



Connected Health, EU-US Research Capability, Collaborations & Vision to 2020

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UPMC at a glance

- ~\$10 billion in revenue; \$4 billion in cash and reserves
- Aa3 credit rating
- 23 hospitals; 400 outpatient locations
- 230,000 discharges a year and 4.5 million outpatient visits
- 55,000 employees; 3,200 employed physicians
- 3rd largest physician training program in the U.S.
- Affiliated with University of Pittsburgh ranked 5th in NIH awards
- Over 20 International locations/relationships
- Over \$500m invested in partnership with Global Healthcare companies

Our Areas of Expertise Range From Medicine to Management

Clinical Services

- Cancer Care
- Emergency Medicine
- Hospital Management
- Transplantation
- Primary Care/
Family Medicine
- UPMC Global Care

Infrastructure Consultation

- Information Technology
- Revenue Cycle
- Analytics
- Supply Chain
Management

Translational Sciences

- Biomedical Research & Bio
technology Center
- Cell Factory

National Security & Public Health

- Center for Biosecurity

Commercial Product Development

- Technology Development
Center
- Application Development

Our Strategic Partners

- IBM
- Alcatel-Lucent
- General Electric
- Nuance
- Optum

UPMC global investments in ICT

IT Expenses (Capital & Operating in millions)

TOTAL FY05- FY12	FY12 budget	FY11 actual	FY10 actual	FY09 actual	FY08 actual	FY07 actual	FY06 actual	FY05 actual
\$ 2092	\$ 316	\$ 303	\$ 296	\$ 283	\$ 266	\$ 238	\$ 204	\$ 186



Wembley Stadium
£ 800 million
(\$ 1.3 billion US)

Innovation at UPMC: Center For Connected Medicine

- Collaboration of industry leaders in health care, IT, communications, and application solutions to provide answers for all facets of the complex requirements for health care
- World's first collaborative health care executive briefing center.
- Connected medicine enables comprehensive and dynamic health care for patients regardless of time, location, or state of health.



Center For Connected Medicine

- **21,263** visitors from **57** unique countries

- **Founders:**

- IBM
- Alcatel-Lucent
- UPMC
- GE
- Verizon

- **Other key partners include:**

- Advisory Board
- dbMotion
- Johnson Controls
- Nuance
- Polycom
- Turner
- Varian
- Vital Images

- **Combined partner's annual revenues total \$468B or 9% of all US revenue**

The Power of Connected Medicine



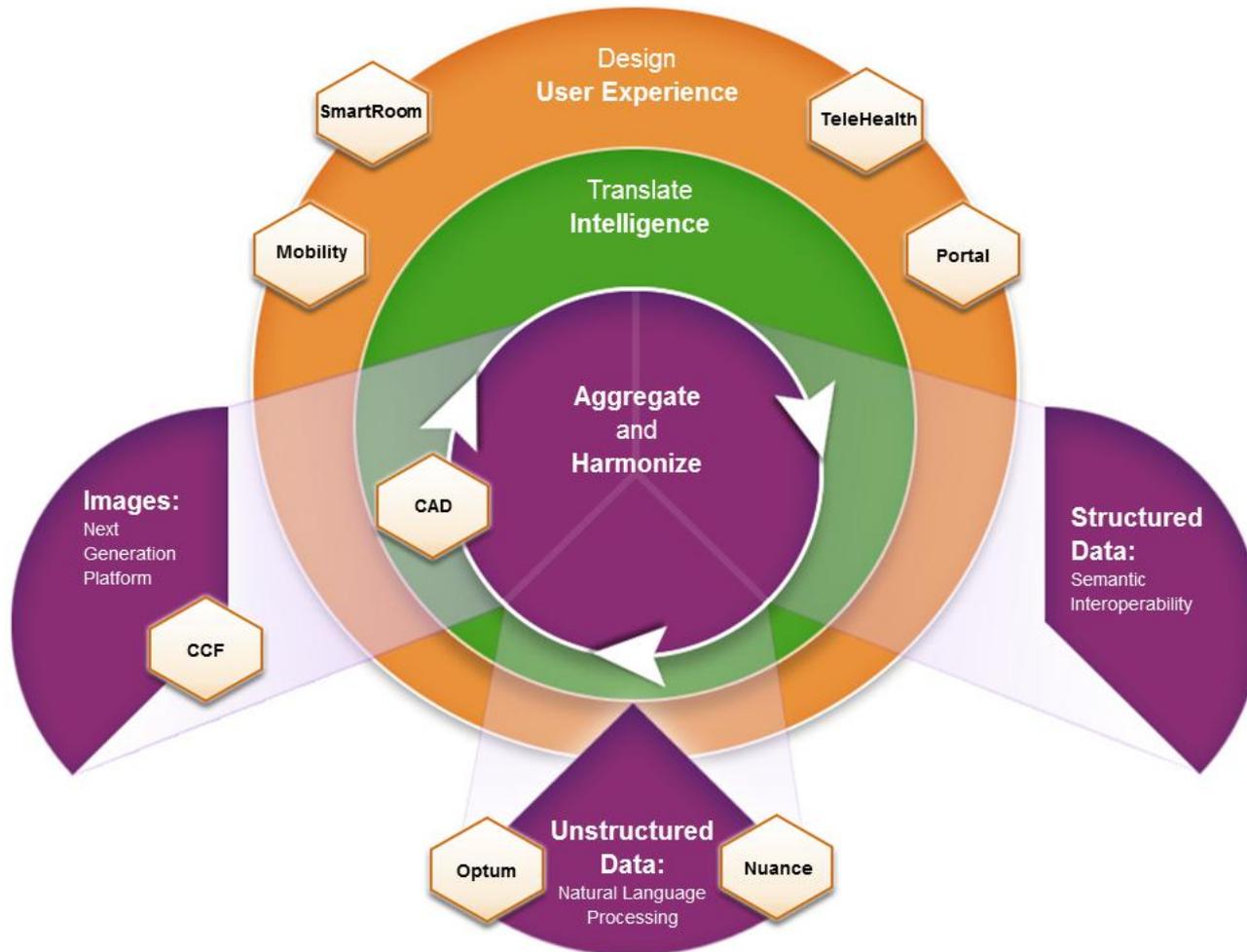
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Innovation at UPMC: Technology Development Center

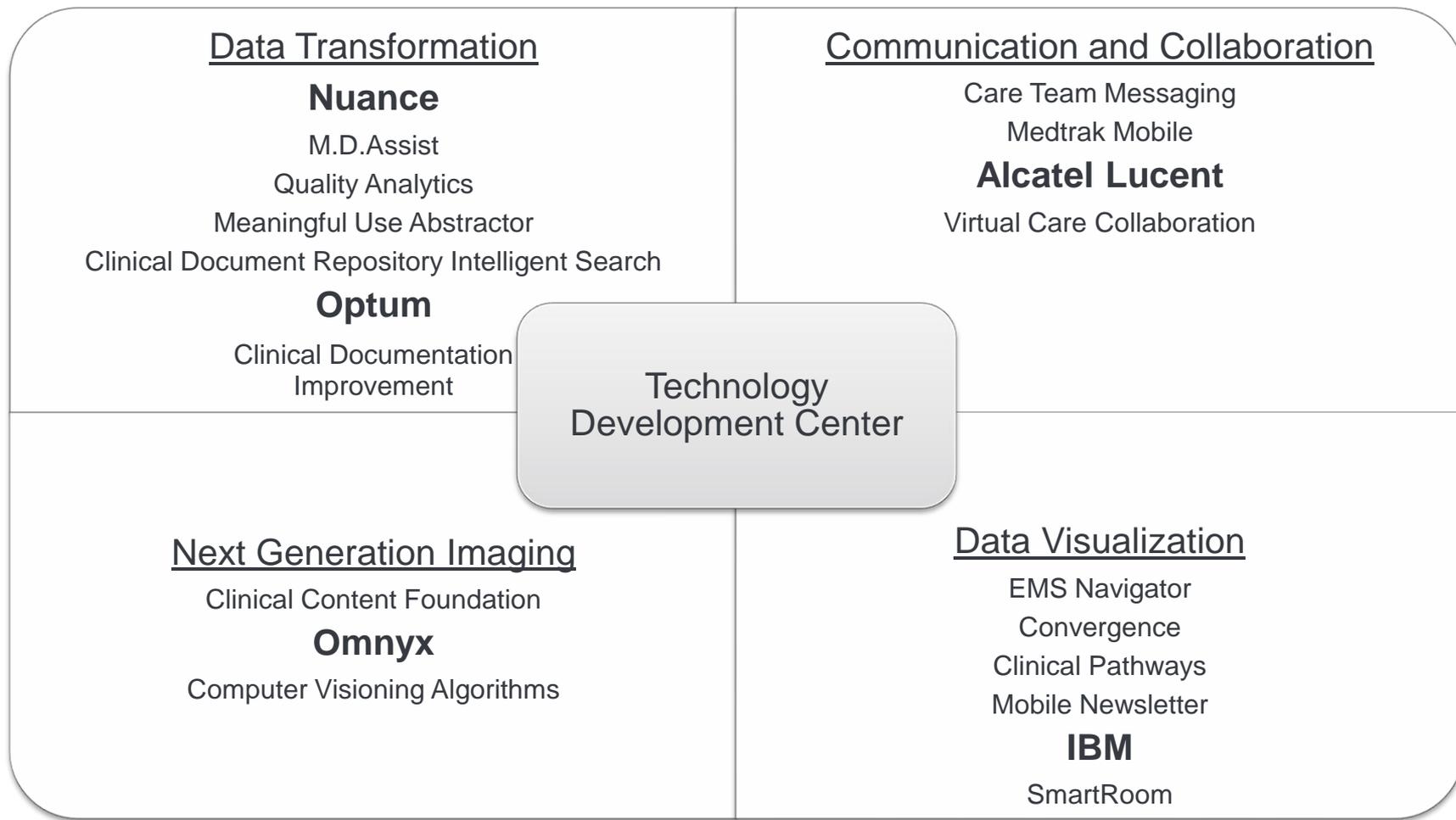
Established in January 2010 as UPMC's "R&D Center for Healthcare IT Innovation"

- **Mission:** Develop technology to address healthcare's greatest challenges introducing "Smart Technology" into the market
- **Focus:** Healthcare information technology, high impact/high value opportunities targeting commercial delivery
- **Model:**
 1. Develop technology leveraging the clinical, IT and operational expertise of UPMC
 2. Use UPMC as the test bed and validation site for the technology by introducing operational value
 3. Collaborate with commercial partners to bring products to market

TDC' strategy



Technology Development Center



Pipeline

Personalized
Medicine

New Models of
Care

Patient
Engagement

Visual Analytics

Expanding Initiatives (pipeline)

Nuance New
Opportunities

Remote
Monitoring

Clinical Pathways

Next Generation
Imaging

Sustaining Engineering

Existing
Mobile Apps

Golden Key

SmartRoom

Virtual
Collaboration

Telemedicine at UPMC

- Telepathology
- Teledermatology
- Teleconsults
- Telewound care
- TeleICU
- Teleophthalmology
- Telecardiology
- Pre-/Post-surgical care

- Telepsychiatry
- Telestroke
- Teleradiology
- TeleMFM (Maternal Fetal Medicine)
- TeleEndocrine
- TeleTrauma
- TelePediatrics
- eVisits

16 Service Lines
19 Facilities

Connecting USA, Italy, China, Colombia and Mexico

Telepathology

On-site pathologist in ISMETT (Sicily, Italy) to consult on-demand and in real-time with pathology specialists in Pittsburgh (Transplant Telepathology Application).

Telepathology service active between Pittsburgh and Bergamo, Italy and between Bergamo and Palermo

KingMed, the largest independent medical diagnostic laboratory in China, will provide its customers with access to UPMC's broad pathology subspecialty expertise

Teleradiology

Neurological evaluation, images of complex problems are transmitted from ISMETT to UPMC specialists for evaluation and advice

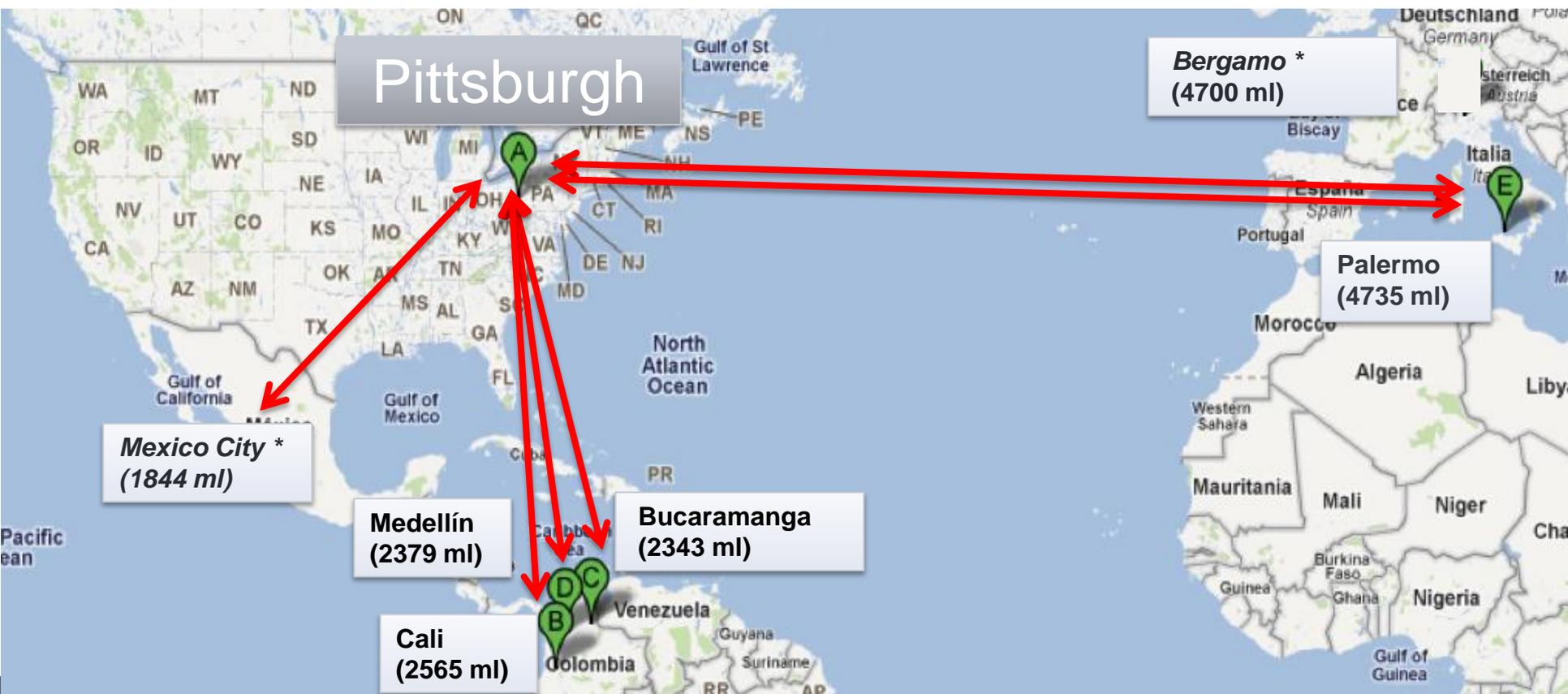
Tele-ICU

UPMC Children's Hospital intensivists in Pittsburgh offer remote consultation for pediatric patients in critical care to Colombia, Mexico and Italy (ISMETT)

Home monitoring

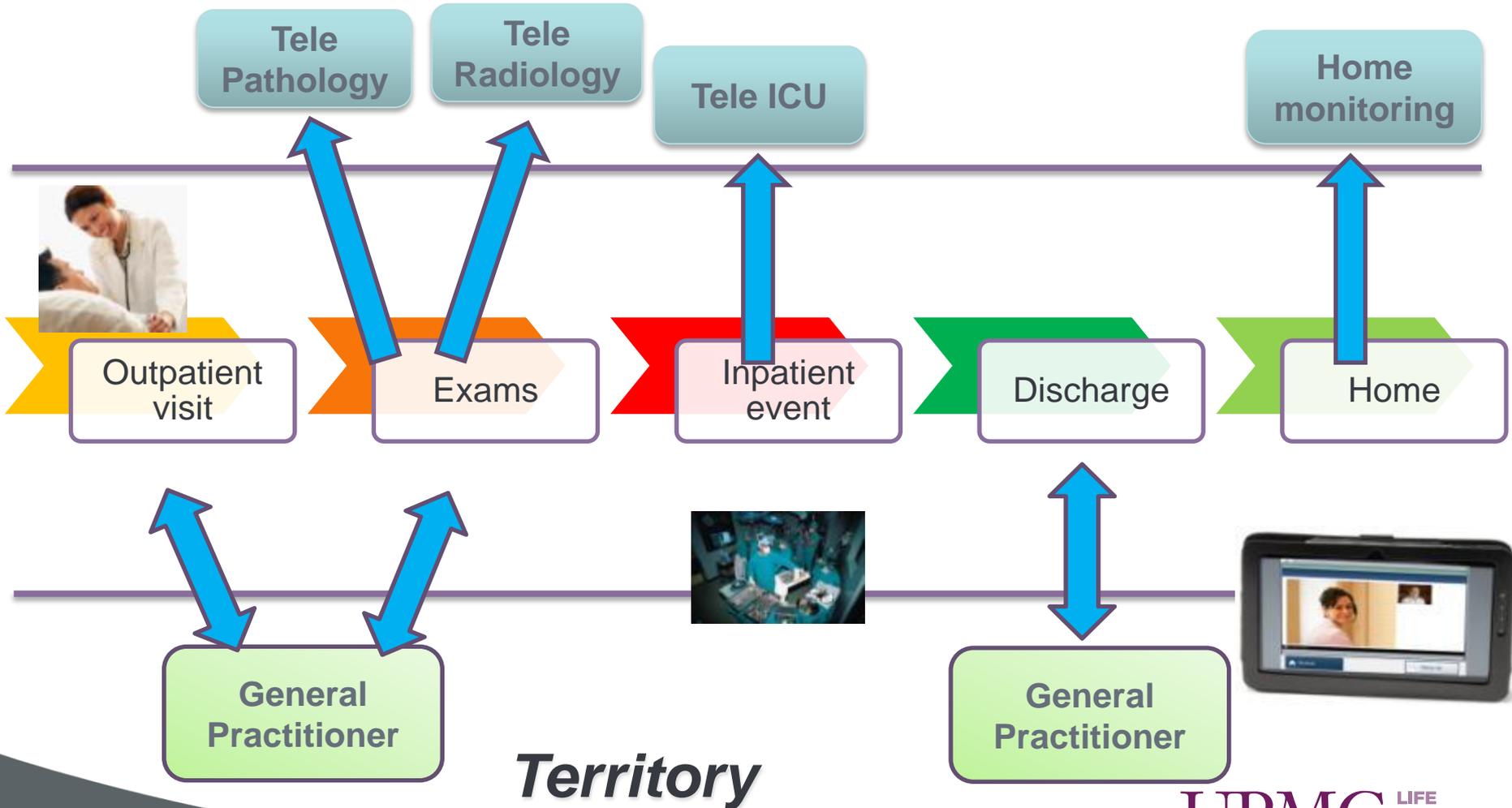
All patients residing in Sicily, who consecutively underwent a liver transplant at ISMETT and were discharged starting the 15th of July 2011 through the 31th of March 2012

International Telemedicine at CHP of Pittsburgh of UPMC



Patient – Centric Health care Process

UPMC-ISMETT



Next UPMC programs in Italy: working towards Horizon 2020

Smart cities and communities

Deploy a second generation of EHR that will be designed for patient living in Sicily and Calabria and possibly other regions

Tele-ICU program with ISMETT as HUB and 7 Sicilian hospital satellites to support ICU management of organ collection

Home monitoring for post surgical lung transplanted patients and LVAD patients with ISMETT-UPMC connection