SWIFT™

Incorporating a Machine Learning Feature into the Product Lifecycle

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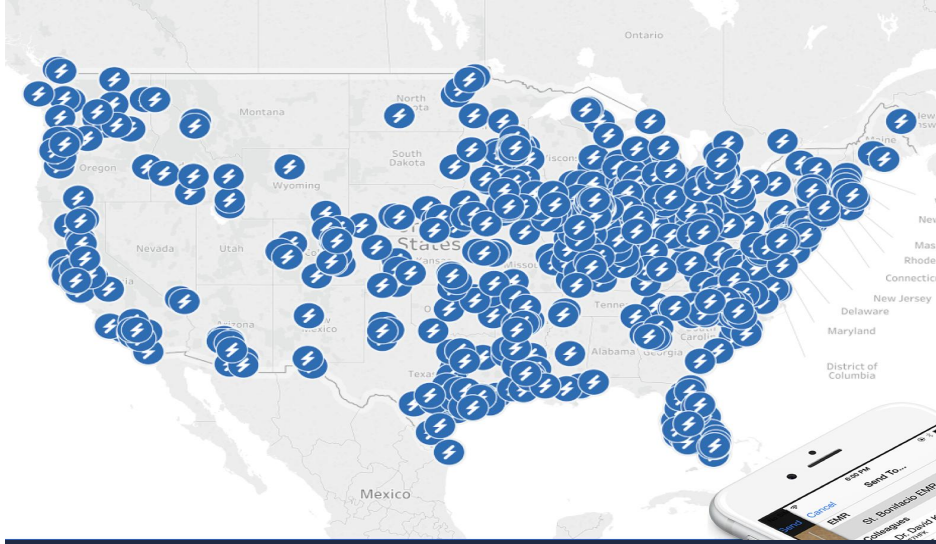
SWIFT MEDICAL

Industry leading point-of-care visioning technology for wound care

Teams located in Chicago, San Francisco, Toronto and Montreal

Partnered with the largest health care organizations in North America

Cross continuum penetration: LTPAC, Home Health, Hospitals, WCC



ADOPTED BY
1,700+
ORGANIZATIONS

DEPLOYMENTS IN ALL
50
STATES +
3 CONTINENTS

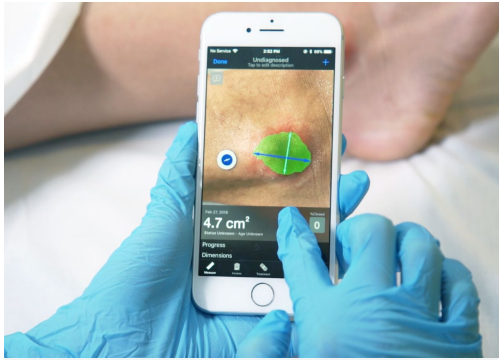
IN USE BY
10x
MORE ORGANIZATIONS THAN CLOSEST COMPETITOR

MONITORING
200,000+
PATIENTS MONTHLY

SOLUTION COMPONENTS

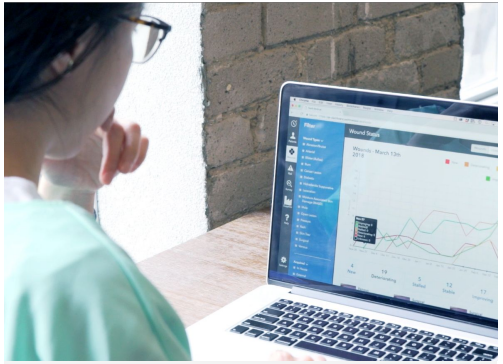
SWIFT HEALX

Scientific Calibrant



SWIFT APP

iOS/Android Devices



SWIFT DASHBOARDS

Web/Desktop Analytics

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CHALLENGES OF WOUND DOCUMENTATION

MEASUREMENT

Current clinical standard measure with a paper ruler, where:

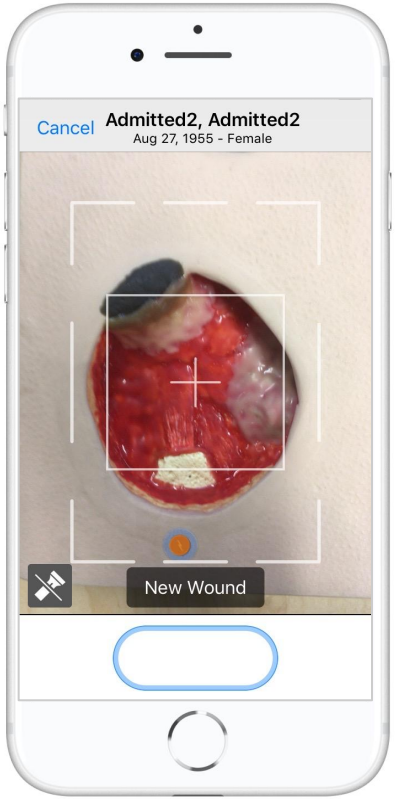
Area = Width x Length

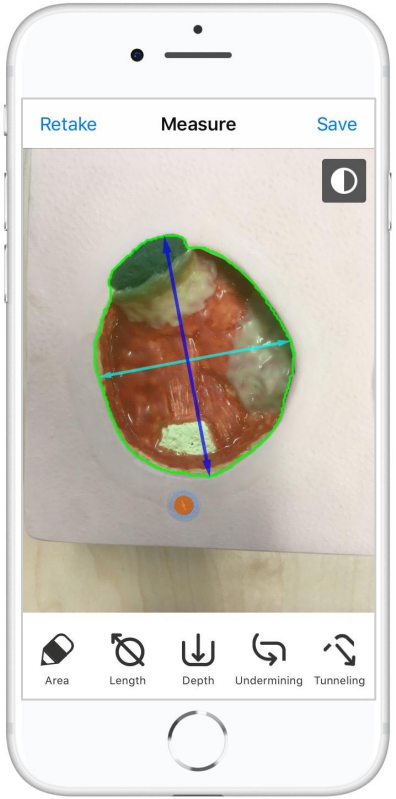
CORRECTNESS AND CONSISTENCY

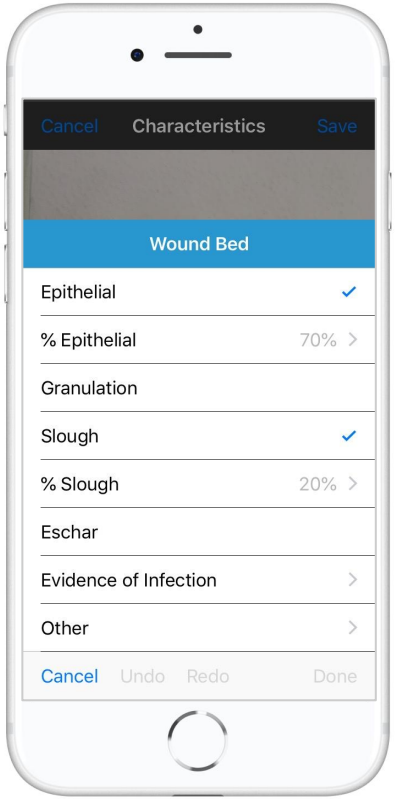
Key factors incorrectly documented or not documented at all:

- The wound's location on the body
- Wound type and stage
- Exudate
- Classification of tissue types in the wound bed

COMPLETING A WOUND EVALUATION







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HOW WE CAN USE MACHINE LEARNING TO IMPROVE?

Identifying the Wound Boundary (Trace)

Today Automated algorithm uses the image's statistics - leaving out any expertise specific to wound care

AutoTrace

- Improve efficiency for users
- Improve quality of traces

Tissue Classification

Today User entered - time-consuming and dependent on the user's education, experience and diligence

AutoTissue

- Improve efficiency for users
- Improve completeness and quality of documentation

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CONSTRAINTS

1. We deliver a regulated product
2. We commit to having all features work offline
3. Clinicians are people too

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DEVELOPING THE FEATURES

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FITTING THE MODEL INTO THE PRODUCT

The output of the model is a *suggestion* - the clinician must confirm that this suggestion is correct.

The model must fit into the workflow - both when it works and when it fails.

DEVELOPING AUTOTRACE

Data: Lots of good data from everyday use of our app

Model: Relatively simple architecture

Fit into Product: Effective trace presentation and editing tools already present in app

Test and ***Refine***: Lots of customers are keen to test this feature and keen to support improvements

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DEVELOPING AUTOTISSUE

Data: We needed to create our own labelled dataset

Model: More complex than AutoTrace

Fit into Product: Need to generate new ways to present the output

Test and ***Refine***: More iterations of both model and UX tools

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CONTINUOUS IMPROVEMENT

We will always seek to improve our solution

Usability metrics - how well are our users flowing through each step of the process?

Product Metrics - are we actually seeing hoped for improvements?

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