

STPH Clinic for Wound Care and Hyperbaric Medicine



Ochsner/St. Tammany Partnership

John Kessels, MD

Medical Director
St. Tammany Wound Center

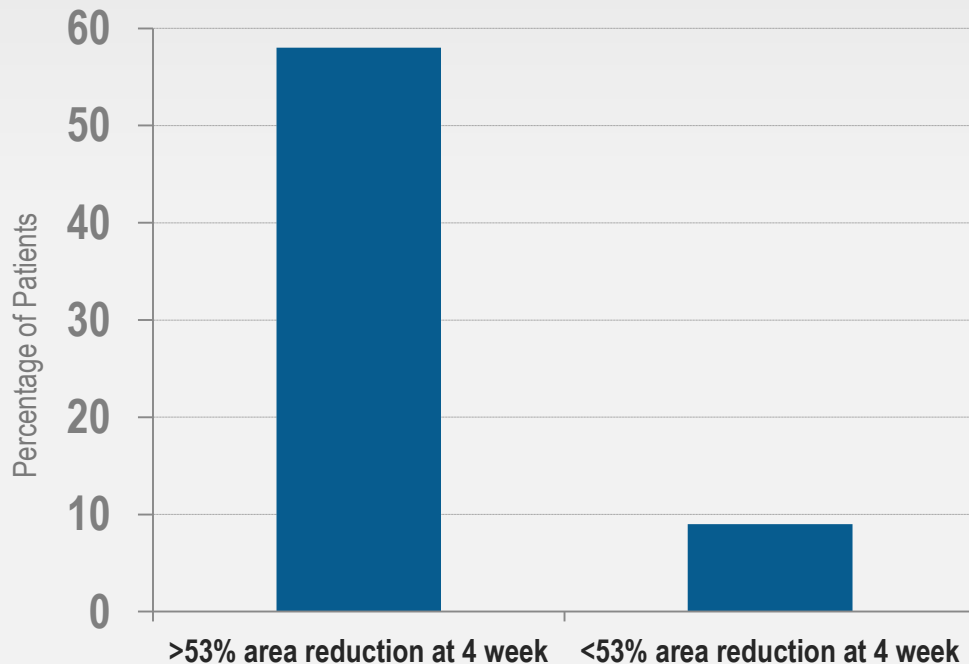
Chantal Lorio, DPM

Associate Medical Director
Ochsner Wound Care Services

The Need For Advanced Wound Care

The Sheehan Study

Percentage of Patients in Whom Ulcers Healed During the 12-Week Period



Insignificant decrease in wound size *early in treatment* makes definitive wound healing *more challenging*

The likelihood of a wound being *healed at 12 weeks* is dramatically *decreased if the wound is not 50% smaller in the first 4 weeks.*

STPH Clinic for Wound Care and Hyperbaric Medicine

- Established in 2003
- Advanced wound care technologies
- Innovative Multidisciplinary Approach

Multidisciplinary Approach

- John Kessels, MD, Medical Director
- Brian Strand, MD, Plastic Surgeon
- M'Liss Hogan, MD, Plastic Surgeon
- Consulting Services
 - Infectious Disease, Mike Hill, MD
 - General Surgery, Northlake Surgical Group
 - Cardiovascular Services
 - Covington Cardiology Clinic
 - Ochsner Cardiology
 - Podiatric Services, Sept. 1, 2015

Innovation

- Wound Care Telemedicine



STPH Clinic for Wound Care and Hyperbaric Medicine

Advanced Wound Technologies Available

Current Best Practice:

Wounds that have *not healed after 4 weeks* should be treated with **Advanced Wound Therapies**

Sensilase
Vascular
Testing

Total Contact
Casting

Negative
Pressure

Regenerative
Medicine

Ultrasonic
Debridement

Hyperbarics

Hyperbaric Oxygen Therapy

Pressurized 100% oxygen **significantly increases tissue oxygenation**

Substantial **benefits** for slow healing wounds

Speed of healing	Blood vessel formation	Elimination of toxins
Preservation of damaged tissue	Infection control	Surgical incision healing

IV Antibiotic Infusion

Initiation and
*coordination of IV
Antibiotics* for
long-term need

In-clinic infusions by
Registered Nurses

Total Contact Casting

Significantly
improves *success*
and speed of wound
healing

Application and
management of walking
casts for
diabetic/insensitive foot
wounds

- 1) Source: Evaluation of Removable and Irremovable Cast Walkers in the Healing of Diabetic Foot Wounds
- 2) A randomized controlled trial.
- 3) David G. Armstrong, DPM, MSC, PHD123, Lawrence A. Lavery, DPM, MPH4, Stephanie Wu, DPM, MS2 and Andrew J.M. Boulton, MD, FRCP3

Sensilase Vascular Testing

Evaluation of
*Peripheral Artery
Disease or Critical
Limb Ischemia*

Prediction of wound
healing and
*optimization of limb
salvage*

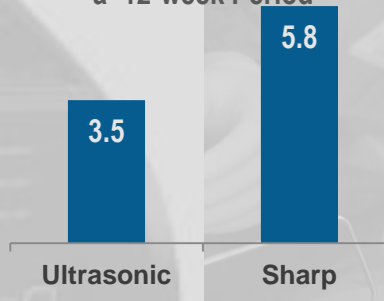
- 1) Source: Castronuovo *et al.*³—53 patients (61 limbs), prospective study (100% ulcers/gangrene). SPP reliably predicted wound healing and accurately identified CLI. Kondo *et al.*⁴—24 patients (44 limbs), prospective study (100% diabetes mellitus [DM]/hemodialysis). SPP was more sensitive to quantify ischemia compared with ABI; validation metric was digital subtraction angiography. Okamoto *et al.*⁵—140 patients (266 limbs), prospective study (100% hemodialysis patients). SPP was more effective in identifying PAD than transcutaneous partial pressure oxygen or transcutaneous oxygen tension (TcPO₂), ABI, or toe-brachial index or toe-brachial indices (TBI); validation metric was multidetector-row computed tomography angiogram. Yamada *et al.*⁶—211 patients (403 limbs), retrospective study. SPP was a more accurate, objective measurement for assessing severity of PAD and predicting wound healing compared with ABI, TBI, or TcPO₂.

Ultrasonic Debridement

When appropriate, Ultrasonic Debridement can achieve healing *faster* with *fewer procedures*

Less invasive than standard sharp debridement

Debridement Procedures Needed to Achieve Healing in a 12-week Period



- 1) Source: A Closer Look at Ultrasonic Debridement. *Podiatry Today*, 23(8). August 2010
- 2) Martin E. Wendelken, DPM, RN, Lee Markowitz, DPM, and Oscar M. Alvarez, PhD

Negative Pressure Wound Therapy



Negative Pressure Wound Therapy Devices

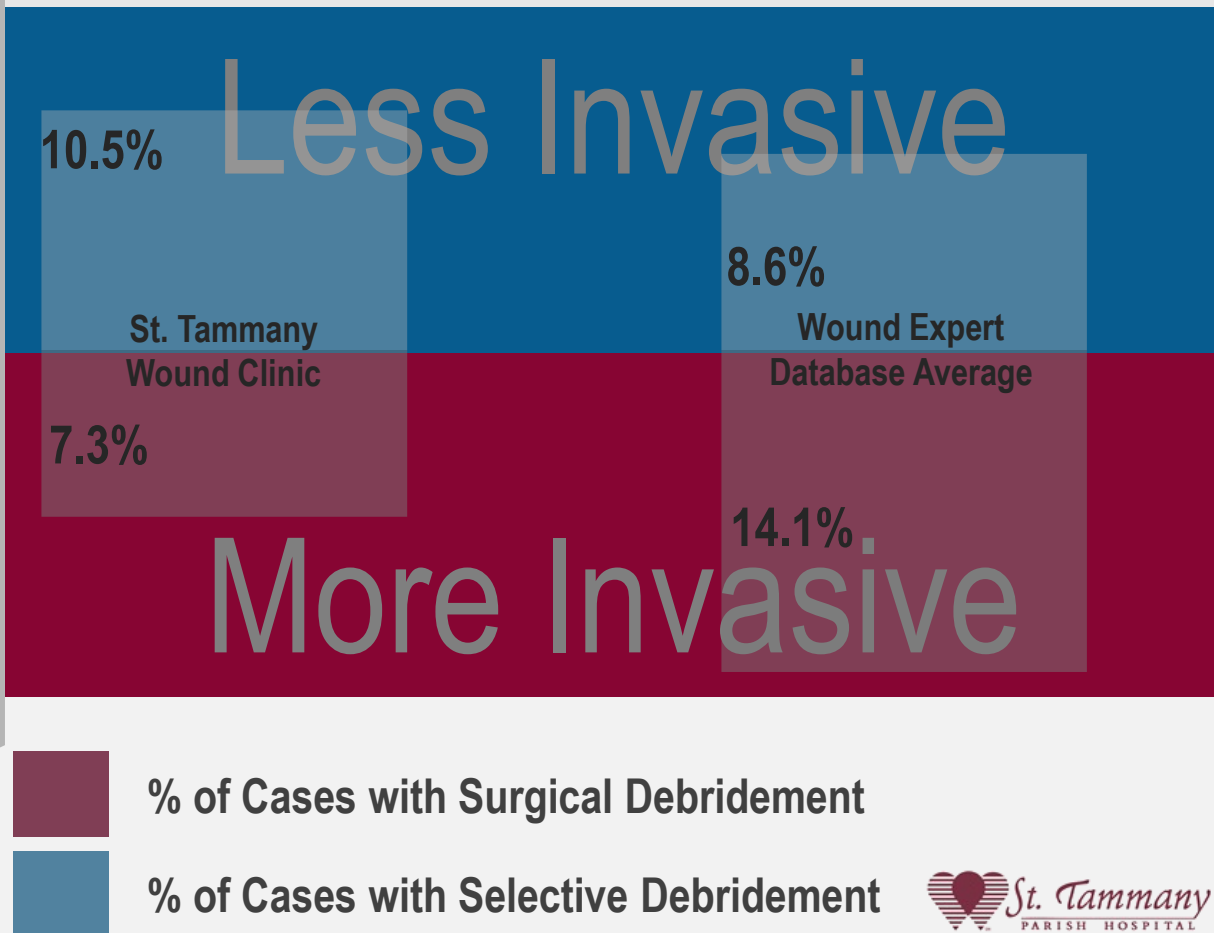
Improving ease of use, cost-effectiveness, and the overall patient experience



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Less Invasive

STPH Clinic patients are ***much less likely*** to have a more invasive ***surgical debridement*** procedure than patients at other wound care centers.



Source: January – May 2015 Wound Expert Database, St. Tammany Wound Clinic vs all database wound care centers.

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Lower Cost

Less invasive selective debridement also comes with lower cost for payers/patients. Selective debridement is $\frac{1}{4}$ *the billed cost* of surgical debridement.

STPH Clinic 2014 Average Procedures Performed

\$1445 per procedure*



499 Surgical

\$331 per procedure*



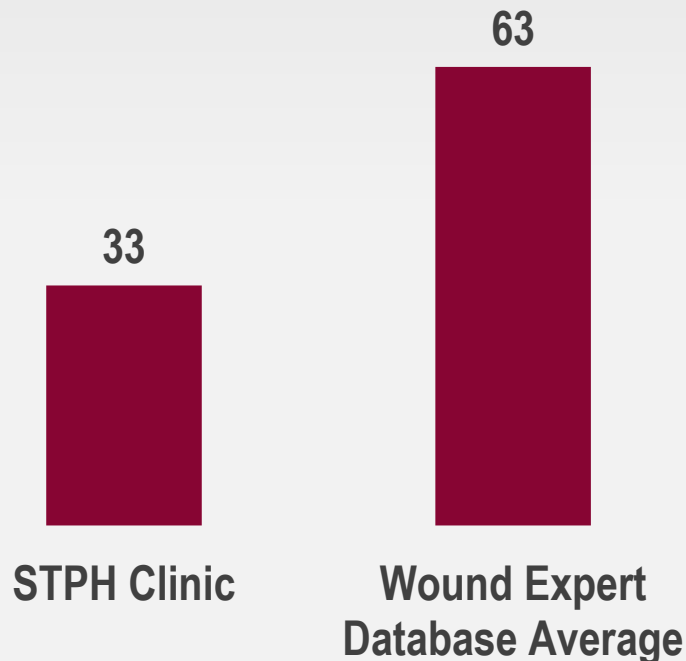
864 Selective

* Based on CPT specific Medicare reimbursement rates

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Faster Healing

Average Days to Heal
All Wound Types



Patients treated with *less invasive and lower cost procedures* at STPH Clinic *heal faster* - on average *30 days faster* than patients at other wound clinics.

Access

- Established relationship with Ochsner Hospital outpatient services and STPH outpatient services, acute care setting, and the ED to ensure timely handover of patients.
- Focus is to see patients within 24-48 hours of referrals, depending on payer requirements.
- Same day access for urgent care patients on an individual case basis.

Resources

1. Hirsch AT. Criqui MH. Treat-Jacobson D. Regensteiner JG. Creager MA. Olin JW, et al. Peripheral arterial disease detection, awareness, and treatment in primary care. JAMA. 2001;286:1317. [\[PubMed\]](#)
2. Frommelt P. Gorentz J. Deatsman S. Organ D. Frommelt M. Mussatto K. Digital imaging, archiving, and structured reporting in pediatric echocardiography: impact on laboratory efficiency and physician communication. J Am Soc Echocardiography. 2008;21:935. [\[PubMed\]](#)
3. Castronuovo JJ. Adera HM. Smiell JM. Price RM. Skin perfusion pressure measurement is valuable in the diagnosis of critical limb ischemia. J Vasc Surg. 1997;26:629. [\[PubMed\]](#)
4. Kondo Y. Muto A. Dardik A. Nishibe M. Nishibe T. Laser Doppler skin perfusion pressure in the diagnosis of limb ischemia in patients with diabetes mellitus and/or hemodialysis. Int Angiology. 2007;26:258. [\[PubMed\]](#)
5. Okamoto K. Oka M. Maesato K. Ikee R. Mano T. Moriya H, et al. Peripheral arterial occlusive disease is more prevalent in patients with hemodialysis: comparison with the findings of multidetector-row computed tomography. Am J Kidney Dis. 2006;48:269. [\[PubMed\]](#)
6. Yamada T. Ohta T. Ishibashi H. Sugimoto I. Iwata H. Takahashi M. Kawanishi J. Clinical reliability and utility of skin perfusion pressure measurement in ischemic limbs: comparison with other noninvasive diagnostic methods. J Vasc Surg. 2008;47:318. [\[PubMed\]](#)
7. Lo T. Sample R. Moore P. Gold P. Prediction of wound healing outcome using skin perfusion pressure and transcutaneous oximetry: a single-center experience in 100 patients. Wounds. 2009;21:310.
8. Tsuji Y. Hiroto T. Kitano I. Tahara S. Sugiyama D. Importance of skin perfusion pressure in treatment of critical limb ischemia. Wounds. 2008;20:95.

