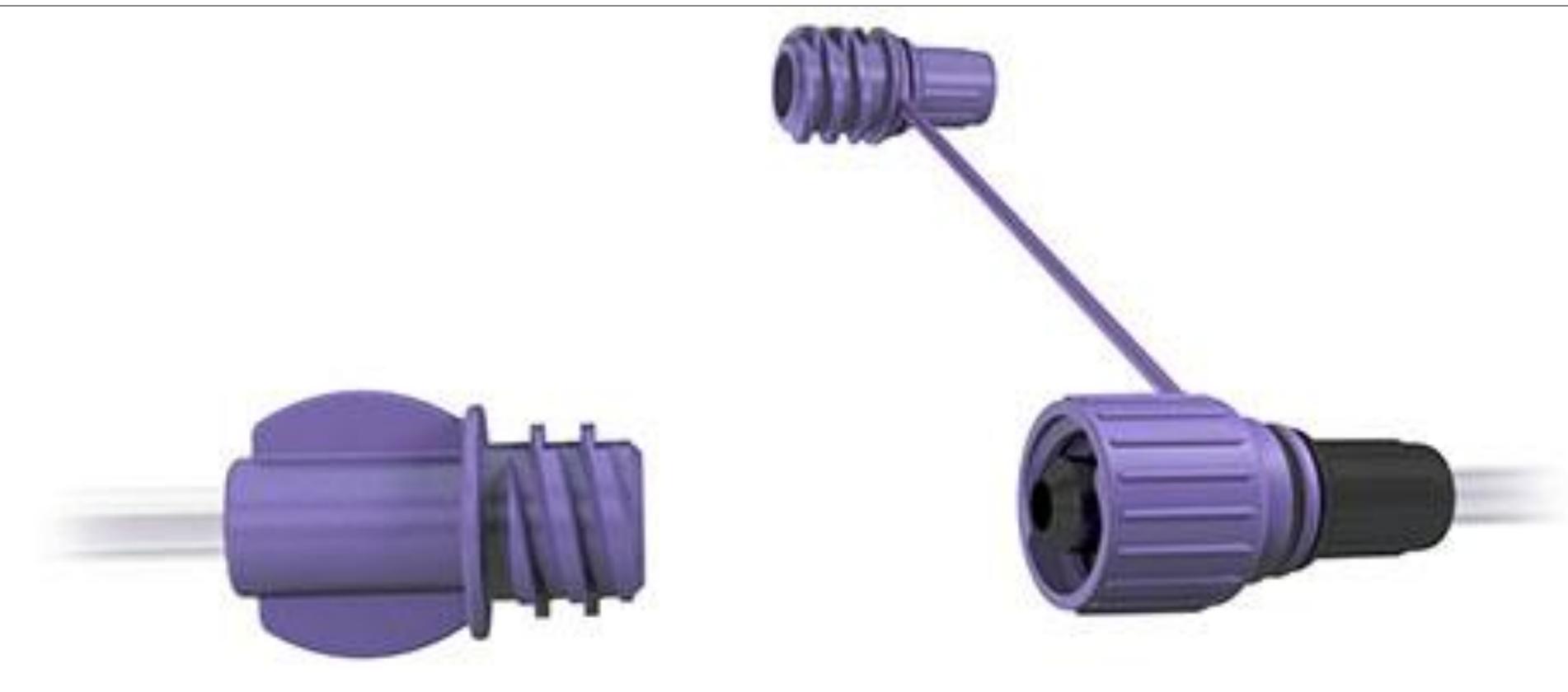
Male ENFit  
Connector for  
Feeding Tube





ENFit™









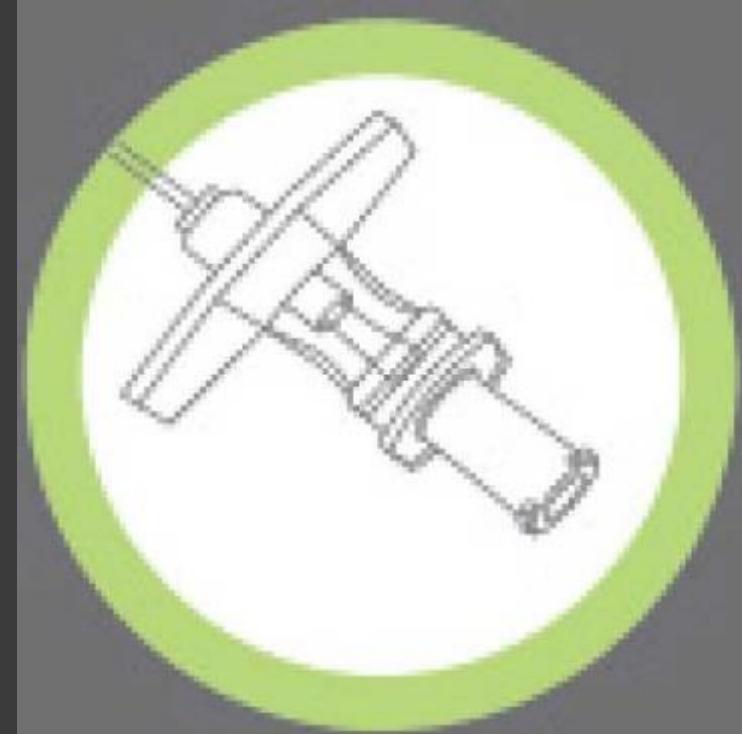


# Enhancing Patient Safety

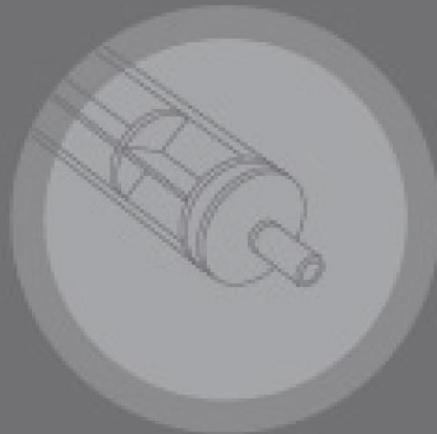
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New global design standards  
for neuraxial connectors

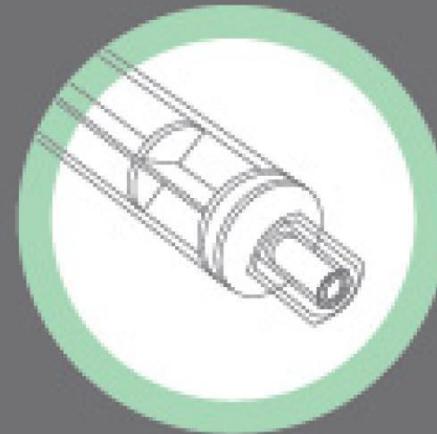
# Introducing NRFit the NEW ISO Standard Neuraxial Connector



80369-6

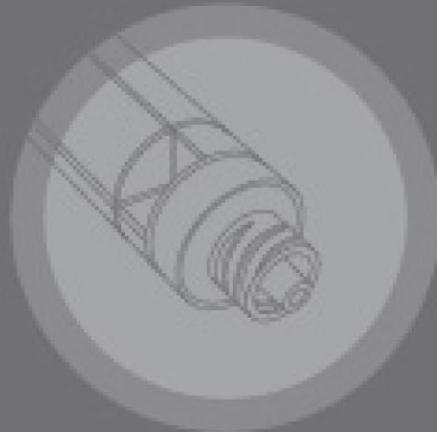


SYRINGE

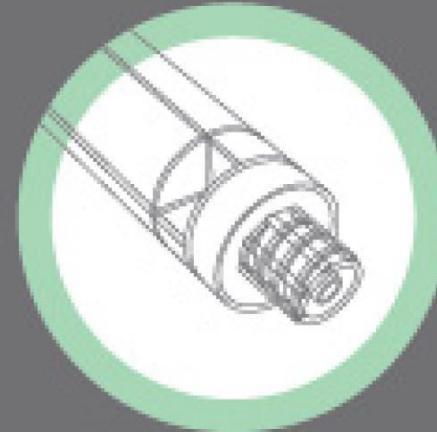


SYRINGE

Slip males will have a collar surrounding the connector



LUER-LOCK SYRINGE



LUER-LOCK SYRINGE

**NRFit™**

Coming  
Soon

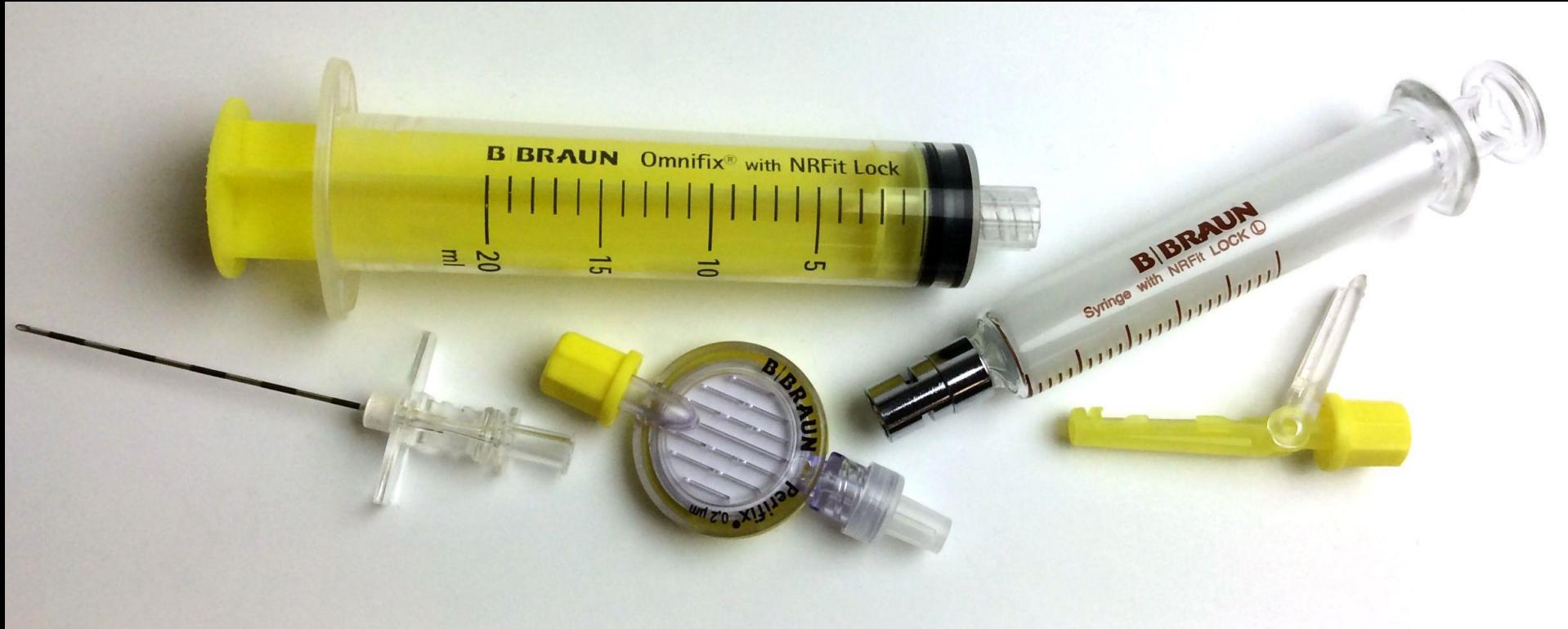
NRFit is a trademark of GEDSA



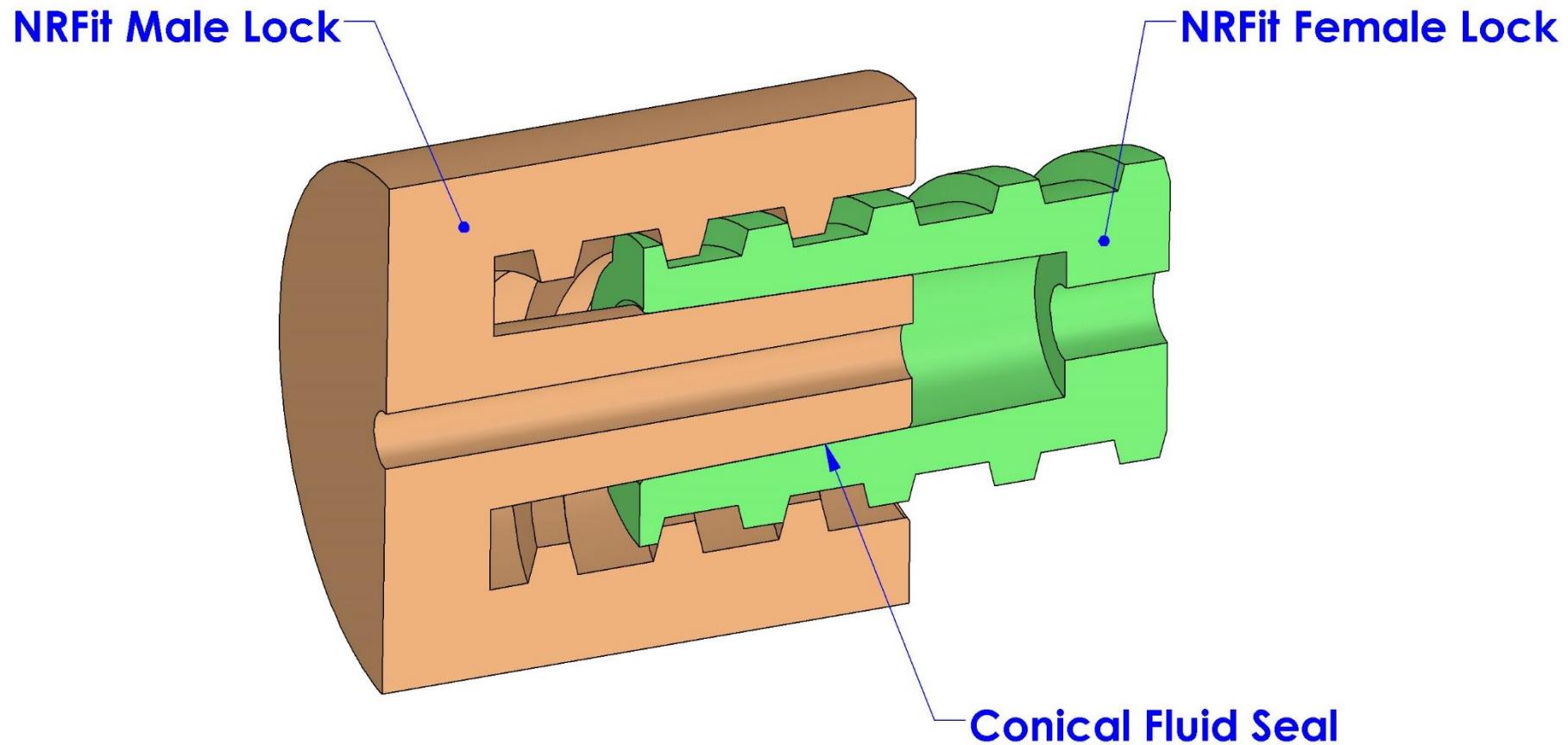
Luer



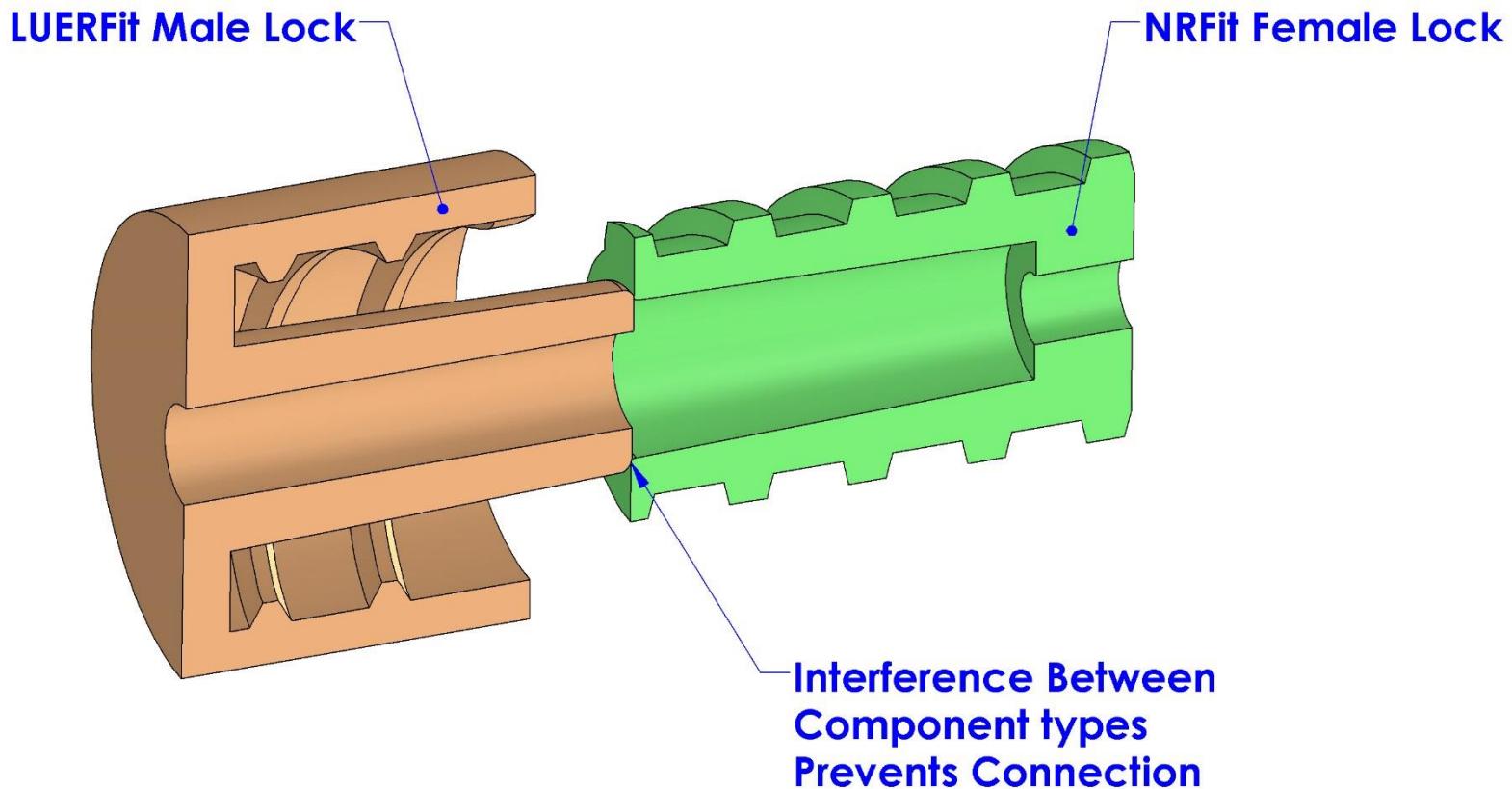
Courtesy of B Braun



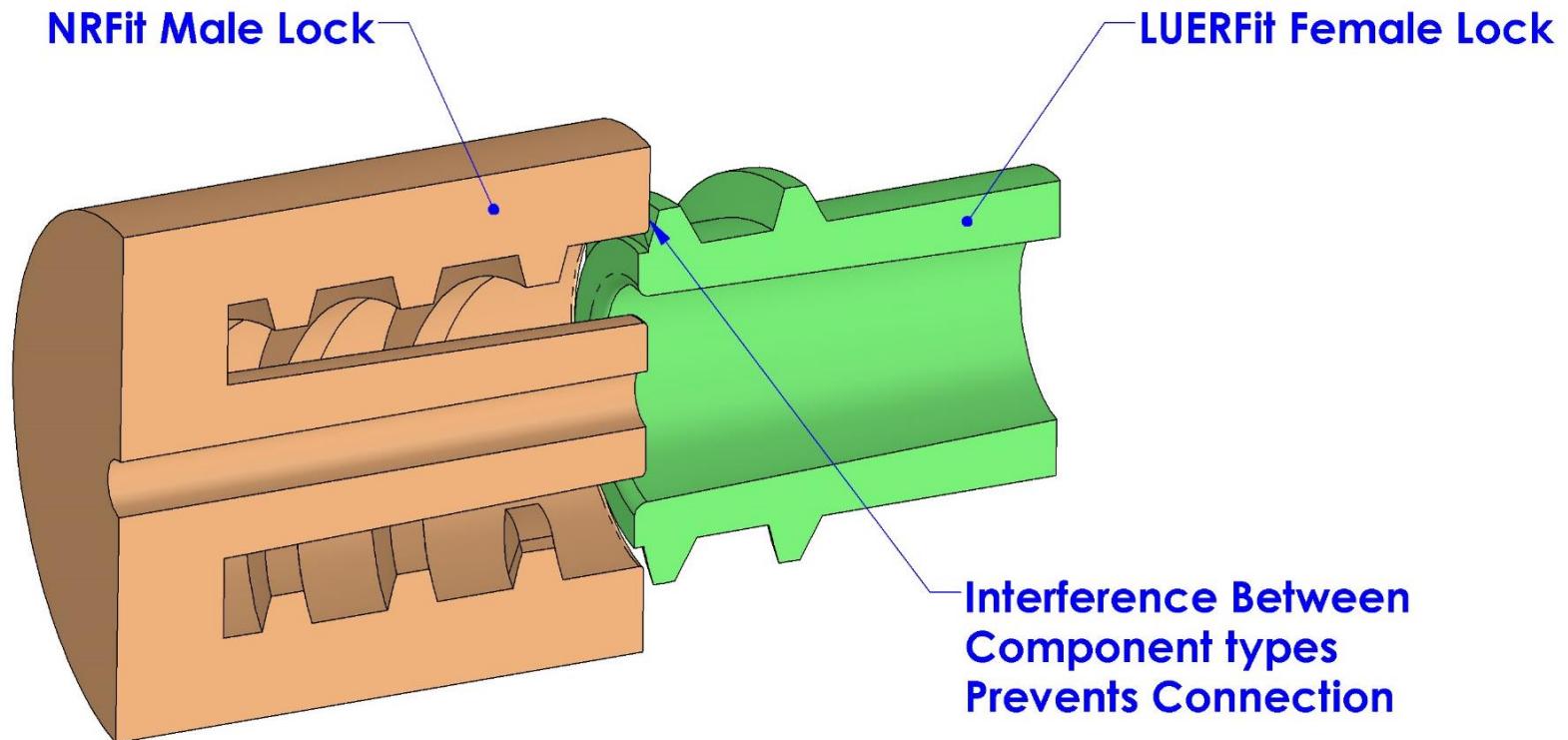
Courtesy of B Braun



Courtesy of B Braun



Courtesy of B Braun



Courtesy of B Braun

# CA 1867



## Assembly Bill No. 1867

### CHAPTER 194

An act to amend Section 1279.7 of the Health and Safety Code, relating to health facilities.



[Approved by Governor August 27, 2012. Filed with  
Secretary of State August 27, 2012.]

# CA 1867

- Epidural connections &
- Enteral connections are
- Prohibited to fit into Vascular connections
- January 2<sup>nd</sup> 2016



# CA 1867

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- Epidural connections &
- Enteral connections are
- Prohibited to fit into Vascular connections
- January 26 2017





# CHPSO

California Hospital  
Patient Safety Organization

*Eliminating preventable harm and improving  
the quality of health care delivery*



# NRFit Unresolved Issues

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- Caudals?
- Intrathecal chemo?
- Blood patch?
- Omaya reservoirs?
- January 2017??!!





INSTITUTE FOR SAFE MEDICATION PRACTICES

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[www.ismp.org](http://www.ismp.org)

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