

Thrive with PDPM/PDGM

PATHWAY TO PROFITABLE
REFERRALS

C.A.R.E.+™
“more than wound care”

Programs & solutions for wound & infectious disease
under PDGM/PDPM

Pathway to Profitability

infectious disease & wounds

Education



Complementary CEUs
specific to wound care.
On-demand webinars and courses

Collaboration



Continuity and collaboration of care
with all providers for complex
wound patients



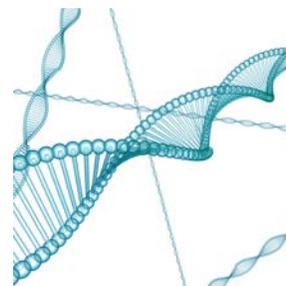


NPWT Modality



Most cost effective solutions with the best clinical outcomes

Identification



Identification and proper pathway through molecular testing for infectious disease

Historic Problem With Wound Referrals

Wound patient referrals historically have been a liability and financial loss for agencies and facilities. Until recently chronic and infected wounds were the #1 reason for lawsuits.

WOCN statistics show that approximately 35% of all wound admissions have unknown chronic wounds. New studies conclude that biofilm is the cause of most chronic wounds creating an actual barrier to treatment. Additionally unknown co-morbidities and high re-hospitalizations occur effecting the ability for your agency or facility to receive referrals from case managers.

Most wound referrals lose facilities money

unprofitable wound referral

Over 90% of chronic wounds have presence of biofilm

chronic wounds

WOUND PATIENT REFERRAL

Re-hospitalization rates as high as 40-50%

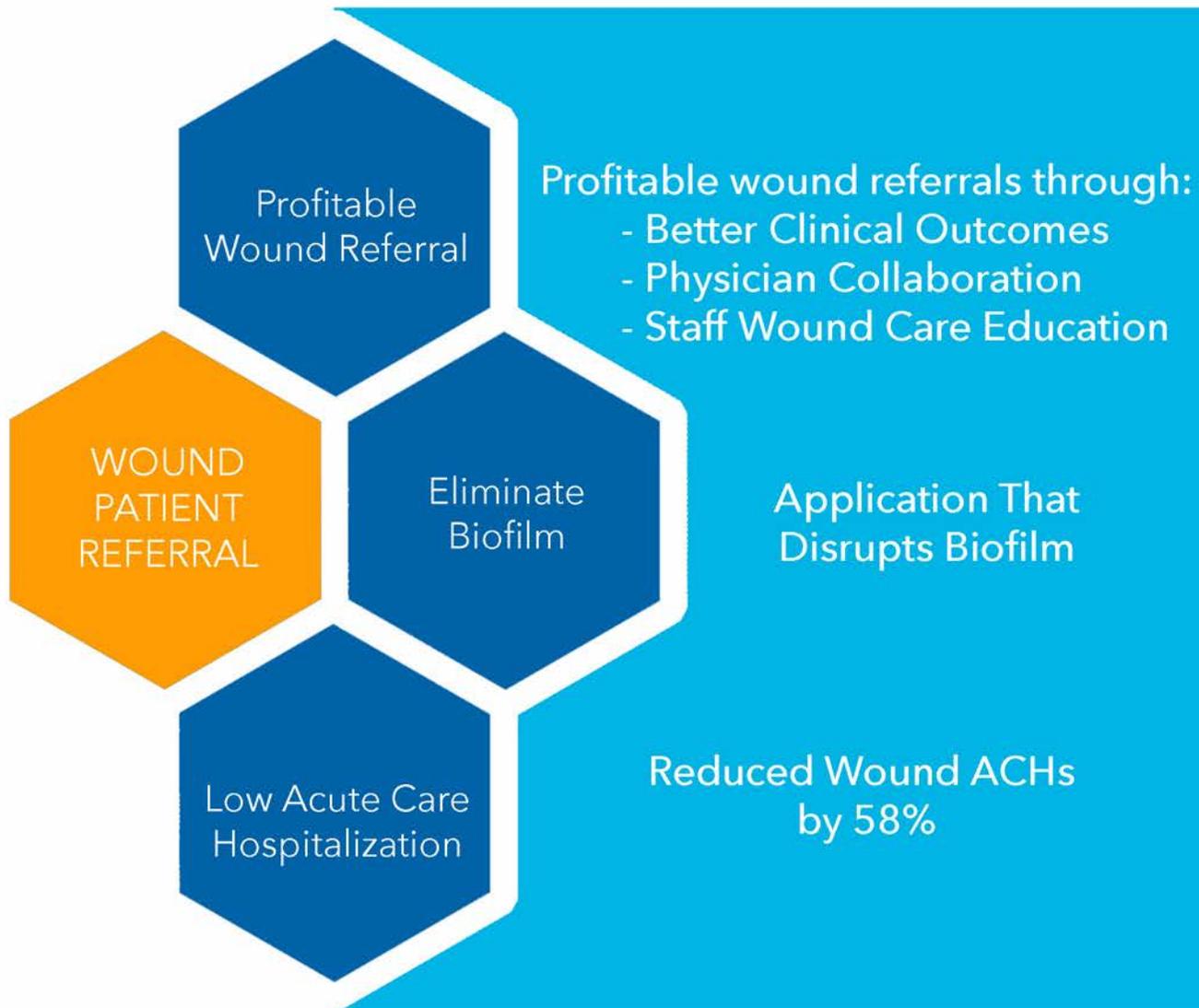
high rate of re-hospitalization

Better Clinical Outcomes

and profitable wound referrals

For over 27 years the founders of National Wound Care have developed a program of care that accelerates healing of patients with complex wounds.

National Wound Care understands that volatility in healthcare is the norm. So, we have found solutions that provide the substantially better results that maximize profitability for your facility. Under the previous fee-for-service models, these solutions were not widely implemented. Now under outcome based models of PDGM/PDPM, it is a must to provide best possible patient outcomes.



NPWT: DACC Dressing

better clinical outcomes

National Wound Care uses a proprietary modality in negative pressure wound therapy (NPWT) through the use of diacle charbomoyal chloride (DACC) contact layer within the NPWT dressing.

HEALING WITH DACC

Thousands of patients experienced healing with the most complex and severe wound types. This included non-healing chronic wounds, infected wounds, DFU, and surgical dehisced wounds. Many patients were even slated for amputation until our product was administered as a last effort of care and limbs saved, and lives changed.

The healing of these patients is due to the use of our DACC dressing solution and how it binds DNA damaging pathogens found in the wound bed and over 98% of the pathogens are removed at each dressing change.

WHY THIS WORKS

REMOVES BACTERIA INCLUDING ANTIBIOTIC RESISTANT STRANDS

Some bacteria strands are antibiotic resistant (i.e. methicillin-resistant Staph. Aureaus MRSA and vancomycin-resistant Enterococcus VRE), but are removed with the DACC dressing.

NON TOXIC & NON ALLERGENIC

Many man-made dressings for complex wounds are highly toxic and/or can cause allergic reactions to clinicians and patients. Some can also actually impede wound healing. DACC has no risk of allergies nor cytotoxicity.

NO BACTERIAL ENDOTOXIN RELEASE

Some advanced wound dressings, such as silver, actually kill bacteria, and create endotoxin release from the dead cells. With the DACC dressing the bacteria is removed and natural wound healing can occur.

NO CONTRAINDICATIONS

The DACC dressing can be used safely with all patients, including even pregnant or breast-feeding patients, as well as teens and children.

Naturally Derived for Best Outcomes and More GREEN for the Bottom Line

Our bodies were designed to heal. When they don't, there is something obviously wrong. We found that best outcomes come from products that naturally work with the healing process.

Most products within complex and advanced wound care are toxic and require special disposal protocols. With over 25 years in wound care, we see that solutions with high toxicity are not the best solutions for treating the patient. These practices often end up stop being widely used within the standard of care. Our products are naturally derived and use the natural elements of healing and fighting infections. When this happens, patients get dramatically greater clinical outcomes. This in-turn puts more "green" to the agency/facility bottom line. Everyone gets the outcomes they want and need.

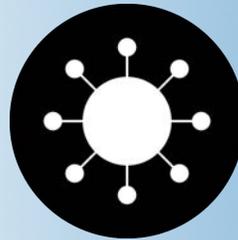


Why Molecular Testing

Speed, Accuracy, and Antibiotic Stewardship

Hospitalizations

Infections and incorrect antibiotics are leading cause of hospitalizations for LTC



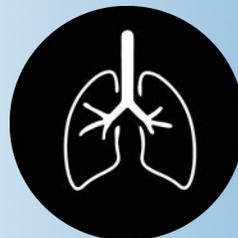
Wrong Antibiotics

75% of elderly prescribed incorrect antibiotics



Respiratory Infections

5th Leading Cause of Death in those 65+ of age



SEPSIS

Most common causes of SEPSIS in the elderly is respiratory infection & UTI





Fast Response

Traditional Culture (TCM)
take 3-7 days
PCR response 24-48 hours

Full Panel

TCM is "contaminated" when
> 3 pathogens identified.
PCR can identify full pathogenic
loads by identifying RNA/DNA

Higher Accuracy

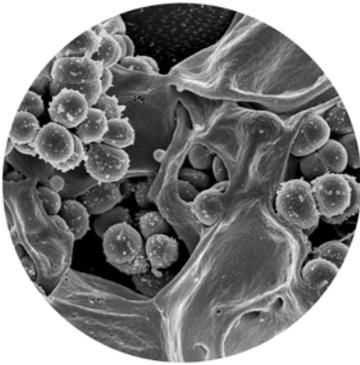
TCM has 30% false negative
PCR has 98% accuracy

Antibiotic Guidance

Antibiotic resistants identified
and guide to highest efficacy

Better Clinical Outcomes

PDGM / PDPM



Remove DNA Damaging Bacteria Disrupt Biofilm

Clinically Proven Outcomes

International Wound Journal ISSN 1742-4001

ORIGINAL ARTICLE

Comparison of gauze as fillers pressure trans microvascular t

Main Malmjö¹, Richard

¹ Department of Ophthalmology, Lund University, Lund, Sweden

² Department of Cardiothoracic Sur

Key words: Blood flow, Experimental surgery, Pressure wound therapy, Wound healing

Correspondence to: Main Malmjö, MD, PhD, Department of Ophthalmology, Lund University, Lund, Sweden. E-mail: main.malmjo@med.lu.se

doi: 10.1111/iwj.12483.2012.010

Objective: To experimental hydrophobic, de

Method: Hydrophobic ex

Results: Fibro

Conclusion: To

Declaration: Cell culture medi

Introduction: Negative pressure wound therapy by initiating a cavity healing. Initially, the wound

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International Wound Journal © 2012 John

JOURNAL OF WOUND CARE VOL 24 NO 1

RIGHTS & PERMISSIONS

Effect of a DACC dressing on the growth properties and proliferation rate of cultured fibroblasts

Objective: To experimental hydrophobic, de

Method: Hydrophobic ex

Results: Fibro

Conclusion: To

Declaration: Cell culture medi

Introduction: Negative pressure wound therapy by initiating a cavity healing. Initially, the wound

Economic aspects of biofilm-based wound care in diabetic foot ulcers

Objective: There has been a dramatic rise in the number of chronic wounds globally, which is placing an increased demand on decreasing health-care resources. With significant cuts in health-care budgets

Method: This study is a retrospective group based ORL in 2005; the other methods common today. The second c

Results: For the 2013 cohort total c

Conclusion: In conjunction with cel

Declaration: of interest RW has a

Introduction: biofilms; wound healing; health care c

The rapid increase in chronic

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limits the use of advanced wound care t

In addition, third-party payers are ad

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and products wound care providers ma

All of these changes led to fewer resu

management of increases in, not only

but also the severity of chronic wou

care providers will have to make signifi

in their practice patterns. Practitioners

innovate in how they manage chronic

that they can treat patients more eff

lower resources.

Innovations in biofilm-based wou

Bacteria and fungus binding mesh in negative pressure wound therapy

A review of the biological effects in the wound bed

ABSTRACT

In recent years, intensive research has been conducted to investigate the biological effects of negative-pressure wound therapy (NPWT) on the wound bed and to find ways to optimize the use of this technology. The mechanisms by which NPWT may lead to accelerated wound healing include the creation of a moist environment, drainage of exudate, reduction of tissue oedema, contraction of the wound edges, mechanical stimulation of the wound bed, blood flow changes in the wound edges, stimulation of angiogenesis and formation of granulation tissue. The choice of wound filler partly determines the effects of NPWT on the wound bed. Foam and gauze are the most frequently used wound fillers for NPWT. Bacteria and fungus binding mesh (Sorbac®) constitutes an interesting new alternative wound filler. In light of the lack of a randomized, controlled trial, this review provides some insight on some of the latest preclinical findings regarding the choice of wound filler to optimize NPWT for the individual wound.

INTRODUCTION

Negative-pressure wound therapy (NPWT) is increasingly used to treat hard-to-heal wounds and has been shown to improve healing outcomes in many wound types, including orthopedic trauma,¹ soft tissue trauma,² skin grafts,³ flaps, pressure ulcers,⁴ venous leg ulcers,⁵ vascular surgery wounds, diabetic foot ulcers,⁶ burns,⁷ wound dehiscence, in abdominal⁸ and thoracic surgery⁹ and surgical infections.¹⁰

Initially, the wound is filled with a wound filler (commonly foam or gauze) to allow pressure to be transmitted and evenly distributed to the bottom of the wound. The wound is then sealed with an adhesive drape and a drain is connected to a vacuum pump that applies the negative pressure. Wound fluid is withdrawn by the negative pressure and collected in a canister.

NPWT accelerates wound healing by initiating a cascade of interrelated biological reactions that ultimately lead to wound healing. NPWT has been found to create a moist wound healing environment,¹¹ drain exudate^{12,13}, reduce tissue edema¹⁴, contract wound edges^{15,16}, mechanically stimulate the wound bed^{17,18}, alter blood flow in the wound edges^{19,20} and stimulate angiogenesis^{21,22} and the formation of granulation tissue.²³ The biological effects of NPWT are represented in Figure 1.

THE NEGATIVE PRESSURE LEVEL

The most commonly used negative pressure level is -125 mm Hg²⁴. However, more recent studies have shown that the maximum biological effects on the wound edges, in terms of wound contraction,²⁵ regional blood flow²⁶ and the formation of granulation tissue²⁷, are obtained at -80 mmHg. A recent case report²⁸ shows that negative pressure levels lower than -125 mm Hg induced results in excellent wound healing. When using NPWT to treat poorly perfused tissue (e.g. diabetic foot ulcers and thin skin transplants), ischemia may develop in the wound tissue and the patient can

Dramatically Enhances the Speed of Wound Healing

Alan Rocas III, RN, BSN, CWCN¹, Lu Wang, PhD², Dmitri Deabov, PhD², Ron Najafi, PhD², Mark Anderson PhD²

¹ 1950 Sullivan Avenue, Daly City, CA 94015
² Neovascular Pharmaceuticals, Inc. 5890 Horton Street, Suite 550, Emeryville, CA 94608

Results

Discussion

Chronic non-healing wounds have many factors contributing to healing such as the presence of foreign bodies, tissue mechanical pressure and ischemia. The clinical outcome can be further complicated by infection, inflammation, wound dehiscence, and charred or necrotic tissue. The goal of treatment is to remove the non-healing wound and to create a moist environment that allows for wound healing. Our 0.01% concentration of NeofPhase is being used to help reduce the risk of infection and to decrease inflammation of the adjacent skin next to the wound. It is also used to help reduce the risk of infection and to decrease inflammation of the adjacent skin next to the wound. It is also used to help reduce the risk of infection and to decrease inflammation of the adjacent skin next to the wound.

Conclusions

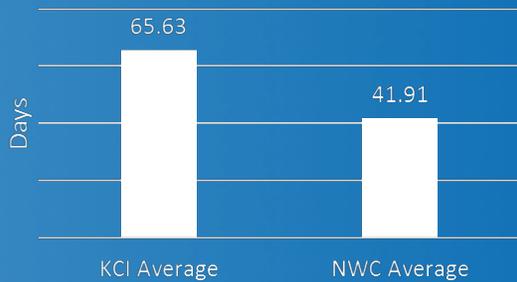
The results demonstrate that NeofPhase safely delivers but an effective topical antimicrobial mesh improves wound healing. NeofPhase helps reduce tissue necrosis. NeofPhase in combination with Sorbac® in the wound bed negative pressure wound therapy dramatically enhances the speed of wound healing. NeofPhase is a combination which is a very effective wound care product for use in wound bed

References

¹ Wang L, Rocas AL, Nayak R, Nayak K, Tang C, Khosravi-Banji E, Bates B, Carter C, Robson MC. Journal of Burn Care and Rehabilitation 2007; 28: 1879

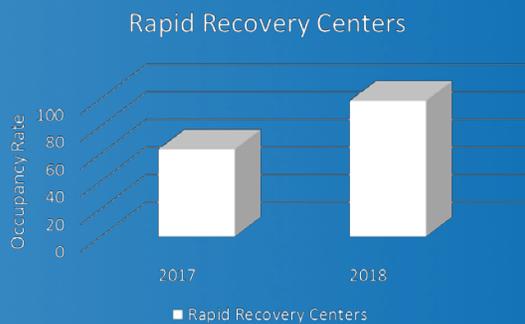
² Robinson M, C. Payne, W. G. Wu, F. Verma, M. Ahmad, S. M. Hwang, C. Chiverton, M. Nayak, R. Cooper, D. Steiner, R. J. J. Burns 2007; 28: 1879

Figure 1: This is a 1x2 cm defect due to MRSA created for initial treatment of a deep wound bed with exposed cartilage and no granulation. (A) Treated with initial wet and Sorbac dressing with 0.01% NeofPhase overnight at home for 30 days through a drain at the base. (B) (C) (D) (E) (F) (G) (H) (I) (J) (K) (L) (M) (N) (O) (P) (Q) (R) (S) (T) (U) (V) (W) (X) (Y) (Z) (AA) (AB) (AC) (AD) (AE) (AF) (AG) (AH) (AI) (AJ) (AK) (AL) (AM) (AN) (AO) (AP) (AQ) (AR) (AS) (AT) (AU) (AV) (AW) (AX) (AY) (AZ) (BA) (BB) (BC) (BD) (BE) (BF) (BG) (BH) (BI) (BJ) (BK) (BL) (BM) (BN) (BO) (BP) (BQ) (BR) (BS) (BT) (BU) (BV) (BW) (BX) (BY) (BZ) (CA) (CB) (CC) (CD) (CE) (CF) (CG) (CH) (CI) (CJ) (CK) (CL) (CM) (CN) (CO) (CP) (CQ) (CR) (CS) (CT) (CU) (CV) (CW) (CX) (CY) (CZ) (DA) (DB) (DC) (DD) (DE) (DF) (DG) (DH) (DI) (DJ) (DK) (DL) (DM) (DN) (DO) (DP) (DQ) (DR) (DS) (DT) (DU) (DV) (DW) (DX) (DY) (DZ) (EA) (EB) (EC) (ED) (EE) (EF) (EG) (EH) (EI) (EJ) (EK) (EL) (EM) (EN) (EO) (EP) (EQ) (ER) (ES) (ET) (EU) (EV) (EW) (EX) (EY) (EZ) (FA) (FB) (FC) (FD) (FE) (FF) (FG) (FH) (FI) (FJ) (FK) (FL) (FM) (FN) (FO) (FP) (FQ) (FR) (FS) (FT) (FU) (FV) (FW) (FX) (FY) (FZ) (GA) (GB) (GC) (GD) (GE) (GF) (GG) (GH) (GI) (GJ) (GK) (GL) (GM) (GN) (GO) (GP) (GQ) (GR) (GS) (GT) (GU) (GV) (GW) (GX) (GY) (GZ) (HA) (HB) (HC) (HD) (HE) (HF) (HG) (HH) (HI) (HJ) (HK) (HL) (HM) (HN) (HO) (HP) (HQ) (HR) (HS) (HT) (HU) (HV) (HW) (HX) (HY) (HZ) (IA) (IB) (IC) (ID) (IE) (IF) (IG) (IH) (II) (IJ) (IK) (IL) (IM) (IN) (IO) (IP) (IQ) (IR) (IS) (IT) (IU) (IV) (IW) (IX) (IY) (IZ) (JA) (JB) (JC) (JD) (JE) (JF) (JG) (JH) (JI) (JJ) (JK) (JL) (JM) (JN) (JO) (JP) (JQ) (JR) (JS) (JT) (JU) (JV) (JW) (JX) (JY) (JZ) (KA) (KB) (KC) (KD) (KE) (KF) (KG) (KH) (KI) (KJ) (KK) (KL) (KM) (KN) (KO) (KP) (KQ) (KR) (KS) (KT) (KU) (KV) (KW) (KX) (KY) (KZ) (LA) (LB) (LC) (LD) (LE) (LF) (LG) (LH) (LI) (LJ) (LK) (LL) (LM) (LN) (LO) (LP) (LQ) (LR) (LS) (LT) (LU) (LV) (LW) (LX) (LY) (LZ) (MA) (MB) (MC) (MD) (ME) (MF) (MG) (MH) (MI) (MJ) (MK) (ML) (MN) (MO) (MP) (MQ) (MR) (MS) (MT) (MU) (MV) (MW) (MX) (MY) (MZ) (NA) (NB) (NC) (ND) (NE) (NF) (NG) (NH) (NI) (NJ) (NK) (NL) (NM) (NO) (NP) (NQ) (NR) (NS) (NT) (NU) (NV) (NW) (NX) (NY) (NZ) (OA) (OB) (OC) (OD) (OE) (OF) (OG) (OH) (OI) (OJ) (OK) (OL) (OM) (ON) (OO) (OP) (OQ) (OR) (OS) (OT) (OU) (OV) (OW) (OX) (OY) (OZ) (PA) (PB) (PC) (PD) (PE) (PF) (PG) (PH) (PI) (PJ) (PK) (PL) (PM) (PN) (PO) (PP) (PQ) (PR) (PS) (PT) (PU) (PV) (PW) (PX) (PY) (PZ) (QA) (QB) (QC) (QD) (QE) (QF) (QG) (QH) (QI) (QJ) (QK) (QL) (QM) (QN) (QO) (QP) (QQ) (QR) (QS) (QT) (QU) (QV) (QW) (QX) (QY) (QZ) (RA) (RB) (RC) (RD) (RE) (RF) (RG) (RH) (RI) (RJ) (RK) (RL) (RM) (RN) (RO) (RP) (RQ) (RR) (RS) (RT) (RU) (RV) (RW) (RX) (RY) (RZ) (SA) (SB) (SC) (SD) (SE) (SF) (SG) (SH) (SI) (SJ) (SK) (SL) (SM) (SN) (SO) (SP) (SQ) (SR) (SS) (ST) (SU) (SV) (SW) (SX) (SY) (SZ) (TA) (TB) (TC) (TD) (TE) (TF) (TG) (TH) (TI) (TJ) (TK) (TL) (TM) (TN) (TO) (TP) (TQ) (TR) (TS) (TT) (TU) (TV) (TW) (TX) (TY) (TZ) (UA) (UB) (UC) (UD) (UE) (UF) (UG) (UH) (UI) (UJ) (UK) (UL) (UM) (UN) (UO) (UP) (UQ) (UR) (US) (UT) (UU) (UV) (UW) (UX) (UY) (UZ) (VA) (VB) (VC) (VD) (VE) (VF) (VG) (VH) (VI) (VJ) (VK) (VL) (VM) (VN) (VO) (VP) (VQ) (VR) (VS) (VT) (VU) (VV) (VW) (VX) (VY) (VZ) (WA) (WB) (WC) (WD) (WE) (WF) (WG) (WH) (WI) (WJ) (WK) (WL) (WM) (WN) (WO) (WP) (WQ) (WR) (WS) (WT) (WU) (WV) (WW) (WX) (WY) (WZ) (XA) (XB) (XC) (XD) (XE) (XF) (XG) (XH) (XI) (XJ) (XK) (XL) (XM) (XN) (XO) (XP) (XQ) (XR) (XS) (XT) (XU) (XV) (XW) (XZ) (YA) (YB) (YC) (YD) (YE) (YF) (YG) (YH) (YI) (YJ) (YK) (YL) (YM) (YN) (YO) (YP) (YQ) (YR) (YS) (YT) (YU) (YV) (YW) (YZ) (ZA) (ZB) (ZC) (ZD) (ZE) (ZF) (ZG) (ZH) (ZI) (ZJ) (ZK) (ZL) (ZM) (ZN) (ZO) (ZP) (ZQ) (ZR) (ZS) (ZT) (ZU) (ZV) (ZW) (ZX) (ZY) (ZZ)



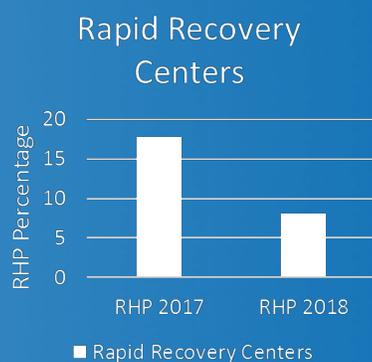
Average 23 Days Faster Healing

Year to year comparison
when changed from KCI



Increased Occupancy Rates

Profitable wound patients
increase census



58% Reduction in Re-Hospitalization

reduction and removal of
wound infections



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Sustainability in Healthcare

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