



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

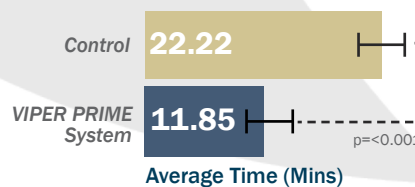
As compared to the VIPER® 2 MIS Spine System

PROCEDURE Efficiency

In an Ethnographic Study[†]
The VIPER PRIME® System
Reduced Time for
Preparation, Tapping and
Screw Insertion By

47%

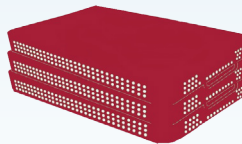
Compared To The
Traditional Jamshidi/
Guidewire Technique



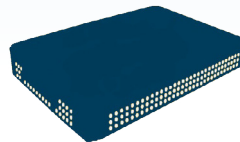
**7 Less
Procedural Steps**
When Compared to the
Traditional Jamshidi/
Guidewire Technique²

ECONOMIC Value

VIPER 2 MIS Spine System



VIPER PRIME System



\$\$\$
\$12,700

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.



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)

69%

REDUCTION[§] In Primary Packaging

47%

LESS ENERGY[§]
Used To Sterilize
And Disinfect Instruments

67%

LESS WATER[§]
Used To Sterilize
And Disinfect Instruments

67%

[†] 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, Bhattacharyya 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.
4. Abrams J, Dekutoski M, Chutkan N. Maximizing Operating Room Efficiency in Spine Surgery. (#477) International Society for the Advancement of Spine Surgery. Boca Raton, Florida. April 13, 2017.
5. Coin News (Web Page) US Inflation Calculator. Updated March 13, 2018. Available online at: <http://www.usinflationcalculator.com> Accessed: March 20, 2018.



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