



TIME



LIFE



COST

The savings benefits of single-use

SINGLE-USE • HIGH QUALITY • EXCELLENT SERVICE • DELIVERS THE CLINICAL VALUE YOU NEED



**TIME**



**LIFE**



**COST**



Matching reusable Standards



Suitable for high risk procedures



Cost effective versus :

- Re-processing
- Repairs
- Replacement



**DTR Medical®**

Our mission is to provide medical professionals with high quality single-use, sterile and disposable innovative products which deliver patient and clinical value combined with exceptional levels of service

### Your sterile single-use solution...

- Disposable surgical instruments for Theatres, Clinics & Primary Care
- Pre-cut silicone tubing and other consumables
- Specialist procedure trays

### ...without compromise

Our single-use solutions cover most surgical and healthcare specialities. Every product in our range is the result of meeting a customer's unmet need.

- Matching reusable standards
- High quality instruments driven by sustainable material, process and design innovation
- Excellent service to deliver the clinical value you need
- "Supporting visibility, quality and safety in your supply chain" \*\*  
Our instruments' packaging features the latest machine readable GS1-standard barcoded labels for product traceability
- Cost-effective alternative to repairs, reprocessing or replacements
- Suitable for high risk procedures

\*\*GS1 - Global Traceability Standards



**In this tough economic climate realising savings is vital. Reprocessing surgical instruments is commonplace but evidence suggests that, by comparison, single-use instruments can save considerable time, costs and possibly even lives.**

## Time-saving

Despite its regular use by clinical departments, the complexity of reprocessing medical instruments is often underestimated. All stages involved take considerable time and involve different people, including:

- Counting and checking
- Re-working returns
- Instrument damage

These processes can lead to delays in theatre lists and appointments, creating extra administration and distress to patient.



# TIME



Healthcare professionals lose time searching for medical instruments. In one recent study, 35% of nurses said they faced daily shortages of medical supplies<sup>1</sup>.



Research involving 861 UK hospital nurses found that each nurse spends an average of four hours a week searching for medication, patient records, and medical devices - the equivalent of around 23 days a year of lost time. About 17 minutes per day of this time is for medical devices, costing the NHS over £350 million per annum<sup>2</sup>.



## Life- saving

Simply put, would you want someone else's human remains inside your body? Extreme as it sounds, there are some things which chemical or cleaning methods may not be able to completely remove. Abnormal proteins associated with rare prion diseases, such as vCJD, are not living organisms and are resistant to all conventional methods of decontamination. This means that when difficult to clean instruments are reused, proteins can potentially pass on to the patient and have adverse effects.



### SSI figures

Any healthcare facility has a duty of care to its staff and patients to minimise the risk of infection. By disposing of an instrument after one use, many instances of infection are prevented, thereby minimising NHS costs, potential litigation and mortality rates.

Currently, there are not disposable equivalents for all medical instruments, yet with knowledge of the benefits increasing, single-use products have the potential to offer reliable alternatives for many reusable products.

▶ **Based on 8.6 million surgical procedures in the UK per annum, an infection rate of 4.2% and treatment costs of approximately £2,100 per infection, the total costs of surgical site infection (SSI) in the UK is estimated at £758 million per annum<sup>3</sup>. Research suggests these figures are just the tip of the iceberg.**

<sup>1</sup> GS1 & Nursing Standard, May 2010, Survey of 861 UK Hospital Nurses  
<sup>2</sup> ibid  
<sup>3</sup> Clinical Services Journal (Sept, 2010) 'Calculating the cost of SSIs', <http://www.clinicalservicesjournal.com/Story.aspx?Story=7093>

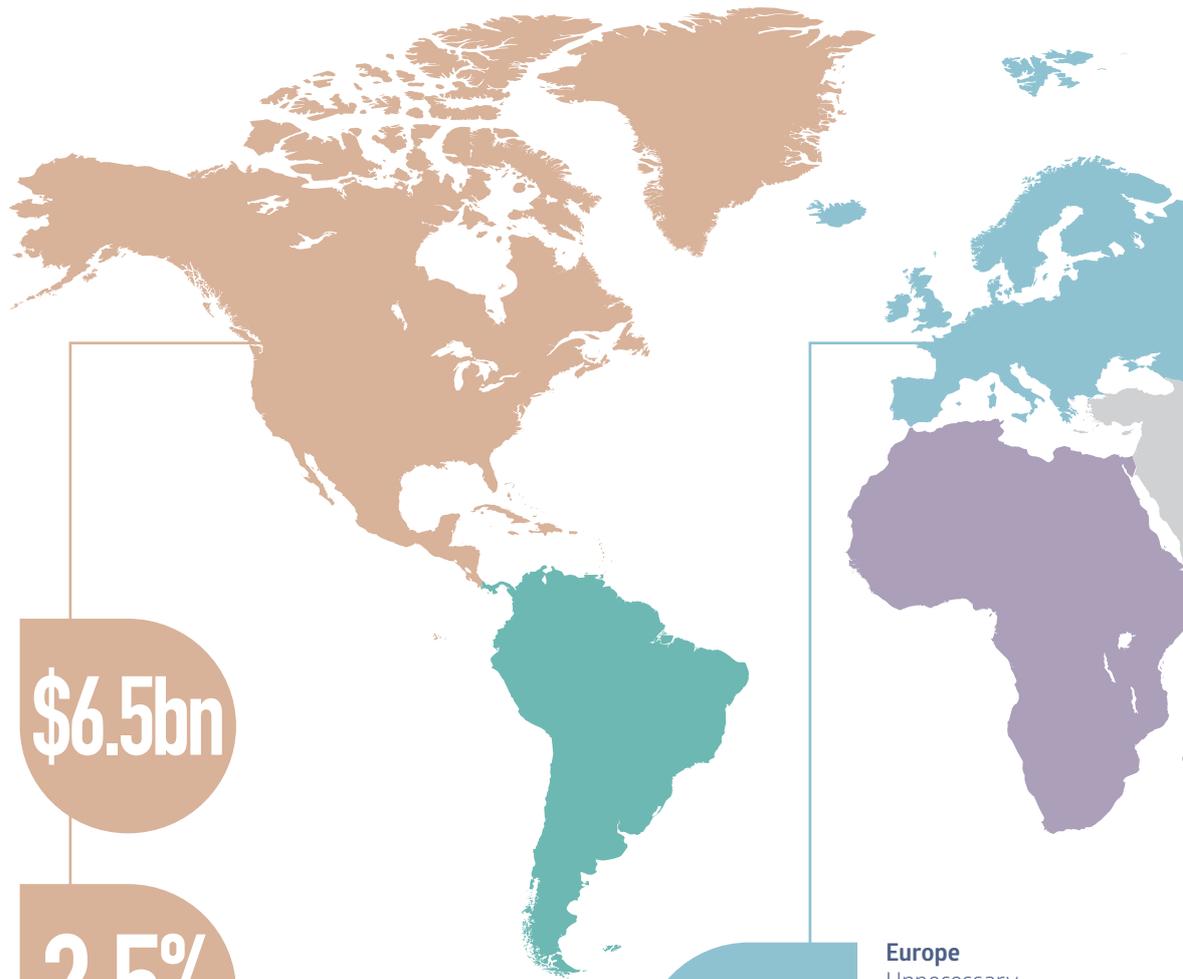
# The worldwide effect of surgical site infections



Surgical site infections have been responsible for increasing cost, morbidity and mortality related to surgical operations worldwide



Surgical site infections have been reported as accounting for **20-25%** of all nosocomial infections worldwide<sup>1</sup>



**USA**  
Estimated annual financial losses due to health care-associated infections.<sup>3</sup>

**\$6.5bn**

Approximately 2-5% of the 16 million patients undergoing surgical procedures each year have postoperative surgical site infections<sup>3</sup>

**2-5%**

**€7bn**

**Europe**  
Unnecessary additional annual spend due to health care-associated infections.<sup>3</sup>

**16m**

Health care-associated illness results in 16 million extra days of hospital stay.<sup>3</sup>

<sup>1</sup> [www.molnlycke.com/solutions/infection-prevention-surgery/costs-microbial-infections/](http://www.molnlycke.com/solutions/infection-prevention-surgery/costs-microbial-infections/)

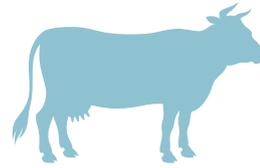
<sup>2</sup> [www.independent.co.uk/news/science/nhs-failed-to-sterilise-surgical-instruments-contaminated-with-mad-cow-disease-8967763.html](http://www.independent.co.uk/news/science/nhs-failed-to-sterilise-surgical-instruments-contaminated-with-mad-cow-disease-8967763.html)

<sup>3</sup> [www.who.int/gpsc/country\\_work/gpsc\\_ccisc\\_fact\\_sheet\\_en.pdf](http://www.who.int/gpsc/country_work/gpsc_ccisc_fact_sheet_en.pdf)

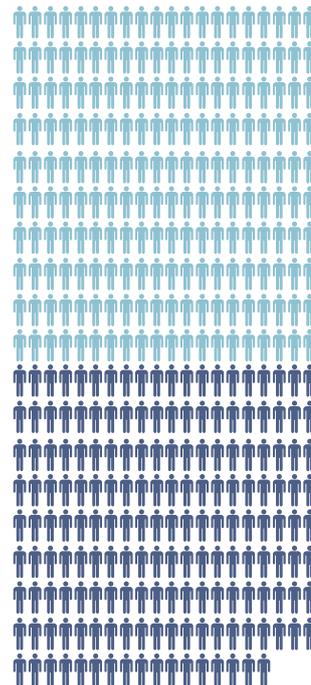


Globally, surgical site infection rates have been reported to range from<sup>1</sup>

**2.5-41.9%**



People affected by Variant Creutzfeldt-Jacob disease (vCJD) or "mad cow disease" in the UK



**200**

200 hospital patients exposed to vCJD prion through surgical instruments used on other patients who subsequently died of the illness<sup>2</sup>

**177**

People have died from vCJD in the UK<sup>2</sup>



**Surgical site infections (SSIs) and hospital-acquired infections (HAIs)**

**14%**

SSIs account for 14% of all HAIs and are the third most common type of HAI after urinary tract infections and pneumonia.<sup>1</sup>



Patients with an SSI are twice as likely to die as non-infected patients.<sup>1</sup>

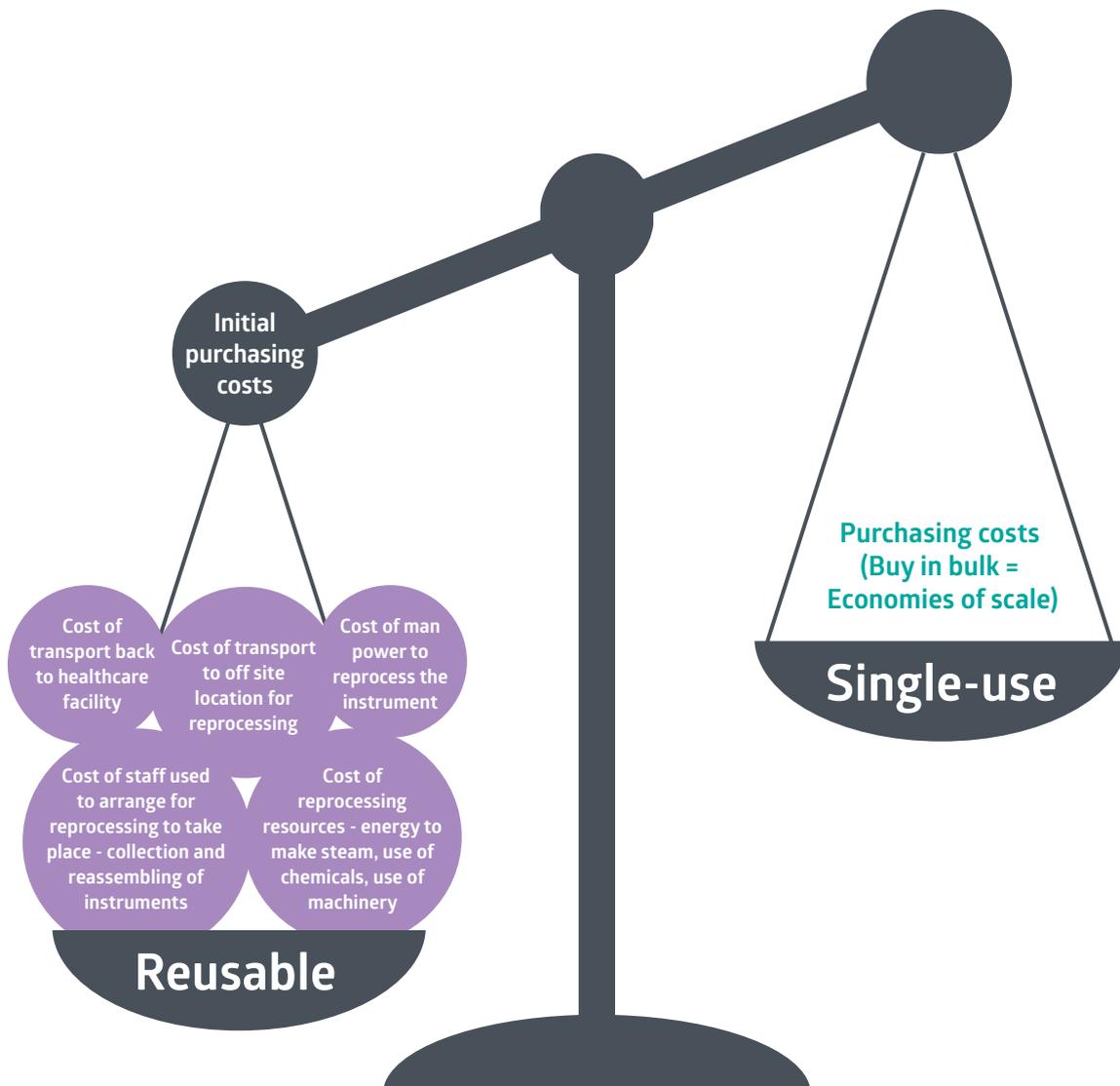
## Cost-saving

To assess the total cost of using single-use disposables, procurement personnel need to take into consideration more than the initial purchasing costs.

By looking at the different processes that both reusable and single-use instruments have to go through in order to be fit-for-purpose, the cost savings become clear.



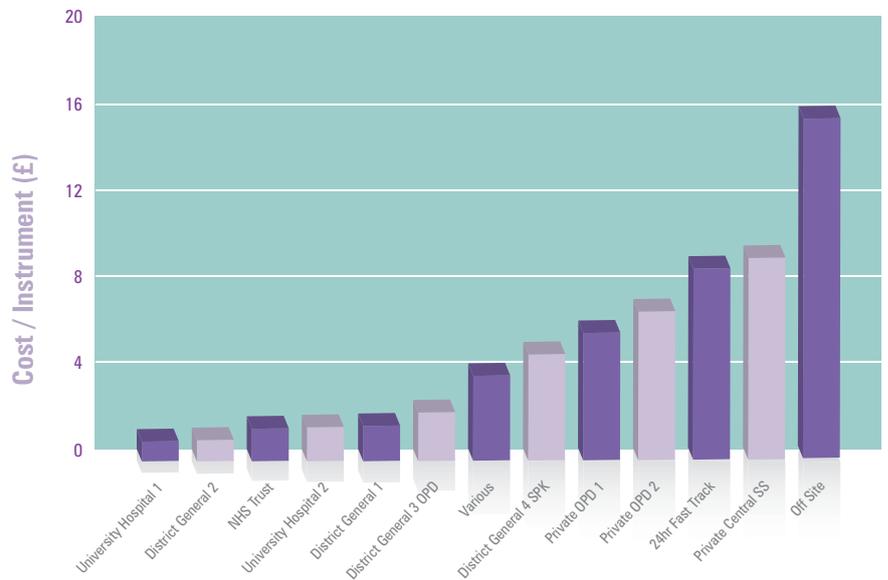
### Potential costs, Reusable v Single-use



Research collected by DTR Medical’s clinical consultations shows that the costs of reprocessing vary. Some reusable instruments can cost as little as £1 to reprocess with their disposable equivalent also costing the same. The question we pose to clinicians is why take risks with cross-contamination and potential time delays if there is no differentiation in price?

There are other less tangible costs which are not always understood, but which are very important to consider when discussing cost savings:

- The typical cost of repair for an instrument is £50 and single-use instruments rule out this cost
- Expensive and fine precision instruments are at greatest risk of damage, and incur the largest financial losses
- Busy clinical units need multiple sets of instruments to cope with high patient numbers which can put pressure on the capital costs of new reusable equipment
- Reusable instruments can put patients at risk of healthcare acquired infections (HCAIs), such as surgical site infections (SSI)
- Disposing of instruments after one use may seem like a waste of resources but when compared to the costs and energy used to reprocess reusable products, the savings speak for themselves.



**In 2010 alone, a hospital in Wales and two north of London had to interrupt surgery schedules after discovering traces of contamination on instruments that had been out-sourced for reprocessing<sup>4</sup>.**

<sup>4</sup>Western Mail, Jun 4 2010, 'Operations cancelled over 'dirty' surgical instruments'. <http://www.walesonline.co.uk/news/wales-news/2010/06/04/operations-cancelled-over-dirty-surgical-instruments-91466-26584001/>



DTR Medical, established in 2005, provides medical professionals with high quality single-use sterile products which deliver clinical value combined with exceptional levels of service.

Customer retention is a priority for DTR Medical. We ensure constant, high quality service delivery whilst bringing innovative products to the surgical table.

Research and customer feedback are integral to DTR Medical's operations. The questions customers are encouraged to ask are 'do you do?' and 'can you get?' The company's ethos ensures that new product development is led by the customer, so that real time clinical need is always delivered.



**DTR Medical believes that the benefits of single-use products speak for themselves. The time, life and cost savings they provide are significant, and the company's fast-growing customer base proves that these are not being ignored.**



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### Reprocessing

- Counting & checking
- Re-working returns
- First time sharpness
- Instrument damage or blockage

### Clinics

- Searching delays
- List disruption



### Contamination

- Prions/vCJD
- Difficult to clean/Pyrogens
- Surgical site infection

### Risk & Reputation

- Insurance
- Litigation
- Publicity



### Productivity

- Theatre time
- Clinic capacity
- Bed usage

### Comparative

- Capital
- Repair/Replacement
- Transportation



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INVESTOR IN PEOPLE