

IMPROVING COMMUNICATION AND EFFICIENCY IN THE WOUND MANAGEMENT PROCESS

THE ASKLEPIOS EXPERIENCE

THE NEW DIGITAL TRANSFORMATION PROCESS AT THE ASKLEPIOS HOSPITAL IN LANGEN

Asklepios Kliniken GmbH & Co KGaA, comprising over 100 clinics and healthcare facilities, is one of the largest clinical operators in Germany. In this context, an alliance was established between the Asklepios Group and Dedalus – a partnership aiming to deploy the clinical software ‘ORBIS U’ on the ASK Langen site, a specialised care clinic.

THE JOURNEY BEGINS

In 2022, through a process involving all institutional stakeholders and the solution provider, a complete Business Blueprint was defined in order to improve communication between doctors, nurses and wound managers in relation to patient treatments. The first step of this transformation, aiming to rethink and redesign the overall processes, looked at the Wound Management process.

“We can learn a lot from various projects in the context of digitisation. I say “we” deliberately, as I mean both Dedalus and Asklepios. Our roadmap to take on the challenges we currently face involves projects which combine the interests of Head Physicians, nurses, Managing Directors, technicians and Asklepios staff in general”, says Jan Voigt, Director of 4 Asklepios group clinics.



CONTEXT

To manage wounds appropriately, doctors and nurses usually need to take several essential photos in some contexts, such as emergency evaluations, burn and wound care, after surgery, and so on. This process is however highly time-consuming, since these professionals must then take the time to download, save and archive the pictures and connect them to the related wound documentation in the patient's record.

“Asklepios Klinik Langen operates around 400 beds, is a pioneer in digitisation and already demonstrates a high level of digital expertise. It shows willingness to innovate, and is ready to explore new horizons”

explains Christoph Brandes, Head of Country Product Management at Dedalus in Bonn.

“Digitisation in the nursing and the medical sector is an important step, helping us to better overcome healthcare-related challenges. For instance, digital technologies can facilitate the nursing staff's work, accelerate the information flow and ease internal processes. This is why we promoted digitisation in all areas of the clinic at an early stage, and always involved our staff in the development of new programmes,” adds Jan Voigt, Managing Director of Asklepios Klinik Langen.



NEEDS AND CHALLENGES

With 50% of visits at the Asklepios Outpatient Clinical Department related to wound treatment, it is essential that the software solution is smooth, effective and able to update information in real time. In this way the physician visiting the patient knows they are accessing the very latest data (information and images) relating to the right stage, and can potentially ask for clarifications from the Wound Manager if need be. Thanks to the new ORBIS U solution, images and reports are saved in real time in the patient record and the wounds management process flows smoothly and effectively.

“At the moment, we can measure images in two dimensions. In wound management, it is essential to be able to measure the wound in depth, as wounds often grow from the inside out. This is very important to determine whether the wound treatment is working or not, so we also plan to implement this feature in future” says Mrs. Beate Schütz, Head of Case and Documentation Management at Asklepios Langen

METHODS

To demonstrate whether ORBIS U created value within the healthcare organisation, both in the short and the long-term, Dedalus considered the healthcare organisation’s context and implemented a methodology based on SMART KPIs designed specifically for Wound Management processes.

3 metrics were selected for this first phase of the project, with targets measured both before the implementation of ORBIS U and regularly afterwards, in close collaboration with the healthcare organisation and data analysts.

STATISTICAL ANALYSIS

A mixed team worked jointly at the Asklepios Langen Clinic, observing and measuring the activity of doctors, each supported by a Wound Manager. The same patient use cases (clinical conditions) were compared, both before and after implementing the new software solution ORBIS U.

In recent years, a number of [studies](#) have shown that the achievement of the three initial goals of the Triple Aim: patient satisfaction, cost efficiency and health equity, should first consider the well-being of professionals. Our research wants to highlights important outcomes for both professionals and patients.

IMPROVE CARE TEAM SATISFACTION



IMPROVE CARE TEAM SATISFACTION

Metrics



Time per patient spent by the Wound Manager to write notes and save images in EMR at the clinical Department. An average of 400 patients per month

Before



Time per patient: 7 minutes (an average of 3 minutes to write the notes in the notebook and then in the system) plus 4 minutes to download and upload the photos into the EMR)

After



Time per patient: 1.5 minutes (no rewrite time, no download or upload time)

Value measured



2H GAINED PER DAY

ENHANCE CARE TEAM COLLABORATION



ENHANCE CARE TEAM COLLABORATION

Metrics



Elapsed time for the doctor to receive the needed information

Before



The doctor requests a wound management activity. The wound manager takes photos with a camera, treats the wound and makes notes on a paper notebook, then register the process and the photos in the patient's medical record. (The photos were uploaded separately and the notes were written down as a report). The doctor waited for 1 day before having the needed information.

After



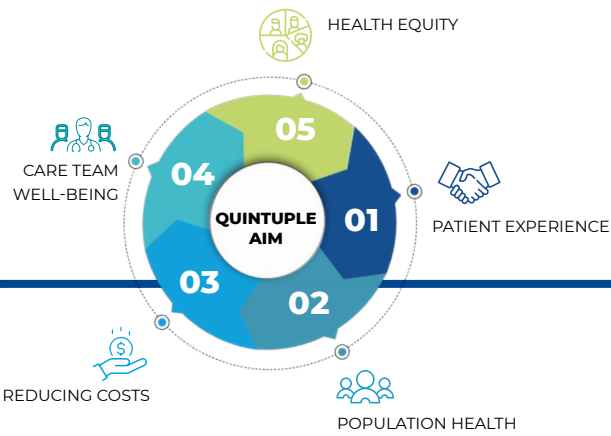
The doctor requests a wound management activity. The wound manager takes photos with a mobile device on which ORBIS U Woundmanagement is installed and synchronized with the Patient's medical record.

Value measured



1 DAY GAINED PER
affected patient

BETTER CARE EXPERIENCE



BETTER CARE EXPERIENCE

Metrics



Number of patients with a complete nursing dossier for ongoing treatment in the outpatient clinical department

Before



In the previous phase all the patients with wounds didn't have in real time images for a better treatment.

After



Thanks to the new solution on mobile devices all patients with wounds have in real time their dossier updated.

Value measured



ALL PATIENTS in Outpatient Departments with wound have in real time a complete dossier

SOME QUOTES A
“**HUGE TIME-SAVER**”, “USER FRIENDLY AND
TIME EFFICIENT”

A wound care nurse described ORBIS U Wound Management as a “huge time-saver”. A wound management report which includes photos enables to **reduce nursing time by 80% compared to the former system**. “If half our patients each month require this kind of treatment, this is significant”, the nurse adds.

“My colleagues in nursing are of course enthusiastic about going digital, because it means the whole team’s workload will be reduced – which is much appreciated. And since I’ve been working with them, I think that being able to use tablets and managing data directly will make our way of working even more professional, especially for the younger colleagues. This digitisation has already improved communication between all professional groups in the hospital, as all of us can access anything that a colleague has documented, at any time. We always have full access to the solution.”, says Christina Müller, a registered nurse involved in the digitization project



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About Dedalus

Dedalus is the leading healthcare and diagnostic software provider in Europe and one of the largest in the world. With its innovative framework of comprehensive and process-oriented solutions, Dedalus enables a revolutionary digital transformation of country-wide Healthcare Systems fully supporting the patient digital journey. Dedalus serves more than 7,500 private and public hospitals across 40 countries, through more than 8,000 highly specialised resources, of which 2,900 are dedicated to R&D activities.

We aim to help caregivers and healthcare professionals to deliver better care to the communities they serve and for this reason we are very proud of doing a special job, working with healthcare organisations to improve healthcare outcomes for patients.

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