Advanced Wound Management Capital Markets Event
Forward looking statements

This document may contain forward-looking statements that may or may not prove accurate. For example, statements regarding expected revenue growth and trading margins, market trends and our product pipeline are forward-looking statements. Phrases such as "aim", "plan", "intend", "anticipate", "well-placed", "believe", "estimate", "expect", "target", "consider" and similar expressions are generally intended to identify forward-looking statements. Forward-looking statements involve known and unknown risks, uncertainties and other important factors that could cause actual results to differ materially from what is expressed or implied by the statements. For Smith & Nephew, these factors include: economic and financial conditions in the markets we serve, especially those affecting health care providers, payers and customers; price levels for established and innovative medical devices; developments in medical technology; regulatory approvals, reimbursement decisions or other government actions; product defects or recalls; litigation relating to patent or other claims; legal compliance risks and related investigative, remedial or enforcement actions; strategic actions, including acquisitions and dispositions, our success in performing due diligence, valuing and integrating acquired businesses; disruption that may result from transactions or other changes we make in our business plans or organisation to adapt to market developments; and numerous other matters that affect us or our markets, including those of a political, economic, business, competitive or reputational nature. Please refer to the documents that Smith & Nephew has filed with the U.S. Securities and Exchange Commission under the U.S. Securities Exchange Act of 1934, as amended, including Smith & Nephew's most recent annual report on Form 20-F, for a discussion of certain of these factors.

Any forward-looking statement is based on information available to Smith & Nephew as of the date of the statement. All written or oral forward-looking statements attributable to Smith & Nephew are qualified by this caution. Smith & Nephew does not undertake any obligation to update or revise any forward-looking statement to reflect any change in circumstances or in Smith & Nephew's expectations.
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Presenter/Position</th>
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<tbody>
<tr>
<td>13:30</td>
<td>Welcome by Olivier Bohuon</td>
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<tr>
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<td><strong>Presentations:</strong></td>
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<td></td>
<td>Today’s Challenges in Wound Management</td>
<td>Prof. Marco Romanelli, MD PhD</td>
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<td></td>
<td></td>
<td>Director Wound Healing Research Unit, University of Pisa</td>
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<td>Global Wound Market and Smith &amp; Nephew Strategy</td>
<td>Glenn Warner</td>
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<td>President, Advanced Wound Management</td>
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<td></td>
<td>Adopting PICO® for Incision Management of High Risk Patients</td>
<td>Miss Narmada Katakam</td>
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<td>Geo Spotlight: AWM in the United States</td>
<td>Glenn Warner</td>
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<td>President, Advanced Wound Management</td>
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<td>Geo Spotlight: AWM in Emerging Markets</td>
<td>Paolo Di Vincenzo</td>
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<td>SVP Strategic Marketing, Advanced Wound Management</td>
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<td><strong>Q&amp;A</strong></td>
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<td>Summary by Glenn Warner</td>
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<td>16:30</td>
<td><strong>Product showcase</strong></td>
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<td>17:00</td>
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Our journey to higher growth

2011*

Lower Growth 65%

Higher Growth 35%

Future

Higher Growth 67%

Lower Growth 33%

Improving
Strengthening
Creating

Proportion of Revenue

Higher Growth: Sports Medicine Joint Repair, ArthroCare, Trauma & Extremities, Gynaecology, Advanced Wound Bioactives and Devices, Emerging markets (all franchises)

Lower Growth: Arthroscopic Enabling Technologies, Reconstruction and Advanced Wound Care (all Established markets)

* Excluding Clinical Therapies
Uniquely positioned for market leadership

Advanced Wound Management

Smith & Nephew revenue split*

- Hips & Knees: 31%
- Sports Medicine: 25%
- Other Surgical: 4%
- Trauma: 11%
- Other Group franchises

*Q3 2015
Sometimes the best treatment wears a uniform and a smile.
Supporting healthcare professionals for over 150 years
Global Wound Market and Smith & Nephew Strategy
Glenn Warner, President AWM

Joined Smith & Nephew in 2014

Relevant Experience

• 28 years medical device, pharmaceutical, biologics experience

• Significant international experience; leadership positions in Europe, SE Asia and Japan.

• AbbVie, Abbott, TAP Pharmaceuticals
Global Wound Management Overview

Revenue & share by segment

- **Advanced**: $20 billion
- **Surgical**: Sutures/staplers, Sealants, adhesives, Hemostasis
- **Basic**: Bandages, Compresses, Tapes/Gauze
- **Mid-Tier**: Dressings, Devices
- **Emerging Markets Mid-Tier**: A commercial solution for emerging markets
- **Advanced**: Advanced Dressings, Devices, Bioactives

Source: Internal model; US$, rolling 4-quarters to Q2 2015

Smith & Nephew
Global Advanced Wound Management
Only S&N competes in all 3 categories

- Revenue share by category
  - Wound Care: 65%
  - Bioactives: 13%
  - Devices: 22%

- $8.1 billion
  - 3 – 4% CAGR

- S&N Share
  - 32%
  - 11%
  - 17%

- Key Competitors
  - Organogenesis inc.
  - MiMedx
  - EKCI
  - MÜLNLYCIE HEALTH CARE
  - ConvaTec
  - Coloplast
  - 3M

Source – internal model; US$, rolling 4-quarters to Q2 2015.
Advanced + Mid-Tier

Source: Internal estimate
Global Advanced Wound Management
Strong Geographical Position

Revenue share by region

- North America: 42%
- Europe: 31%
- Emerging Markets: 22%
- Asia Pac*: 5%

$8.1 billion
3 – 4% CAGR

S&N Market Position

- Europe: #1
- Emerging Markets: #1
- Asia Pacific*: #1
- North America: #2

Source: Internal data. *Japan, Australia, New Zealand

Source – internal model; US$, rolling 4-quarters to Q2 2015; Includes Mid-Tier
Significant unmet need → significant opportunity

Wound care remains attractive....

- Large and growing market
- Significant unmet need
- Primed for innovation and better solutions

But the industry needs to deliver...

- Compelling clinical and economic evidence
- Increased medical education to elevate clinical practice
- Improved care coordination ... between therapies and sites of care
- Enhanced decision tools & practice guidelines
Core strengths position Smith & Nephew to lead

1. **Product Portfolio**
   - Broad & Diverse Portfolio
   - Trusted & High Quality Brands

2. **Medical Education**
   - Improving Outcomes Through Education
   - Digital education platforms >100,000 members

3. **Evidence Based**
   - Raising Standards for Clinical Evidence
   - Investing in Real-World Evidence

4. **Innovation**
   - Strong, Differentiated Pipeline
   - Well Positioned for Acquisitions & Licensing
We are evolving beyond just a product focus....

- Leverage Cornerstone Portfolio
- Focus on Growth Brands
- Lead in Integrated Solutions
AWC Growth Driver: ALLEVYN® Foam Dressings

What is it?

- ALLEVYN absorbs wound exudate, an essential step towards healing
- Unique design reduces pressure on at-risk skin; lowering risk of ulceration
- Unique design leads to longer wear times

ALLEVYN Value Proposition

- Patient-centric design increases concordance
- Leading pressure ulcer prevention performance and program
- Delivers real savings
  - > $1M saved in one hospital alone¹
  - Community care, 8,000 visits saved²

Growth Drivers

- Prevention value aligns with provider priorities
- Investing in clinical & real-world evidence
- Demonstrated cost savings with prevention protocol¹

¹ Swafford, K., Culpepper, R., Dunn, C. Eskenazi Health, Indianapolis, IN, USA
AWD Growth Driver: PICO™ System

What is it?

Single-use Negative Pressure Wound Therapy (NPWT)
- Effectiveness of traditional NPWT in a modern, small portable system
- Designed for both open wounds and closed incisions
- Leverages our leading dressing technology
- S&N in first mover position with best in class design

Unique PICO Value Proposition
- Reduces risk of infection and other complications
- Lowers readmissions for surgical site infections
- Simpler logistics and lower cost
- May reduce nursing time and complexity
- Increases patient mobility and patient experience

Growth Drivers
- Strong value proposition resonates with payers, providers
- Increasing investment in real-world evidence
- High volume of requests for investigator initiated trials
- Improved US reimbursement beginning Jan 1, 2016

Surgical complications for high risk patients

**C-sections**
- UK patients experiencing a surgical site infection (SSI)\(^1\)
  - 1 in 5 with body mass index (BMI) >35
  - 1 in 7 diabetics
  - 1 in 10 overall
- ~£3,500 per UK patient to treat cesarean SSI, ~4700 total avoidable hospital days

**Orthopaedic Surgery**
- Rate of SSI for hip and knee replacements range 0.7% - 2.4%\(^2\),
- High risk groups up to 15x more likely to develop wound complications\(^3\)
- SSI prolongs hospital stay, doubles readmission rate, and increases healthcare costs by 300%\(^2\)

**CABG**
- 3-4% sternal incisions complicated by infection\(^4\)
- Infection can increase hospital stay from 7 to 29 days\(^6\)
- High mortality rate for deep sternal infections

**Colorectal Surgery**
- Colorectal surgeries have high infection rates
- Infections increase hospital stay by an average of 9 days\(^5\)
- Post surgical complications can increase costs by ~$18,000\(^5\)

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\(^2\) Guide to the elimination of orthopedic surgical site infections. APIC Guideline 2010
\(^4\) Damin S. Surgical site infections following coronary artery bypass graft procedures. BMC Inf Dis 2014, 14:318
PICO™ proven to minimize surgical site complications

29 papers published to date, 18 for closed incisions

C-sections

- Use of PICO eliminated readmissions for wound complications in patients with BMI >35
- 0.4% infections in patients >35 BMI treated with PICO™ vs. 3.6% patients with < 35 BMI not treated with PICO

Orthopedic Surgeries

- PICO post open surgical repair of spinal fracture was associated with reduced seroma volume & fewer dressing changes
- Use of PICO post total ankle arthroplasty was associated with an 8-fold reduction in wound healing problems: dehiscence, eschar, excessive drainage

CABG

- PICO was shown to reduce the risk of superficial infections in sternotomy wound healing

Negative pressure wound therapy that incorporates wireless technology and digital interface to deliver efficient, personalized treatment in highly exuding wound types

**Product Value Proposition**

**RENASYS™ TOUCH**
- User-friendly touch screen
- Individualized patient settings

**RENASYS™ TOUCH Connect**
- First in class connectivity
- Improved asset management and billing transparency

**Growth Drivers**
- Heightened need to manage costs and improve asset efficiency
- Growing evidence supporting clinical benefits of negative pressure

*Approved in some countries; in development in others. See following slide*
Phased launch plan for RENASYS® TOUCH

2015

- **RENASYS® TOUCH**
  - CE approved
  - Pilot
  - Launch

- **RENASYS® TOUCH Connect**
  - CE approval
  - Pilot
  - Launch

- **RENASYS® TOUCH**
  - 510(k) approval
  - Pilot
  - Launch

- **RENASYS® TOUCH Connect**
  - 510(k) approval
  - Pilot
  - Launch

*Estimates only, launches may vary based on review time of regulatory bodies*
AWB Growth Driver: Topical Bioactives

Bioactive Growth Drivers

- Biopharmaceuticals designed to stimulate the body’s own regenerative processes
- The fastest growing segment in chronic wound care
- S&N well positioned with focus on generating relevant clinical evidence and specialized sales force

SANTYL® Ointment

- Biologic enzymatic debriding agent
- Selectively removes necrotic tissue without harming healthy tissue
- The #1 bioactive wound treatment

Occasional slight transient erythema has been noted in surrounding tissue when applied outside the wound. One case of systemic hypersensitivity has been reported after one year of treatment with collagenase and cortisone.

REGRANEX® Gel

- Platelet derived growth factor for diabetic foot ulcers

WARNING: INCREASED RATE OF MORTALITY SECONDARY TO MALIGNANCY
An increased rate of mortality secondary to malignancy was observed in patients treated with 3 or more tubes of REGRANEX® Gel in a postmarketing retrospective cohort study. REGRANEX® Gel should only be used when the benefits can be expected to outweigh the risks. REGRANEX® Gel should be used with caution in patients with known malignancy.

Further information for patients can be found on www.regranex.com/patient/
The best treatment portfolio by design

<table>
<thead>
<tr>
<th>Tissue nonviable or deficient</th>
<th>Infection or inflammation</th>
<th>Moisture imbalance</th>
<th>Edge of wound non-advancing or undermined</th>
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</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Image" /></td>
<td><img src="image2.png" alt="Image" /></td>
<td><img src="image3.png" alt="Image" /></td>
<td><img src="image4.png" alt="Image" /></td>
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</table>

**PRODUCTS**

- **VERSASET® II**
  - Hydrotherapy System
- **PICO°**
- **RENASYS® TOUCH**
- **ALLEVYN®**
  - Life
- **OASIS Ultra**
However a broader view provides a larger opportunity...

Opportunity for solutions across the disease management continuum

- **Prevention**
  - Patient engagement
  - Prevent recurrence

- **Diagnosis/Detection**
  - Right treatment, right patient, right time

- **Treatment**
  - Wound bed prep, healing

- **Care Coordination & Monitoring**
  - Efficient communication & patient transition

- **Data Driven Healthcare**
  - Outcomes tracking, best practices
Disease lens leads to better outcomes at a lower cost...

Focused on opportunities where:

• Smith & Nephew has a right to win
• Evidence of market readiness
• Innovation opportunities

Wound care “diseases”

Venous leg ulcers  Pressure Ulcers  Diabetic Foot Ulcers  Surgical incisions  Burns
Diabetic foot ulcers (DFUs) $9.1bn to $13.2bn
Annual treatment costs. All care settings, all payers

Venous leg ulcers (VLUs) $14.9bn to $17.4bn
Annual treatment costs. All care settings, all payers

Pressure ulcers (PUs) $9.1bn to $11.6bn
Annual treatment costs. Inpatient only, all payers

Estimated at $33 billion

... and larger revenue potential

Disease lens is driving our view of innovation

Prevention

- Deep tissue injury detection
- Biosensors

Diagnosis & Detection

- Point of care diagnostics
- Risk stratification tools

Treatment

- Healing technologies
- Bioactive debridement
- Anti-infectives
- Next Generation negative pressure

Care Coordination & Monitoring

- Clinical algorithms
- Outcomes tracking
- Products designed for patient transition

Data Driven Healthcare

- Best-in-class medical education
- Data-driven best practices
- Real-world cost effectiveness models
External innovation model with strong internal development emphasis

External Research & Discovery
- Discovery
  - Tech Scouting
  - Acquisition & Licensing
  - Utilize S&N Incubation Fund

Internal Research and Development
- Research
  - Innovation Center
  - Partnerships
- Product Development
  - Engineering Experience
  - Regulatory Knowledge
- Clinical Development
  - Clinical Trial Execution

Relative R&D Investment Breakdown
Smith and Nephew is well positioned to outgrow the overall wound market

**Well Positioned**
- Broad, Diverse Portfolio
- Trusted Brands
- Global Reach
- Focused Innovation

**Attractive Market**
- Large & Growing
- Significant Unmet Needs
- Under Penetrated

**Growth Opportunity**
- Increase Share
- Invest in New Models and Approaches
- Global Expansion
The broadest portfolio by choice

### Advanced Wound Care (AWC)

<table>
<thead>
<tr>
<th>Exudate Management</th>
<th>Infection Management</th>
<th>Cornerstone</th>
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<tbody>
<tr>
<td>ALLEVYN° Life &amp; Classics</td>
<td>ACTICOAT°</td>
<td>IODOSORB°</td>
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<tr>
<td>DURAFIBER°</td>
<td>DURAFIBER° Ag</td>
<td>OPSITE°</td>
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<td>IV3000°</td>
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<td>PROFORE°</td>
<td>CICA-CARE°</td>
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### Advanced Wound Devices (AWD)

<table>
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<tr>
<th>NPWT</th>
<th>Surgical debridement</th>
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<tr>
<td>RENASYS°</td>
<td>VERSAJET° II</td>
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<tr>
<td>PICO°</td>
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### Advanced Wound Bioactives (AWB)

<table>
<thead>
<tr>
<th>Topical</th>
<th>Matrices</th>
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<tr>
<td>SANTYL°</td>
<td>OASIS°</td>
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<td>REGRANEX°</td>
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Smith & Nephew
Supporting healthcare professionals for over 150 years
Adopting PICO™ for Incision Management of High Risk Patients

Miss Narmada Katakam
Consultant Obstetrician and Gynaecologist
Reproductive Health Group
Disclosure of Interests

- Provide Speaker services to Smith & Nephew

Reproductive Health Group
Contents

- Caesarean Section – Wound Infection Facts
- Wound complications – Impact on new mothers and the NHS
- Reason behind the change in our clinical practice
- Developing 10-Step Pathway – Engaging Clinical teams and Management
- Why PICO™?
- 2 Audit results

Reproductive Health Group
Caesarean Section

- Caesarean section (CS)
  - Most common major operation performed on women in the world.
  - 9% in 1980
  - 26.2% in 2014

Maternity statistics 2014 – England

Reproductive Health Group
Obesity

- Obesity has become a global pandemic
- Number of obese pregnant woman from last 5 years’ statistics
  - BMI $\geq 35 = 15\text{-}20\%$

National Institute for Health and Clinical Excellence (NICE)

Reproductive Health Group
Obese Women - Why Higher Risk Of Wound Infection?

- Reduced blood supply to the fat tissue.
- Results in slower wound healing.
- Adipose or fatty tissue also increases risk of
  - Wound haematoma i.e. blood collection in the wound
  - Leading to wound infection and breakdown.

Reproductive Health Group
Facts *

- 2.6 to 5% of surgeries result in Surgical Site Infection (SSI)
- Most of the SSI are caused by endogenous bacteria
- Reducing microorganisms on the skin will address this factor – therefore skin prep is important

* Centre of Disease control and Institute of Healthcare Improvement - USA

Reproductive Health Group
Infection Rate

- It is very difficult to assess true CS wound complications rate
  - Royal College of Obstetricians and Gynaecologists - 6%
  - National Institute for Health and Clinical Excellence (NICE) - 8%
  - Multicentre study (Wloch et al., 2012) - 9.6%

Reproductive Health Group
Hospital – Community

- Almost all infections are diagnosed after the patients are discharged home
- Hospitals - Underestimate the scale of the problem
- In the Community, care is not standardised
  - Lack of surgical training in wound care management

Reproductive Health Group
Reality

- Given the number of women delivering by CS in the UK, substantial costs are incurred as a result of these infections.

- Prevention of these infections should be a clinical and public health priority.

Reproductive Health Group
Tip of the Iceberg

- Many hospitals will not know if they have a problem with CS SSI, as surveillance data is not mandatory.

- CS SSI causes a considerable impact on the mother and baby bonding.
Wound Complications - Impact

 On women
   After a C Section, the last thing a woman wants to discover when she gets home is that she has a wound infection – at the same time as having to care for her newborn.

 On NHS
   Readmission average cost – £1,050

Reproductive Health Group
Total Deliveries: 645,000

CS Rate: 26.2%

BMI ≥ 35 = 20%

SSI in BMI ≥ 35 = 20%

6800 × 1050 = £7,140,000

Reproductive Health Group
Bolton – The Reasons Behind The Change

- December 2011 – 3 cases of broken down wounds
- Initial audit in Feb 2012 - 33% wound infection rate
- One or two changes are not going to bring this rate down.
- Difficult to identify and pinpoint exact source of infection
- Where do we start?

Reproductive Health Group
And So We Did!

- We decided to address the issues at every step of patients’ journey
- Home to Ward to Theatre to Ward and finally back Home

Reproductive Health Group
### 10 – Step Bundle at Bolton

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>Refrain from hair removal around the surgical site in the last weeks preceding the delivery</td>
</tr>
<tr>
<td>2</td>
<td>Have a bath or shower before the C Section in the morning</td>
</tr>
</tbody>
</table>
| 3    | WHO Surgical Safety Checklist - Surgical Site Infection (SSI) control  
  - ☐ Antibiotics prophylaxis in last 60 minutes  
  - ☐ Hair trimming |
| 4    | 2% Chlorhexidine in 70% weight/volume alcohol for skin prep |
| 5    | Midwife receiving the baby to wear sterile gown |
| 6    | PICO™ dressing for high risk women |
| 7    | Leave dressing for all CS for 5-7 days (Change to OPSITE Post-Op Visible) |
| 8    | Leaflet - Do and Don’ts |
| 9    | PICO™ + Infection Control Champions, Wound Swab Technique |
| 10   | Wound Care Follow Up Clinic |

---

**Reproductive Health Group**
Specific to High Risk Women

- Specific measure for high risk woman i.e.
  - BMI > 35
  - Diabetes
  - Previous CS SSI
- Using PICO™ dressing
- Change in skin closure material and technique
- 15 Dressings trialled in October 2012 – 0% infection

Reproductive Health Group
Aspirations – Outcomes

- Divisional Board Meeting – Business Case - June 2013

Reproductive Health Group
Projected Savings by Using PICO™

- Business case
  - Adopting a patient-centred approach
  - Using PICO™ on high-risk patients
  - No extra cost to the Trust – *Spend to Save*

- Reduce readmissions and repeat surgical interventions
  - Release bed days for new mothers helping with capacity

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Existing strategy</th>
<th>New strategy</th>
<th>Saving</th>
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<tbody>
<tr>
<td>Infection rate equivalent to a nearby trust</td>
<td>£73,365</td>
<td>£25,290</td>
<td>£48,075</td>
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<tr>
<td>Bullough and Wilkinson 2012: 12%</td>
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<tr>
<td>Lower readmission rate: 20% per SSI</td>
<td>£30,315</td>
<td>£25,290</td>
<td>£5,025</td>
</tr>
<tr>
<td>Lower additional length of stay on readmission: 2 days</td>
<td>£39,415</td>
<td>£25,290</td>
<td>£14,125</td>
</tr>
<tr>
<td>New strategy reduces readmissions by 50%</td>
<td>£58,665</td>
<td>£54,690</td>
<td>£3,975</td>
</tr>
<tr>
<td>Totals</td>
<td>£201,760</td>
<td>£130,560</td>
<td>£71,200</td>
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</table>
Engaging Clinical and Management Teams

Stakeholders

- Obstetric Doctors
  - Identify high risk patients
    - PICO™ Training
    - Trim hair pre-op
  - PICO™ Training
- Theatre Scrub Nurses
  - PICO™ Training
  - Review PICO™ Leaflet
    - Dos and Don’ts
- Hospital Midwives
- Community Midwives
- Lead Midwife
- Wound Care Clinic
  - Monthly database
  - One to One feedback
  - Advanced Midwifery Practitioners

Engaging Clinical and Management Teams
1. Re-audit of CS SSI (104 Cases)

2. Audit of PICO™ (207 Cases)
Re-Audit Of Surgical Site Infection Following Caesarean Section

November 2014

Reproductive Health Group
Risk factors for surgical site infection following caesarean section in England: results from a multicentre cohort study

C Wloch, a J Wilson, b,c T Lamagni, a P Harrington, a A Charlett, d E Sheridan a


Correspondence: C Wloch, Department of Healthcare Associated Infection and Antimicrobial Resistance, Health Protection Agency, 61 Colindale Avenue, London NW9 5EQ, UK. Email catherine.wloch@hpa.org.uk

Accepted 18 June 2012. Published Online 1 August 2012.

Overall rate of CS SSI - 9.6%
BMI ≥ 35 - 19.28%
DM - 15.6%
# Wound Classification

**Wloch et al., 2012**

## Table 1. Criteria for identifying patient-reported surgical site infections

<table>
<thead>
<tr>
<th>Infection site</th>
<th>Criterion</th>
<th>Indications of surgical site infection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Superficial incisional</td>
<td>Criterion 1</td>
<td>Discharge of pus from the wound + antibiotics</td>
</tr>
<tr>
<td></td>
<td>Criterion 2</td>
<td>Clinical signs* + dehiscence</td>
</tr>
<tr>
<td></td>
<td>Criterion 3</td>
<td>Clinical signs* + antibiotics</td>
</tr>
<tr>
<td>Endometritis</td>
<td>Criterion 4</td>
<td>Uterine tenderness + antibiotics</td>
</tr>
<tr>
<td></td>
<td>Criterion 5</td>
<td>Abdominal pain + antibiotics</td>
</tr>
<tr>
<td></td>
<td>Criterion 6</td>
<td>Purulent drainage from uterus + antibiotics</td>
</tr>
</tbody>
</table>

*Clinical signs: at least two of pain, heat, redness or swelling

Reproductive Health Group
Developing a national guideline for preventing post-Caesarean infection

The management of post-Caesarean infection is widely perceived as the responsibility of secondary care but, because most women are discharged within one to two days, infections are rarely seen in the hospital setting. The provision of care therefore falls to community services. It is important that NHS Trusts, Clinical Commissioning Groups (CCGs) and Health Boards agree a common management pathway that optimises patient care and minimises administrative and financial burdens.

At a symposium sponsored by Smith & Nephew, held at the Royal College of Obstetricians and Gynaecologists in London on 23 June 2014, a multidisciplinary Advisory Board was convened to interpret recent evidence on the management of post-Caesarean infection in the light of clinical experience. In workshop groups, participants reviewed their practice and discussed which areas could be improved to support closer collaboration between acute surgical units and community services. These discussions are intended to form the basis of a practice guideline for primary and secondary care to prevent post-Caesarean infection.
Box 2. Summary of key consensus opinions emerging from the meeting

Hospital systems
- Individual units should develop their own standards of practice and work to improve the competence of all staff

Pre- and intraoperative care
- Women should be advised to clip rather than shave or wax hair prior to Caesarean section
- Chlorhexidine is an appropriate disinfectant of choice for skin preparation
- All units should adopt a standardised approach to technique and suture choice, to ensure consistent practice, which will support correct patient advice and staff expertise
- Monofilament should replace braided sutures for all closures
- Drains should be discouraged and not used as a routine

Postoperative care
- Health professionals, particularly nurses and midwives, should be offered education about wound management that includes correct procedures for swabbing a wound and clear criteria for diagnosing a wound infection. Some classification should be standardised
- Obesity significantly increases risk of infection and may warrant additional measures to prevent skin contamination
- An appropriate dressing should be chosen based on identified patient risk factors
- In the immediate postoperative period, patients should be taught about wound hygiene and the signs of infection
- Written information should be provided in a simple format and the midwife should go through this with the patient at the time of discharge
- Importance should be placed on developing a single patient pathway that enables women to take some responsibility for the care of their wound. Women should be empowered to self-assess their wounds and to contact the midwifery team if they have concerns

Unification of care
- It should be recognised that post-Caesarean section wound care costs falls mainly on the primary care sector
- Any future management pathway must show how primary and secondary care are working together to rationalise treatment and minimise service duplication
CS Audit Summary – 104 Cases

- SSI: 33% in Feb-12, 14.7% in Nov-14
- Readmission: 3% in Feb-12, 1.8% in Nov-14
- Return to theatre: 3% in Feb-12, 1.8% in Nov-14

Reproductive Health Group
The Women’s Health Patient Safety Day
Friday 16 October 2015

Venue: RCOG, London

Programme

Royal College of Obstetricians & Gynaecologists

Reproductive Health Group
What Makes Us Believe That PICO™ Has An Important Role?

Audit of PICO™

Reproductive Health Group
Evidence From 207 Cases of PICO™
Royal Bolton Hospital 2015

- BMI > 35: 12.6%
- Diabetes: 11.5%
- Previous SSI: 4.5%

Readmission rates (3% Vs. 1.9%)
Return to theatre rate (3% Vs. 0.5%)

Reproductive Health Group
Comparison in High Risk Cases
Royal Bolton Hospital 2015

BMI > 35
- Wloch et al: 19.2%
- Reproductive Health Group: 12.6%

Diabetes
- Wloch et al: 15.6%
- Reproductive Health Group: 11.5%
Reducing Caesarean Section (CS) Surgical Site Infection (SSI) Rate With PICO® Negative Pressure Wound Therapy (NPWT) In High-Risk Pregnancies

Sunita Pappas, Beverley Michel, Jonathan Riley, Namrita Kataruk

Background: Caesarean Section (CS) is the most common major surgery performed on women. CS Surgical Site Infection (SSI) poses substantial health burden on NS. Initial audit at Bolton on all CS performed in April 2015 confirmed an SSI rate of 13.3%, readmission and return to theatre rates of 9%. National data based on a 40% women aged 25-34, born 1990-1999, had SSI rate of 15% in a study by Dhillon et al (2016). 15.5% infection rate in a recent study by Yoon et al (2016) and 14.5% reported by the National Institute for Health and Care Excellence (2018). All these studies show a higher infection rate than us, but no significant difference (p>0.05)

Methods: PICO® application training was offered to doctors, nurses, and midwives. Eligible women (BMI ≥ 35, Diabetes or GDM) that PICO® applied for 14 days and monitored for 90 days post-operatively. SSI was confirmed with both clinical observation and microbiological investigation. 200 postnatal women were recruited from Nov 2016 to Dec 2016.

Results: The SSI rate was significantly lower in the PICO® group (4.5%) compared to the control group (13.3%), which was associated with fewer complications and shorter hospital stay.

Conclusions: PICO® application in high-risk CS pregnancy is an effective intervention to reduce SSI rates and improve patient outcomes.
Another Interesting Fact!

- We noted in this audit that in half the cases, the bacteria noted in the wound were coliform and enterococci.

- These are due to contamination from urine and faeces.

- There is a great need for a stark improvement in patient education regarding hand hygiene.

Reproductive Health Group
Impact of PICO™

- In our two years of experience, PICO™ negative pressure is a proven device to reduce the incidence of CS SSI.
- Limitation – High-risk women. (Cost)
- Reduction in CS SSI, readmission and return to theatre rate
- This automatically reduced the
  - Demand on the health care services but most importantly
  - Improved the quality of care we provide to the woman

Reproductive Health Group
PICO™ contributed to fixing the problem

Prevention is better than cure

This ensured that any risk of infection, pre, during and post-surgery was minimised through the implementation of a multi-model approach at the level of the Trust, Healthcare Professionals and the patient

Reproductive Health Group
Conclusion

- Evidence based steps for effective wound care management
- Staff education
  - Consistent diagnostic criteria and wound management
- Patient education
- Provision of written information
- We have only started this journey and there is a long way to go.
- We believe that we will continue to make the improvement.

Reproductive Health Group
References

5. Developing a national guideline for preventing post-Caesarean infection. Key Opinions in Medicine supplement November 2014.
Advanced Wound Management in the United States
U.S. Wound Management remains attractive

Biologics represent the overall fastest growing segment

U.S. sales ($B)

- Biologics
- Devices
- Wound Care

2012: $2.8B
2014: $3.1B
2020e: $3.7 - $4.2B

Source – internal estimates

Sales CAGR (2014-2020)

- Total segment: Mid Single Digit Growth
- High Single to Low Double Digit Growth
- Low/Mid Single Digit Growth
- Mid Single Digit Growth
Only S&N has a portfolio that competes in all segments of wound care

**U.S. Revenue share by category**

- **Bioactives** $0.9B (28%)
- **Wound Care** $1.3B (40%)
- **Devices** $1.0B

**S&N Position**

- #1
- #2
- #5

**S&N Strategy**

- Defend and grow
- Expand NPWT franchise
- Turn around performance to gain share

*Source – internal estimates, moving annual total as of Q2 2015*

*Source – Q2 year-to-date 2015 S&N internal/GHx data*
Building scale in our U.S. business

*Note: Does not include 2012 revenue from Healthpoint of ~$190M

Source – internal data
2015 U.S. commercial imperatives to generate above market growth

**Optimize Resources & Leverage Synergies**
- One Fort Worth based organization
- Realigned sales force
- Expanded managed care team
- Promotion focused on key brands:
  - SANTYL®
  - REGRANEX®
  - PICO®
  - ALLEVYN® LIFE
  - ACTICOAT®
  - Cornerstone team focused on reversing sales declines

**Focus Investment on Growth Brands**
- REDEPLOY savings for growth
- INCREASE share of voice
- INTEGRATE sales and promotional programs
- ENHANCE clinical & health economic evidence

**Improve Execution**
- GAIN market share through focus on growth brands
- CREATE opportunities in strategic channels (Long Term Care/Retail)
- RELAUNCH RENASYS® tNPWT systems to compliment PICO
- ESTABLISH new contracting models that reduce payer risk
- LEAD continuum of care opportunity with a disease centric approach

**Commercial Leadership**
U.S. Advanced Wound Care
Returning to Growth

Actions

- Increase **share of voice** for better account coverage
- New **long term care sales force** to support ALLEVYN® & SANTYL®
- Improved **contracting and tendering**
- Re-focused **sales organisation** and new **incentive structures**
- **Focus** on cornerstone brands to reverse long running sales decline
- Increased **sampling & direct mail** programs
- Create more **clinical and health economic** evidence
- **Pressure dispersion mapping system** for ALLEVYN LIFE foam
- **“Account Conversion Excellence”** tools for account pull through
ALLEVYN® well positioned for current market needs

Significant penalties for hospital acquired pressure ulcers (HAPUs)

ALLEVYN demonstrated to reduce HAPUs

Eskernazi Pressure Ulcer Prevention Publication
69% reduction in HAPUs
$1 million annual savings with ALLEVYN®

Smith & Nephew is #1 in Bioactive Segment

**Market Dynamics**

- **3 distinct segments:**
  - topical agents, skin substitutes and collagens
- Crowded and **competitive market** with 60+ players
- **Topical agents** remain strong with ~9% Q2 growth
- Price and reimbursement factors impact market trends
- Care models shifting from acute care towards **primary care**

**Growth Drivers**

- **Large sales force in place** for Acute Care, Retail and Extended Care (~300 sales reps)
- Broad customer reach with advertising & digital promotion
- Focus on customer and patient needs by site of care:
  - Extended Care: **education** and competency programs
  - Acute Care: **value** over the care continuum
  - Retail: **patient convenience**, including education and proper dosing offerings
- Generating **clinical and economic** evidence

![S&N Bioactives sales trajectory](image)
U.S. NPWT Strategy is aligned with global approach

**Strategy**
- Selectively return RENASYS legacy systems to U.S. market and grow with RENASYS TOUCH
- Convert Home Care Segment
- Expand PICO into new therapy areas and care settings

**Execution**
- Target acute care accounts
- Small dedicated sales team with total account management
- Clinical and discharge support
- Position PICO as 1st choice for discharge therapy
- Gain Medicare reimbursement
- Expand use for chronic wounds in community market
- Develop market in incision management
Committed to delivering above market growth

1. Product portfolio that is best positioned across all segments

2. A commitment to improving commercial execution

3. Focused investments on growth brands through evidence, outcomes and medical education

4. Willingness to continue to invest in scale
U.S. Advanced Wound Management – one organisation to our customers
smith & nephew
Supporting healthcare professionals for over 150 years
Advanced Wound Management in Emerging Markets
Paolo Di Vincenzo

Joined Smith & Nephew in 2014

Relevant Experience

• 15 years Medical Device and Diagnostics experience
• Europe, U.S., Asia, Middle East and Africa
• Roche, Becton Dickinson, Systagenix (now Acelity)
Emerging Markets - a large region with highly diverse populations and cultures

“This is where I keep all my medicine (in my bedroom). Those jars of snakes are very old!”

DIABETIC FOOT PATIENT, AT HOME, CHINA
AWM is large and growing in Emerging Markets

Market Drivers

- Ageing population
- Chronic illnesses
- Emerging middle class
- Clinical practice; Education
- Innovation
- Reach
- Funding
- Regulatory environment

VOLUME of wounds by geography (m)

VALUE of wounds by geography ($ m)

More than 130m wounds

$1,900m market

Source: internal estimates
Fast-growing with a tiered market structure

2014 MARKET STRUCTURE: PREMIUM AND MID TIER

Advance Wound Management market size $1.9B - CAGR +10%

- Premium segment
  - AWD
  - AWC
  - Other EM
  - China

- Mid-tier segment
  - AWD
  - AWC
  - Other EM
  - China

$1,100m
$800m

S&N growing faster than market in both premium and mid-tier segments
Premium - improving clinical and economic outcomes

World Class Portfolio

- ALLEVYN LIFE®
- VERSAJET®
- OPSITE® Post-Op Visible
- ACTICOAT®

Key Priority Indications

- Diabetic Foot Ulcers
- Pressure Ulcers
- Burns
- Trauma
- Incisions

World Class Enablers

- Training
- Medical Education
- Evidence
- Market Access
- Support Programs
Mid-Tier - increasing access and adoption

Expanding product portfolio

- ELECT® IV
- ELECT® FOAM
- ELECTOFIX®

What we want to improve

- Ensuring adequate capabilities and leveraging a lean model
- Expanding product portfolio
- Providing products that are fit for purpose to increase access and affordability
- Ensuring reach through low-cost distribution channel

Mid-Tier
Smith & Nephew is well positioned to win

1. **CLINICAL PRACTICE**
   - Training and education
   - Clinical and best practice guidelines

2. **REGULATORY AND COMPLIANCE**
   - Responding to evolving local requirement
   - Strong compliance and quality function

3. **FUNDING**
   - Healthcare economics development
   - Meeting market needs and quality expectations

4. **REACH**
   - Sales and Marketing
   - Distribution Network

5. **INNOVATION**
   - Exudate Management
   - Infection Management
   - Surgical Management
   - Devices
   - Services
Our Vision in Practice

“I thought I was going to be scarred for life. If I look back at where I was two months ago, I'd say there's hope for everyone out there who is suffering from TENs.”
- Ms. S, March 2014

“Appropriate and effective dressings are key in managing these cases and this is where it is important to work with a skilled team. When Smith & Nephew provided us with these specialized dressings in the past they worked excellently”
- Dr Emmanuel Kabuzi, the consulting specialist physician who managed Ms. S's care

Supporting health care professionals to improve their patients’ lives

Taking a pioneering approach to the design of our products and services

Securing wider access to help our products reach more health care professionals

Enabling better outcomes for patients and payers
Spotlight on China
### China market structure

<table>
<thead>
<tr>
<th>Treatment site</th>
<th>Types of wounds</th>
<th>Types of products</th>
<th>S&amp;N presence today</th>
<th>Key competitors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class 3 hospitals</td>
<td>Chronic wounds: Surgical wounds, Post-op wounds, General wounds</td>
<td>Advanced wound management products</td>
<td>~40% coverage</td>
<td><strong>Multinationals</strong></td>
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<tr>
<td>~1,100*</td>
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<td><strong>Coloplast</strong></td>
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<td><strong>3M</strong></td>
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<td><strong>URGO MEDICAL</strong></td>
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<td><strong>MOONLIGHT</strong></td>
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<td></td>
<td>Chronic wounds: Surgical wounds, Post-op wounds, General wounds</td>
<td>Mid-Tier products: Standard wound care products: dressings, gauze &amp; tape</td>
<td>~5% coverage</td>
<td><strong>Local players</strong></td>
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<td>Class 2 hospitals</td>
<td>Surgical wounds, Post-op wounds, General wounds</td>
<td>Traditional Chinese Medicine (TCM)</td>
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<td><strong>WEGO威高</strong></td>
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<tr>
<td>~4,300*</td>
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<td><strong>SIMP</strong></td>
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<td><strong>BEIJING</strong></td>
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<td>Post-op wounds, General wounds</td>
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<td>Class 1 hospitals</td>
<td>Post-op wounds, General wounds</td>
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<td><strong>HUBEI</strong></td>
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<td>~12,500*</td>
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<td><strong>SIMP</strong></td>
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</tbody>
</table>

* Source: China MOH database, 2015
How Smith & Nephew addresses market challenges

China Specific Challenges around Market Access

- Registration
- Hospital listing
- Access

What we do to address it

- Depth and strength of dossier submissions
- Protocols & guidelines
- Product development, M&A, and licensing

Key Strategic Levers

- Education and training
- Reach and breadth of portfolio
Strengthened position over the past 3 years

Strong focus and momentum

Growing presence in key strategic segments

Establishing strong footprint in key hospitals and geographies

Recognized for innovation and expertise

How we are winning in AWC (dressings)

• Established advisory board to develop wound treatment guideline and protocols
• Developed over the counter channel to access consumer market
• Increased focus in key indications like Pressure Ulcers, Burns, Trauma, and Surgical

How we are winning in AWD (devices)

• Established 10+ VERSAJET° reference centers, with 500+ physicians trained across the country
• Developing NPWT market to upgrade from wall suction
• …national TV reports of VERSAJET and RENASYS° used to save lives in disasters such as the recent tragedy in Tianjin
Summary - well positioned in attractive market with significant growth opportunity

**Attractive Market**
- Large and growing
- Significant unmet need
- Under penetrated

**Well Positioned**
- Strong brand equity
- Customer reach
- Focus on innovation

**Growth Opportunity**
- Expand footprint
- Optimize portfolio
Supporting healthcare professionals for over 150 years