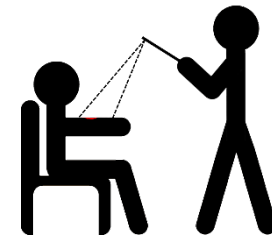




Pressure Injuries and
3D images from GPC
Digital Health and Care Conference
5th July 2016

Ian Wiles, Medical Director,
IanWiles@gpcsl.com



Dr Ian Wiles

- GP Bath over 20 years
- Worked at InHealth, Assura Group and Virgin Care
- Director operations Virgin Care
- Medical Director GPC



- Wound care is costly
 - The cost of treating a pressure ulcer varies from £1,214 (category 1) to £40,000 (category IV).
 - £5 billion in the UK
 - 4.5% population, average cost £2,300
 - Disruptive to the patients lifestyle
- Wound management is changing
 - Closer to the patient
 - Fewer specialist nurses
 - More pressure ulcers
- Outcomes are difficult to monitor
 - Measurements (staging) are subjective and stepped
 - Population management difficult



RealSense 3D Camera



- 1.3D gives perspective
- 2.Delivering accurate measurement
- 3.Length, width and DEPTH
- 4.Reproducible
- 5.Objective
- 6.Intuitive
- 7.Inexpensive



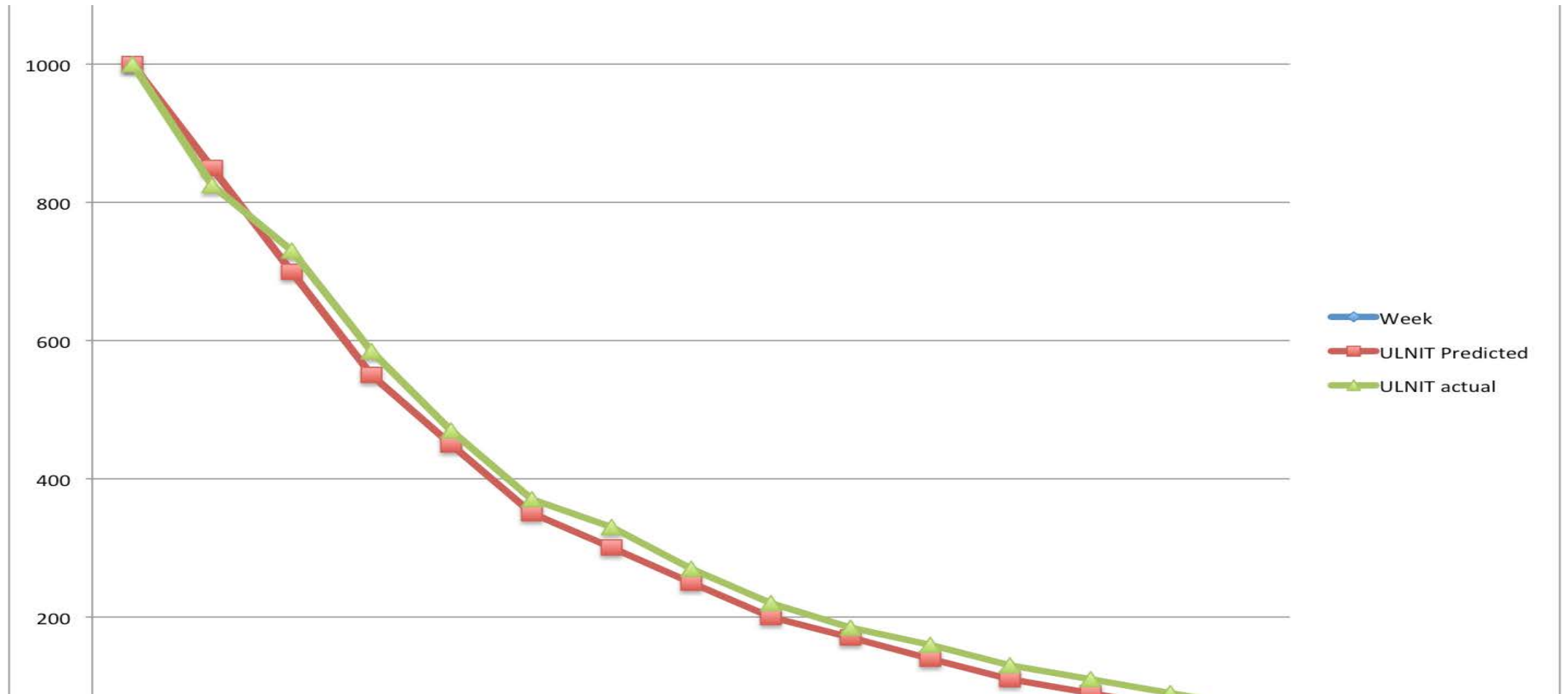
Capture and Analysis of 3D Image

Ulcer Units – ULNITs

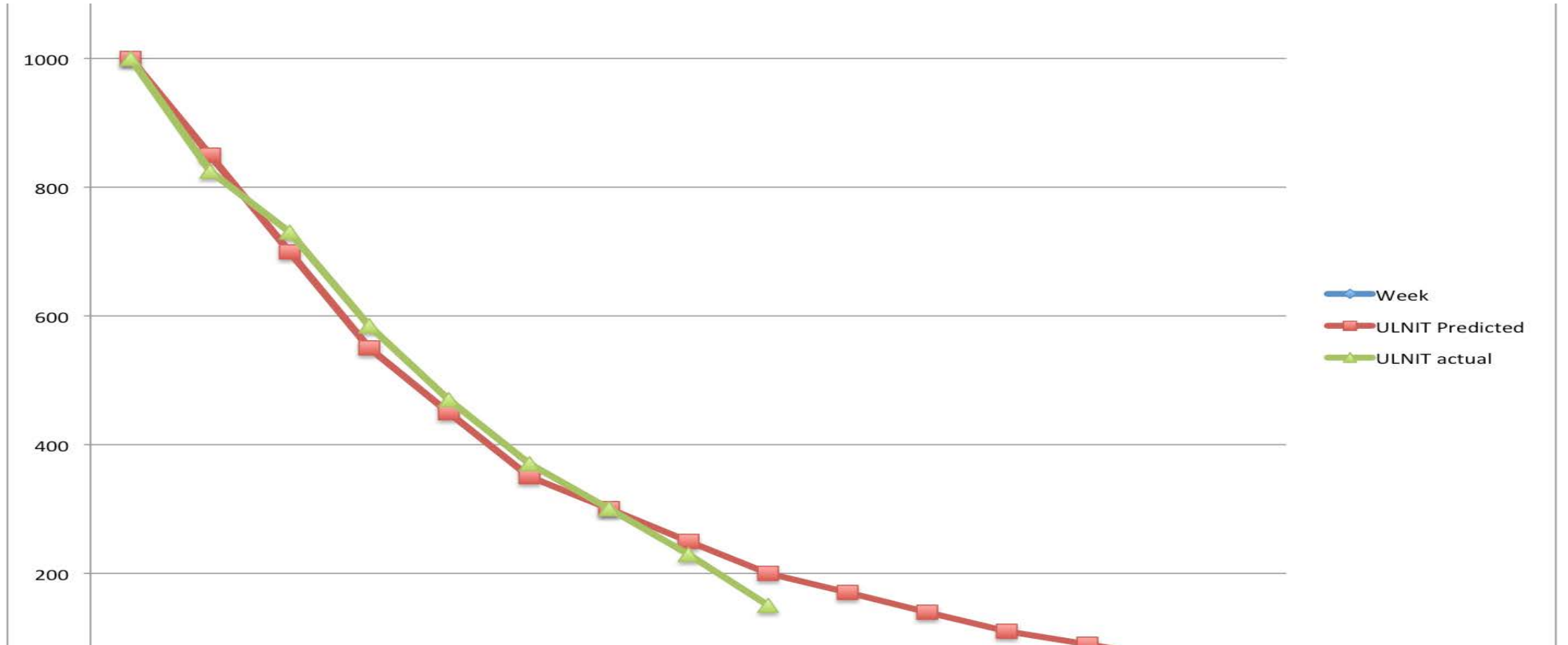


- ULNITs are the accurate measurement of an ulcer using a three dimensional camera (3D).
- The ULNIT is the maximum width multiplied by the maximum length multiplied by the maximum depth of any ulcer all measured in millimeters, to produce a numerical value
- The ULNIT will become surface area multiplied by the maximum depth, and will be automated
- 3D cameras enable any carer to accurately assess and monitor an ulcer.
- The monitoring of ULNITs ensures close scrutiny of all pressure ulcers, removing the subjective element in previous classifications and allowing consistency across a community
- The introduction of ULNITs will allow clinicians and managers to accurately measure the aggregated pressure ulcer 'load' in a community simply by referring to the total ULNITs aggregated for a population, again this can be monitored
- Every clinician involved in ulcer care understands this a powerful development in measurement, using the depth of an ulcer is just a an evolutionary development of ulcer assessment

Ulcer Healing on Track

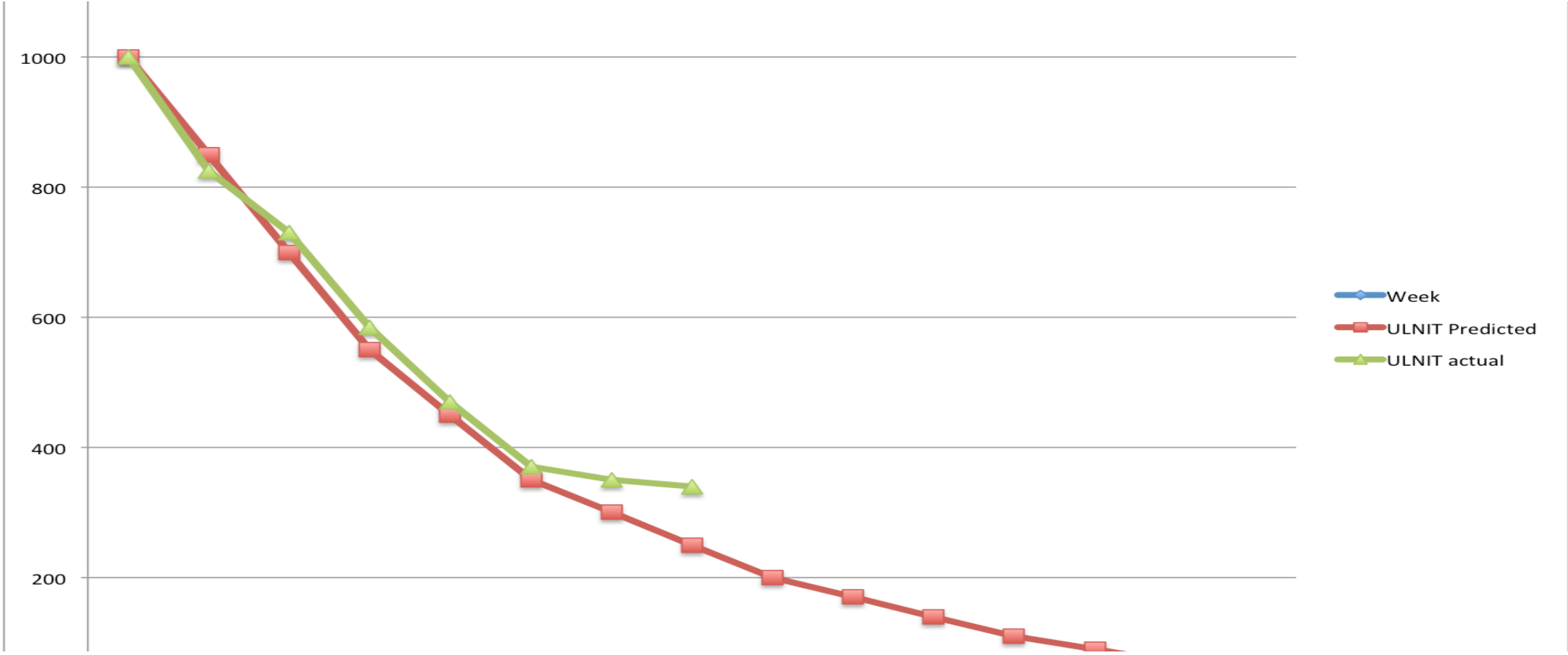


Better than Predicted





Ulcer Healing Requiring Intervention



Other Applications



- Burns with calculation of % surface area affected
- Mole surveillance
- Psoriasis monitoring
- Any suggestions

GPC Pressure Ulcer Applications

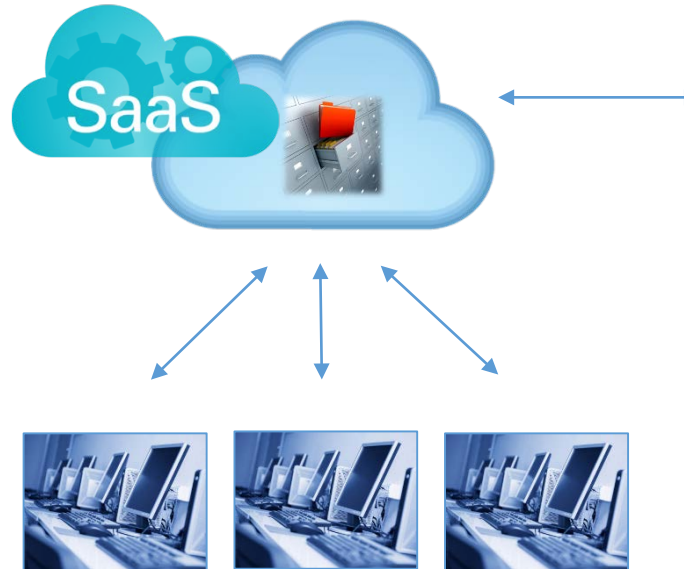
Mobile Applications

- 1 Capture of image and depth data by clinicians and patients



Cloud Store & Applications

- 2 Secure send and store with intelligent image processing



Web Applications

- 3 Dimensions monitored and managed by exception. Specialist Nurses and Physicians review 3d, video and image including change over time and intervene if required



Integration Services

- 4 Integration with other systems to send and receive worklists and medical records and to link to depth, measurement and 3D images.



KEEP
CALM
AND

Monitor
Pressure Ulcers

Patient Management Patient Information

[Add New Patient](#)

Daniel Williams	/ X
John Evans	/ X
Mark Brown	/ X
Huw Evans	/ X
Susan Jones	/ X
Sarah Miles	/ X
Jane Richards	/ X
Chung Mortenson	/ X
Lennie Antone	/ X
Bianca Periera	/ X
Edyth Stotts	/ X
Dorsey Pizzuto	/ X
Susie Selig	/ X
Graciela Bartkowiak	/ X

NAME
Huw Evans

DATE OF BIRTH
01/07/1967

SEX
Male

PHYSICIAN
Dr Williams

DIAGNOSIS
Pressure Sore

CODING
L97.10

PRESCRIBING
Potassium soak

CONSULTANT
Mr Jones

NURSE
Sarah Richards

Gallery Graph

01/01/2015 08/01/2015 15/01/2015 22/01/2015

Data [Update](#)

Length	2	Comments Patient has suffered diabetic leg ulcers for many years. Recently this has deteriorated significantly and a potassium soak has been prescribed.
Width	2	
Depth	2	
Grade	1	





Pressure Injuries and
3D images from GPC
Digital Health and Care Conference
5th July 2016

Ian Wiles, Medical Director,
IanWiles@gpcsl.com

