

Telemedicine in pediatric wound care.

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IMIT 2014
Geneva , 13 -15 April

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Summary

- **We present our experience using telemedicine in the successful assessment and treatment of 235 pediatric patients at the OPBG, Rome**
- **Photographs with a digital camera and videos with webcam were taken and sent weekly via email to a wound care specialist in Rome. The photographs allowed the expert to diagnose and evaluate the wounds periodically.**

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Telemedicine and Wound care Today

- Remote management of complex wounds could reduce direct costs and a better management of wounds self.
- Remote management could be advantageous for patients in bad economic conditions, bearers of deambulation deficit or people hardly transportable.
- A considerable saving for hospital structures is predictable, as the costs of in-hospital wounds management are reduced

MATERIAL AND METHODS

- The study included **235 pediatric patients** with complex wounds. (155 M and 80 F.)
- Specialist consultation for an **initial wound assessment**.
- **Bacterial swabs** in case of suspected infection.
- Each patient was handed a **Web cam** for the transmission of data, and the monitoring of the wound, weekly variable depending on the case.
- Selected nurses**, trained in the classroom carried assistance and tutoring to every home medication, unless clinical stability.

Data acquisition system

Webcam positioned in the patient's home and at the Bambino Gesù Hospital.
MODEL: Lifecam HD-3000
16:9 widescreen, truecolor technology.
Compatible with Windows 7 and HP.

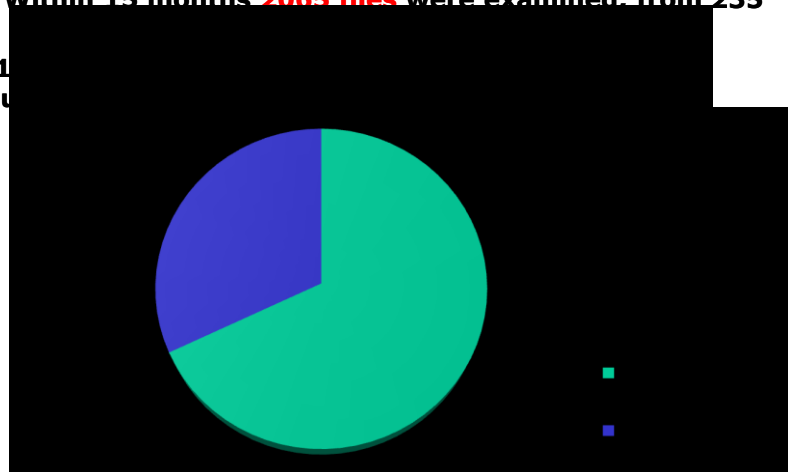


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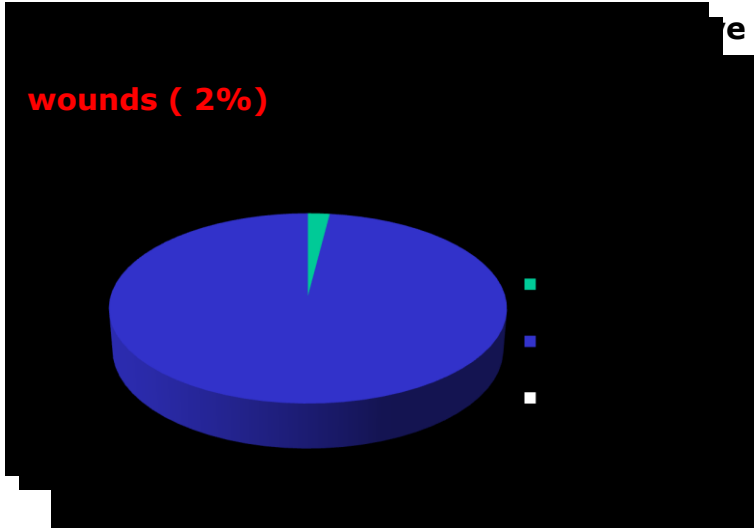
RESULTS I

- Within 15 months **2065 files** were examined, from 235

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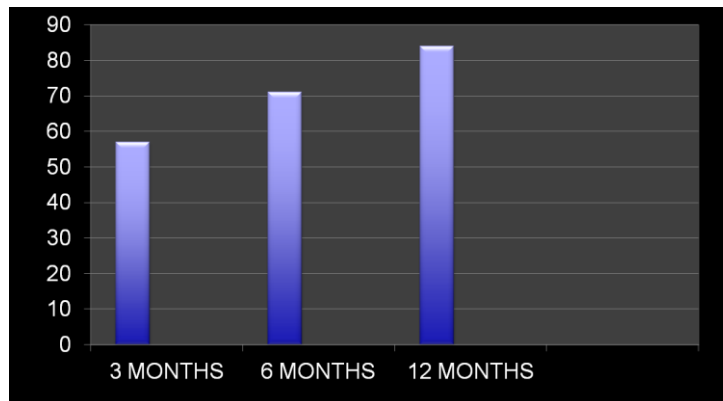


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RESULTS II

- The satisfaction of the parents detected at 3, 6 and 12 months was found to be respectively **57%, 71%, 84%.**



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DISCUSSION

The system shown in this study has never been created before in pediatric patients:

ADVANTAGE 1: ***Provides an analysis of the data and assistance to the families of patients,***

> treatment of complex wounds with planned reduction in infections

> significant cost reductions for the NHS and families.

PREVENTION OF WOUND INFECTIONS TREATED.

- **Direct prevention** of infectious complication identifiable from the first early signs
- Prevents contamination of **nosocomial wound germs** in a inpatient context

ADVANTAGE 2: Provides adequate training and assistance to visiting nurses.



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- **ADVANTAGE 3:**
greater compliance by the children to be medicated in a family environment and by people known and familiar.



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Reducing transportation to the hospital to obtain a specialist advice, wound teleconsultation **lowers health care costs and **improve the quality of life** for **pediatric patients and their family**, while still maintaining a **high quality of pediatric wound care****





<http://www.ospedalebambinogesu.it>

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