

Silhouette Prospectus

Technology enabler to support outcomes-led wound management

There is a significant opportunity to improve outcomes and cost-effectiveness in wound management in the UK. It is estimated that management of chronic wounds such as pressure ulcers, leg ulcers and diabetic foot ulcers costs the NHS (England and Wales data) over £5 billion per year, representing 5% of the NHS budget (1,2). It has been reported that outcomes trends for chronic wounds are variable across the UK and best practice is not consistent at a national level (1,3).

“Approximately 30% of wounds lacked a differential diagnosis, indicative of practical difficulties experienced by non-specialist clinicians. Wounds impose a substantial health economic burden on the UK's NHS, comparable to that of managing obesity (£5.0 billion). Clinical and economic benefits could accrue from improved systems of care and an increased awareness of the impact that wounds impose on patients and the NHS.”

Conclusion from Guest et al , Health economic burden that wounds impose on the National Health Service, BMJ Open Article (1)

We have a powerful and relevant technology to introduce to the NHS. **The Silhouette system (ARANZ Medical)** is an enabling technology that can support clinical and cost improvement plans for wound management pathways in primary care, community and secondary care settings.



SilhouetteStar camera for wound imaging and 3D wound measurement



Silhouette is an E-Health Insider Product Innovation Award Winner 2014



HSJ NHS Partnership Awards 2018
Best Medical Technology Innovation
 Entec Health selected as Finalist

Silhouette Value Statement for the NHS

The NHS health professional community has responded very favourably to the Silhouette system and its potential to make wound assessment, outcomes tracking and treatment planning more objective and easier, with the added value of powerful health informatics for continuous improvement.

Silhouette is increasingly relevant to NHS Trusts as the technology supports:

- 1) Potential to optimise wound outcomes, safety, patient experience and cost-effectiveness.
- 2) Quality clinical practice with standardised wound assessment method and quantified wound assessment data to help treatment review and planning for optimal wound outcomes.
- 3) Paperless clinical processes for greater efficiency to help Trusts move away from current paper-based documentation which is time-consuming, poor data access, often poor quality and paper data does not lead to creation of a valuable database for population-level health informatics, in contrast to the electronic SilhouetteCentral database.

The rest of this prospectus aims to provide an overview of the Silhouette technology and its value to the NHS, stakeholders and patients.

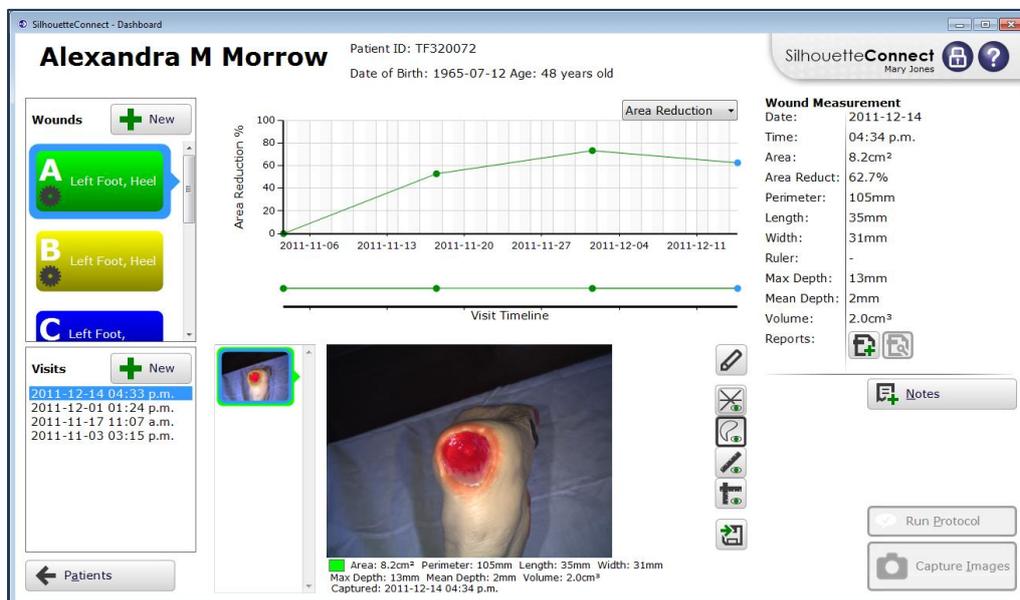


Fig 1. Silhouette Patient Dashboard showing % Area Reduction as quantitative indicator of healing progress (example for illustration only).

1. What is Silhouette?

Silhouette is an innovative electronic wound assessment and information management system.

2. What value does Silhouette offer?

Silhouette is designed for use by health professionals involved in managing patients with chronic and acute wounds. The Silhouette system supports higher quality clinical informatics, increased productivity, improved capability to manage wound outcomes and creates opportunities for cost savings when integrated into a clinical improvement plan.

3. Who is the supplier?

Silhouette is manufactured and supplied by ARANZ Medical Limited. Entec Health is an appointed distributor partner to ARANZ Medical in the UK. The Silhouette system has been on the global market since 2007, with the new enhanced product format available since April 2011.

The Silhouette product has CE Mark Accreditation (2007) and has FDA 510k approval status.

Silhouette is actively sold in the UK and the global market. ARANZ Medical has a worldwide customer base for the Silhouette System, with organisations using Silhouette for research and clinical practice applications. Markets include US, New Zealand, Australia, Singapore, Germany, Switzerland, West Africa (World Health Organisation).

4. Current Adoption of Silhouette in the UK

Entec Health is marketing the product currently to the NHS and UK wound care research sector. This is with a well established and close commercial and implementation relationship with the developer and manufacturer of Silhouette, ARANZ Medical.

Clinical Research

Silhouette is established as a world leading wound imaging and wound outcomes data capture solution for clinical research and has supported over 200 global clinical trials worldwide to validate wound care science concepts and efficacy of wound care interventions

Clinical Practice

Entec Health has been partnering with the NHS to introduce the Silhouette digital wound assessment and information management solution since 2012.

We have extensive experience of facilitating co-creation of solutions, working with leading technology partners and associates to develop and deliver progressive services, using digital and non-digital enablers. We are currently engaging with STP and CCG leads and stakeholders involved at Service Provider organisations, including business managers, clinical leads, IT leads, finance and procurement to support development of improved wound care practice and new models of care.

NHS Experience to Date – Silhouette as a technology enabler for wound management pathways

Case Study A: Entec Health has formed a successful collaboration with EMAHSN, Derby Teaching Hospital NHS FT, Derbyshire Community Healthcare Services NHS Trust and Derbyshire CCGs to introduce a **Digital Diabetes Foot Ulcer (DFU) imaging and assessment solution**. Silhouette has been deployed as an enabler of DFU treatment in the Community, with over-sight from Acute MDT. Resulting in significant improvement in:

- reducing reporting time
- patient experience
- savings across the whole system

The Silhouette solution is now being expanded across the Derbyshire county, supported by Derbyshire STP as part of the NHSE Diabetes Transformation Fund.

See AHSNs Atlas of Innovation case study and BBC East Midlands New Report on this initiative. <http://bit.ly/2rmxN8y>

Patient Feedback – Derbyshire Diabetes Foot Service enabled by Silhouette

“Being able to have my check-ups at my local clinic is great. I have less distance to travel and it makes getting to appointments much easier. The process of being scanned using Silhouette® is also quick and I can see how my ulcer is progressing at each appointment. I like the fact that this technology means I can get seen on my doorstep.”

DH, patient from Ripley Clinic, Derbyshire

Case Study B: Following a successful evaluation managed by Entec Health, ARANZ Medical and NHS stakeholders, Silhouette is supporting the **Norfolk Community Health & Care NHS Trust - Developing a patient-centric wound care service**. Entec Health and ARANZ Medical have established a demonstrator of the Silhouette solution, ahead of a potential wider roll-out of Silhouette across the Trust. The main drivers for the Silhouette investment and initiative are:

- Patient –centric digital technology; adopt to improve engagement, experience, outcomes
- Meet workforce planning goals
- Potential efficiency savings, optimise dressings spend, nursing travel time,
- Quality and Safety improvement
- Demonstrable outcomes for CQUIN
- Can support effective triage across large region

"Clear pictorial evidence of the wound and whether it is improving or not- useful for clinicians and patients- can help patients to realise true picture and help with compliance if needed."
Silhouette Evaluation Feedback, Clinical Lead Nurse, NCHC NHS Trust

Case Study C: Collaboration led by Entec Health supported by GMAHSN and Trustech, - **Tissue Viability Service at Central Manchester Foundation Trust (now Manchester Foundation Trust) successful evaluation of Silhouette 2016/2017**. Business rationale to deploy Silhouette as an enabler of Wound Care Transformation for MFT, with projected benefits identified include:

- Improved continuity of care across acute and community settings
- Reduced length of in-patient stay
- Ability to track healing rates
- Delivery of more targeted education
- Increased formulary compliance
- More efficient use of TV team resource
- Quality baseline data informing future research quality improvement strategy
- Savings identified based on target improvements

There is current restructuring activity underway at MFT. There is an intended commitment to secure budget for Silhouette implementation in FY 2018/2019.

"The biggest benefit of implementing Silhouette at CMFT will be the improvements it will allow us make to the quality of care we deliver. It will also help us establish a clear baseline from which we can continue to improve the service and enhance patient experience."

Julie Cawthorne, Consultant Nurse/Manager
Infection Prevention and Control/Tissue Viability Nursing Services

5. The Silhouette System Overview

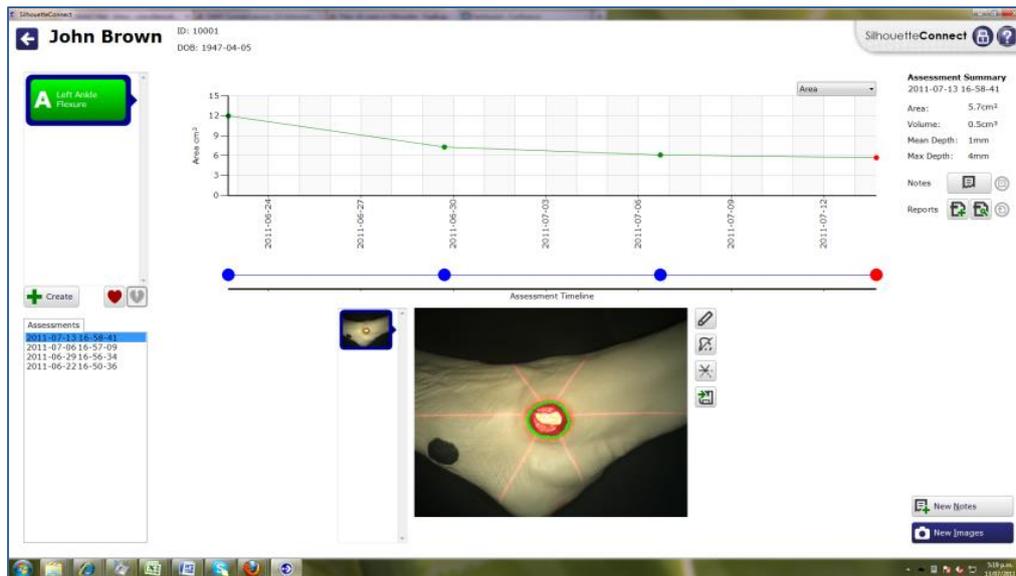


Figure 2 SilhouetteConnect Patient Dashboard showing change in area as indicator of healing (example only)

The Silhouette System is an innovative electronic wound assessment and information management system, the only one of its type currently available on the market.

Silhouette supports rapid and reliable electronic wound imaging, wound measurement, clinical data capture, documentation, reporting and health informatics capability.

Silhouette transforms the key tasks in wound management from a largely paper-based, subjective, labour-intensive practice to a paperless, objective and more productive practice.

The Silhouette system is an integrated solution, comprising four components:

SilhouetteStar™ digital wound camera for reliable wound imaging.

SilhouetteConnect™ wound assessment application software. Supports non-contact, automated 3D wound measurement, clinical data capture and report generation at point of care.

SilhouetteCentral™ database for managing and storing all information collected from multiple SilhouetteStar+SilhouetteConnect devices in one central data platform. Supports the health provider organisation to build robust wound information database and health informatics capability.

SilhouetteLink™ data integration engine for interoperability with 3rd party electronic patient record systems.

6. Transformation Potential of Silhouette for Improved Wound Management Pathways

The Silhouette technology presents a significant opportunity for supporting better clinical management and outcomes for patients with chronic wounds such as pressure ulcers, diabetic foot ulcers, leg ulcers and acute/surgical wounds. (4,5,6,7,8)



Figure 3 SilhouetteStar camera in action in the clinic, capturing an image of a diabetic foot ulcer

The anticipated impact of adoption of Silhouette includes:

Improved efficacy and safety of wound management pathway

- Silhouette supports clinical excellence through helping health professionals generate better quality of information; robust and objective wound assessment, documentation and reporting for improved treatment planning and patient outcomes management.
- Silhouette enables robust capture of information on patient treatment and progress during care for greater transparency and patient safety.
- SilhouetteCentral Aggregate Reporting Module – SilhouetteCentral supports population-level reporting across a range of wound and service metrics, based on standard available templates and the option to commission customised reporting for bespoke requirements.

Enhanced patient engagement:

- Health professionals can use clear images and healing graphs to show progress, explain treatment goals and encourage joint ownership of care plan.

Higher efficiency of wound management pathway:

- Higher productivity, as staff can capture essential and objective wound status information in standardised format within minutes compared to current time-consuming, unreliable, paper-based process.
- Silhouette can be integrated into a tele-consultation approach to improve patient access and timely referral.

Potential for Cost and Efficiency Savings with Silhouette Deployment:**i) Higher quality of clinical information for monitoring wound healing progress and wound outcomes**

Impact: More effective treatment planning, better risk-stratification, robust evidence base, drive improved outcomes.

Savings: Reduce cost of treatment. Release clinical time.

ii) Electronic system to support paperless data capture and data management

Impact: Easier, faster data capture and review for timely clinical decisions.

Savings: Clinical efficiency, higher productivity, reduce service delivery cost.

iii) Silhouette supports timely review of wound assessment data by multiple users at multiple NHS locations

Impact: Integrated care, reduce hospital out-patient visits and unnecessary admissions.

Savings: Drive service efficiencies, release clinical time, optimise specialist coverage.

7. Silhouette Investment

System formats available & pricing

Silhouette is a modular wound assessment and information management system and can cater for a range of requirements, scope and budgets.

The Silhouette solution is available in two formats:

- i) **Silhouette, stand-alone package:** suitable for clinical research applications or a small organisation.
The stand-alone package comprises 1 unit SilhouetteStar camera + SilhouetteConnect software licence for 1 PC.
The SilhouetteCentral database, Aggregate Reporting and Data Integration is not included in this package.

- ii) **Silhouette enterprise level system:** suitable for organisation-wide system use, where multiple wound assessment devices will be utilised by a number of health professionals.
For an enterprise system, the format and pricing is defined by the required number of SilhouetteStar cameras, SilhouetteConnect assessment software licences and level of customisation and data integration required. The enterprise level system includes the SilhouetteCentral database and Aggregate Reporting Module. Clinical user training and technical training is offered as part of the proposal. Other options for consideration are data integration requirements and additional support services such as project management.

To request pricing information, please contact us with details of your requirements.

8. Silhouette Procurement – Silhouette on NHS Framework Agreement

ARANZ Medical Limited, the supplier of Silhouette, and Entec Health as a UK distributor/sub-contractor, have qualified onto the London Procurement Partnership Clinical Digital Information Management Systems Framework Agreement - this is available as a pre-qualified procurement route to any buying authority within the NHS.

Framework Name: Clinical and Digital Information Systems Framework (CDIS)

The framework is open and available to NHS Trusts, Any Qualified Providers, Private Providers and 3rd sector entities.

Framework Host:

London Procurement Partnership (hosted by Guy's and St Thomas' NHS Foundation Trust)

Managed via online procurement portal: Due North Portal

Framework Number: OJEU 2016/S 061-104740

Lot Number(s):

Lot 4.2 Telehealth

Lot 4.6 Patient Workflow

Lot 4.7 Innovation

LPP CDIS Contact:

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Silhouette Provider Information

Developer/Manufacturer: ARANZ Medical www.aranzmedical.com

Appointed UK Distributor: Entec Health www.entechealth.com

UK Contact for Silhouette enquiries:

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About Entec Health

Entec Health is a specialist healthcare technology business, dedicated to selling, marketing and supporting innovative technologies and transformation solutions for healthcare innovation. The company brings products to market directly and also supports companies with market development consultancy services. The company's vision is to enhance healthcare quality, outcomes and cost-effectiveness in partnership with healthcare provider clients and their patients.

Entec Health was established in Nov 2009. Company registration No 07087860.

The company's Managing Director and Founder, Ms Achala Patel, has over 25 years' experience of launching and growing successful healthcare products and services in the NHS and international markets. Her expertise includes commercialisation, collaboration and co-development of solutions within the healthcare sector.

www.entechealth.com

About ARANZ Medical

ARANZ Medical is a leader in digital imaging, 3D modelling and software development for specialist medical applications.

www.aranzmedical.com

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