VIPER PRIME® System

An opportunity to improve MIS operational efficiency, sustainability, and reduce costs associated with MIS lumbar fusions

FEWER instruments **REDUCED** steps **ONE** instrument pass

As compared to the VIPER[®] 2 MIS Spine System

PROCEDURE Efficiency

In an Ethnographic Study¹ The VIPER PRIME® System **Reduced Time for** Preparation, Tapping and Screw Insertion By



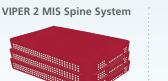
Traditional Jamshidi/ **Guidewire Technique**





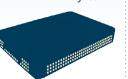


Annual Savings In Reprocessing Costs⁺ The VIPER PRIME System was associated with 2 fewer instrument trays (4 levels)° compared with the VIPER 2 MIS Spine System leading to reductions in costs of sterilization.



ECONOMIC Value

VIPER PRIME System



Additional Savings

May Be Recognized In The **Operating Room And In The Sterile Processing Department** through improved OR efficiency, improved procedure flow and reduced waste and processing costs when compared to traditional Jamshidi/Guidewire techniques.³

EARTHWARDS[®] Recognition^{3[®]}

As Compared to the VIPER[®] 2 MIS Spine System, the VIPER PRIME System is Associated with:

REDUCTION[§] In Materials (Excluding Packaging)



REDUCTION[§] In Primary Packaging



LESS ENERGY[§] Used To Sterilize And Disinfect Instruments



LESS WATER[§] Used To Sterilize And Disinfect Instruments



Assuming 50 procedures per year at a given institution and a cost of \$127 USD per instrument tray^{4, 5} processed/sterilized and 2 less trays with the VIPER PRIME System when compared to the VIPER® 2 MIS Spine System.
 Reductions are in comparison to the existing VIPER® 2 MIS Spine System.

- Instrument trays are counted as each individual tray/level within an instrument set.
 © Earthwards[®] is the Johnson & Johnson approach for developing innovative and more sustainable products.

REFERENCES

- 1. Grossi P, Badin M, Erb M, Cirilli L, Malone D, Walsh M, Menzie AM, Bhattacharryya SK. Reduction in Pedicle Screw Placement Time With a Novel Guidewireless Pedicle Screw System for Minimally Invasive Spine Surgery: Initial Findings. Abstract Accepted and Will Be Presented at ISPOR 2019. PMD36. Note: Results presented in this study are from a single surgeon, single site case study. These results may vary in other cases.
- 2. VIPER PRIME System Internal Data on File. ADAPTIV SEA 103327910. Note: VIPER Prime System eliminates the following steps when compared to the VIPER 2 MIS Spine System: Insert Jamshidi needle, insert guidewire, remove jamshidi needle, insert tap, remove tap, start screw, and remove guidewire.
- 3. VIPER PRIME System Internal Earthwards® Data on File. ADAPTIV SEA 103339245.
- Abrams J, Dekutoski M, Chutkan N. Maximizing Operating Room Efficiency in Spine Surgery. (#477) International Society for the Advacement of Spine Surgery. Boca Raton, Florida. April 13, 2017.
- 5. Coin News (Web Page) US Inflation Caclulator. Updated March 13, 2018. Available online at: http://www.usinflationcalculator.com Accessed: March 20, 2018.



DePuy Spine Inc.

325 Paramount Drive, Raynham, MA 02767 USA Telephone: +1 (800) 227-6633

www.depuysynthes.com

© DePuy Synthes 2019. All rights reserved.