# SHE NEEDED PEACE OF MIND. WE HELPED PUT HER AT EASE.

## Behind each suture is a story

## **Critically strong**

Leading up to Gwen's abdominal surgery she was concerned about life after. She didn't want to be held back from the activities she enjoys or her plans to have another baby.

#### The need

The first two weeks following surgery are critical — this is when the wound is weakest.<sup>1</sup> During the inflammation and proliferation stages of wound healing, type-1 collagen is low, increasing gradually to improve the strength of a wound.<sup>1</sup> While this is happening, wound strength is only 7–10 percent that of the intact dermis.<sup>2,†</sup> With the incidence of abdominal wound dehiscence rates as high as 3.4 percent,<sup>3</sup> it's understandable why patients like Gwen have concerns.

## The solution

Physicians and their patients want a stronger suture that keeps its strength during the critical wound healing process. Our Polysorb<sup>™</sup> suture is designed with a twisted core of tightly braided filaments, a tight outer braid construction, and a unique hydrophilic coating. Compared to Ethicon Vicryl<sup>™</sup>, the Polysorb<sup>™</sup> suture is 39 percent stronger out of the package and stays stronger through the first two weeks.<sup>4</sup> Polysorb<sup>™</sup> suture also demonstrates better handling characteristics compared to Vicryl<sup>™</sup> with higher scores for surface features and knotting characteristcs.<sup>5,1,4</sup>

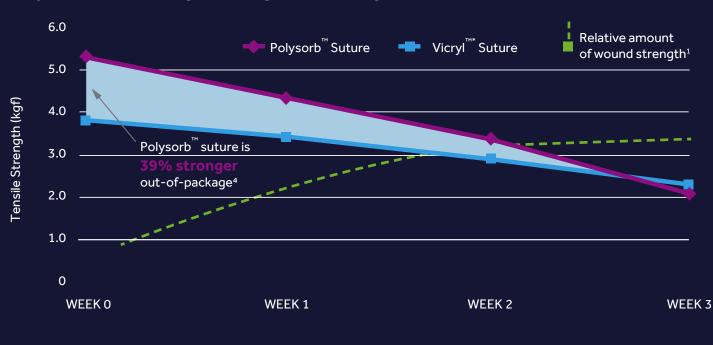
## The result

A stronger braided absorbable suture with superior handling.<sup>4.5.†.‡</sup>

## Polysorb<sup>™</sup> Braided Absorbable Suture







Polysorb<sup>™</sup> 2-0 suture provides greater strength in the critical first two weeks<sup>4,‡</sup>

## **Superior handling characteristics**

#### **Product comparison**

Smoother surface <sup>5,†</sup>	Greater ease of knot positioning <sup>5,†</sup>		Product	Polysorb <sup>™</sup> Suture	Vicryl <sup>™*6</sup>
			Suture Type	Braided Absorbable	Braided Absorbable
			Composition	Glycolide Lactide	Glycolide Lactide
Better knot tightness <sup>5,†</sup>	Stronger knot security <sup>5,†</sup>	_	Coating	Glycolide, Caprolactone and Calcium Stearoyl Lactylate	Caprolactone
			Tensile Strength	80%: 2 weeks 30%: 3 weeks % of USP	75%: 2 weeks 50%: 3 weeks 25%: 4 weeks % of initial strength
			Absorption Profile	56–70 days	56–70 days

## Contact your Medtronic suture specialist for more information. Call us at **800.722.8772** or visit **medtronic.com/woundclosure.**

† Animal data may not correlate with human clinical outcomes.

‡ Compared to Vicryl<sup>™\*</sup>.

2. Levenson SM, Geever EF, Crowley LV, Oaotes JF, Berard CW, Rosen H. The healing of rat skin wounds. Annals of Surgery. 1965; 161(2):293–308.

3. Webster C, Neumayer L, Smout R, et al. Prognostic models of abdominal wound dehiscence after laparotomy. J Surg Res. 2003; 109(2):130–137.

4. Based on internal report #RE00081904, Polysorb benchmarking report. March 2017.

- 5. Debus ES, Geiger D, Sailer M, Ederer J, Thiede A. Physical, biological and handling characteristics of surgical suture material.
- a comparison of four different multifilament absorbable sutures. Eur Surg Res. 1997;29(1):52–61.

6. Vicryl<sup>™\*</sup> suture [instructions for use]. Somerville, NJ: Ethicon, Inc; 2014.

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<sup>1.</sup> Witte MB, Barbul A. General principles of wound healing. Surg Clin North Am. 1997; 77(3):509–528.