Piotr Pawałowski

Enhancing eHealth capacities of Polish healthcare institutions with extended NREN services and SME collaboration

GÉANT & EaP Baselining Meeting "eHealth"
2021-01-27

Poznan Supercomputing and Networking Center - PSNC

Excellence in ICT since 1993

390 employees

20 laboratories

28 years of operation

16+ fields of activity

50+ current projects

70+ projects in Horizon 2020

Medicine, health and quality of life

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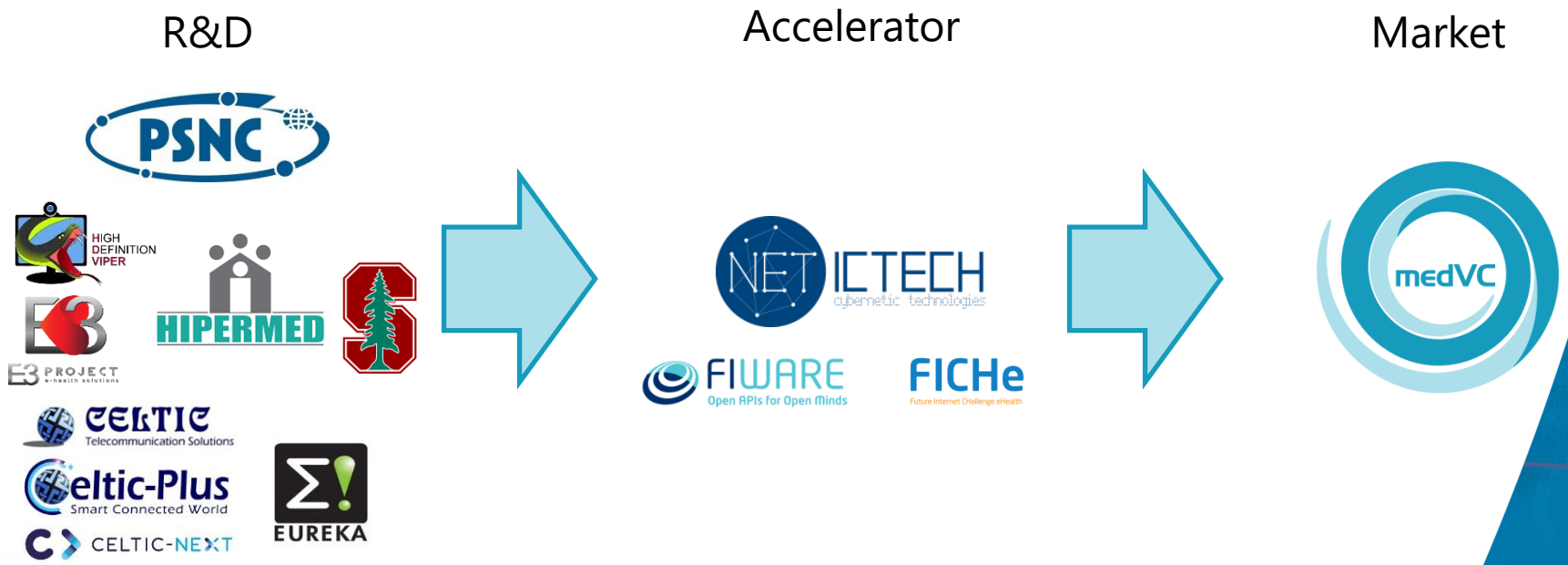
From research to market



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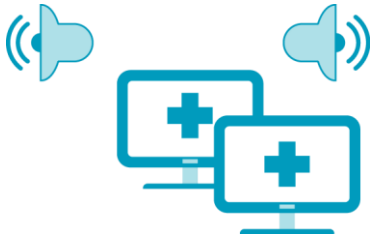
Remote collaboration tool for medical professionals

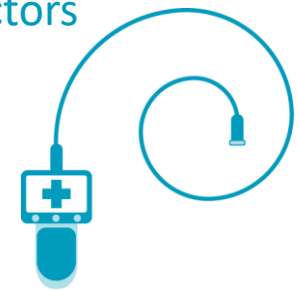
www.medvc.eu

What is medVC?



Real-time audio-video collaboration for doctors

Remote consultations and medical education



Video from medical devices
2D and 3D

Pausing, drawing, remote control, snapshots, recording, live streaming

medVC products

Competition

cisco

VSee

Polycom

Less functionality

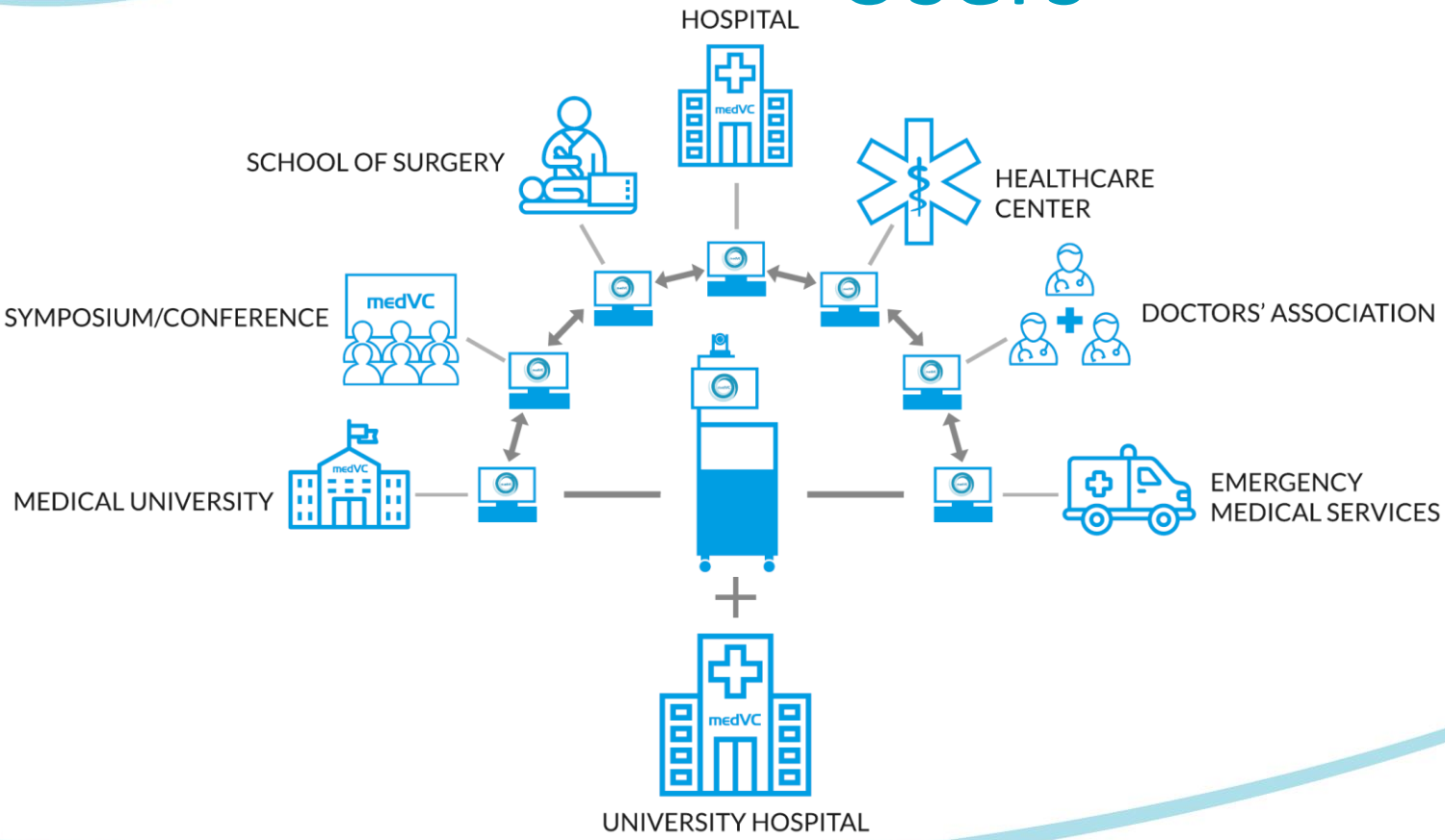
No integrated collaboration services: pausing, drawing, remote control, snapshots, recording, live streaming

No separately encoded video streams for highest medical quality

Limited support of 3D medical devices

More expensive

Users


HOSPITAL
SCHOOL OF SURGERY
HEALTHCARE CENTER
SYMPOSIUM/CONFERENCE
DOCTORS' ASSOCIATION
MEDICAL UNIVERSITY
EMERGENCY MEDICAL SERVICES
UNIVERSITY HOSPITAL

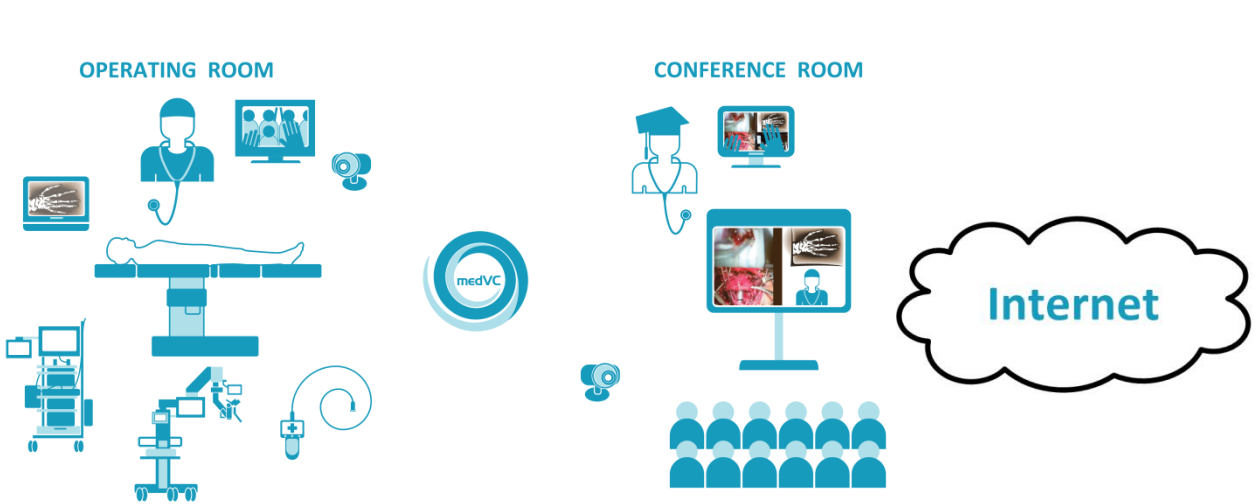
Clients - Poland

- Szpital Kliniczny im. Heliodora Święcickiego w Poznaniu
- Wielospecjalistyczny Szpital Miejski im. Józefa Strusia w Poznaniu
- Ortopedyczno-Rehabilitacyjny Szpital Kliniczny im. Wiktora Degi w Poznaniu
- Polskie Towarzystwo Urologiczne
- Szpital Uniwersytecki w Krakowie
- Specjalistyczny Szpital Miejski w Toruniu
- Szpital Uniwersytecki nr 1 im. dr Antoniego Jurasza w Bydgoszczy
- Samodzielny Publiczny Centralny Szpital Kliniczny w Warszawie
- Wielospecjalistyczny Szpital Wojewódzki w Gorzowie Wielkopolski
- Pomorski Uniwersytet Medyczny w Szczecinie

Clients - Europe

- Centre Hospitalier Régional Universitaire de référence en Lorraine, Nancy (France)
- École de Chirurgie Nancy-Lorraine, Nancy (France)
- Hôpital Robert Schuman, Metz (France)
- San Martino – IST, Genoa (Italy)
- Assistance Publique Hopitaux de Marseille (France)
- Universitätsklinikum Essen (Germany)
- CHL Luxembourg (Luxembourg)
- Hospital de la Santa Creu i Sant Pau, Barcelona (Spain)
- Hospital Clinic, Universitat Autònoma de Barcelona (Spain)
- Leids Universitair Medisch Centrum, Leiden (The Netherlands)
- Universitätsklinikum Gießen und Marburg GmbH, Giessen (Germany)
- Facoltà di Medicina e Chirurgia dell'Università degli Studi di Cagliari (Italy)
- Krankenhaus Märkisch-Oderland, Strausberg (Germany)
- Hôpital Henri-Mondor AP-HP, Paris (France)

Interactive Medical University

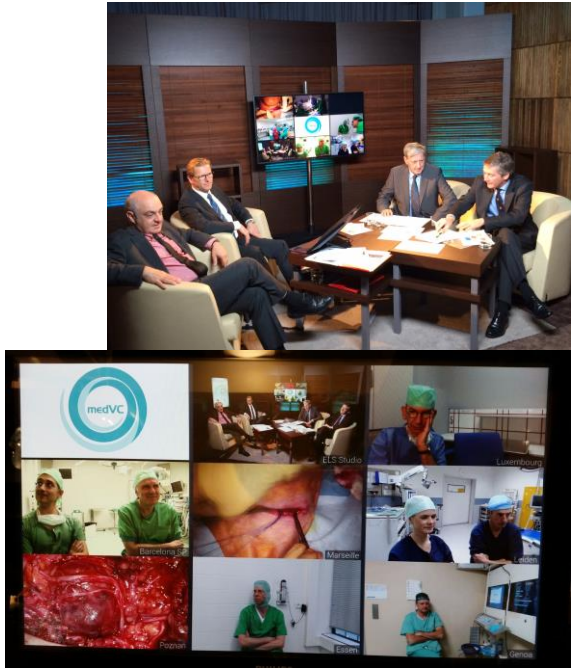


Live broadcast of any session
Recordings published on dedicated portal
Content prepared by medical professors

Thousands of
students at home

European Laryngological Live Surgery Broadcasts

- 6 hours of live broadcast
- 3 surgeries performed in parallel
- Presentation of surgical highlights
- Clinics equipped with medVC
- Professional TV studio in Poznań
- Over 35 000 viewers from 91 countries
- Professional post-production
- Multi-camera view



Connectivity

- Institution connected via PIONIER
  - Scientific entities 221
  - **Universities 196**
  - Post-secondary schools 21
  - School complexes, secondary schools, lower secondary schools and primary schools 234
  - **Health service providers 59**
  - Public security services 27
  - Central government administration offices 27
  - Voivodship administration 59
  - District, municipal and commune administration 73
  - Other administration 9
  - Court and prosecutor's office 26
  - Cultural institutions 104
  - Other education 27

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Cyber Security

- PSNC is certified to be conformant with PN-EN ISO/IEC 27001:2017-06 and PN-EN ISO 9001:2015 (for the scope including ICT consulting and security audits)
- Exemplary projects conducted by PSNC Cybersecurity Department
  - Security audits (penetration tests, source code reviews, etc.)
    - Eskulap telemedicine system – cybersecurity audit plus training
    - Cybersecurity audits for National Health Fund hospitals
    - Security audit of the medVC system
  - R&D projects
    - Cybersecurity services – e.g. Wielkopolska Center of Telemedicine
    - Participation in eHealth related research work – e.g. applying MCDA in MEDICS national project
    - H2020 proposals submitted covering eHealth services
- Cooperation with medVC – e.g. MEDICS project
- But we do not forget that: “Patients want to be cured, not secured”

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Trust & Identity and Cloud and …

- Although PIONIER.Id is up and running since 2014, no medical university nor medical institution has so far launched their IdP.
- VMs for eHealth services and storage for medical data
- Living-lab, FutureLabs and eHealth laboratory
- Medical broadcasts – live surgery and conferences
- Training
- R&D projects

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