



ICT tools and methodologies to improve Public Health in the Americas Region

PAHO **HEALTH** PROGRAM

Knowledge Management and Communication Area (KMC)
Deputy Directors Office (DD)



PAHO HEALTH PROGRAM



PAHO Director's vision



The context



Challenges and opportunities



Contribution to PHC



Conceptual model



PAHO Project

ICT tools and methodologies to improve Public Health in the Americas Region



PAHO hEALTH Program

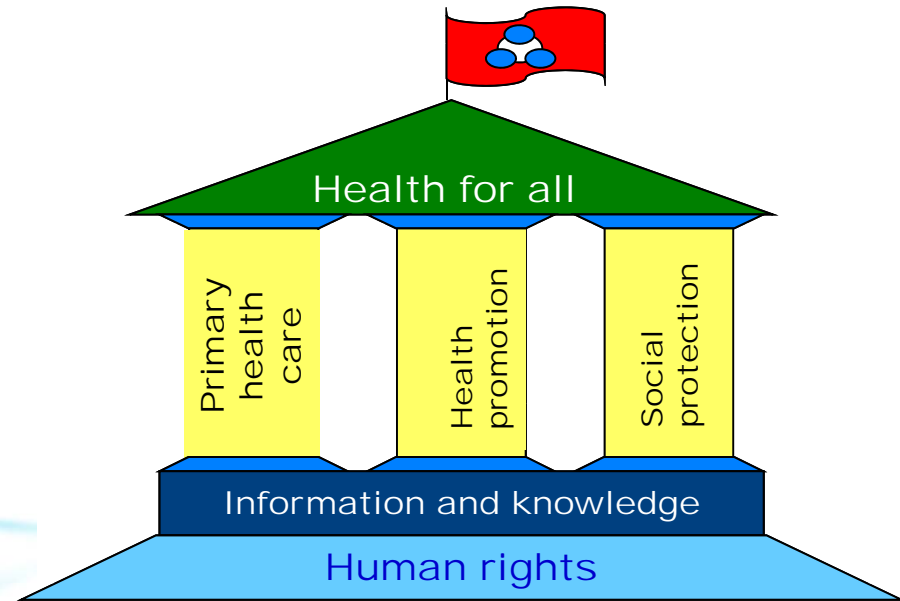
PAHO DIRECTOR'S VISION

PAHO Director's vision

“This will be the century of **networks, connectivity** and **interdependency**, which will allow us to overcome barriers of **space and time** and will open possibilities that were unimaginable to humankind. If we encourage those **networks** to exponentially multiply the **available share capital** in order to **link people and institutions** within a large supportive and inclusive mesh of all the inhabitants of the continent, we will have taken a fundamental step towards **eliciting knowledge and experience** in **new ways of exchanging technical cooperation** for sustainable **human development**”.

Dr. Mirta Roses Periago's Inauguration Speech as Pan American Health Organization Director, Regional Director for the Americas, January 31st, 2003





PAHO hEALTH Program

THE CONTEXT



The context

- Primary Health Care is a commitment to **equitable and affordable care for all people**, ensuring citizen-centered services needed to live a healthy and productive life.
- WHO considers primary health care as "an essential approach to organizing health systems."
- Information and communication technologies are transforming health services and systems, providing solutions that were unthinkable 30 years ago.



PAHO hEALTH Program

CHALLENGES AND OPPORTUNITIES

ICT tools and methodologies to improve Public Health in the Americas Region

Challenges and Opportunities



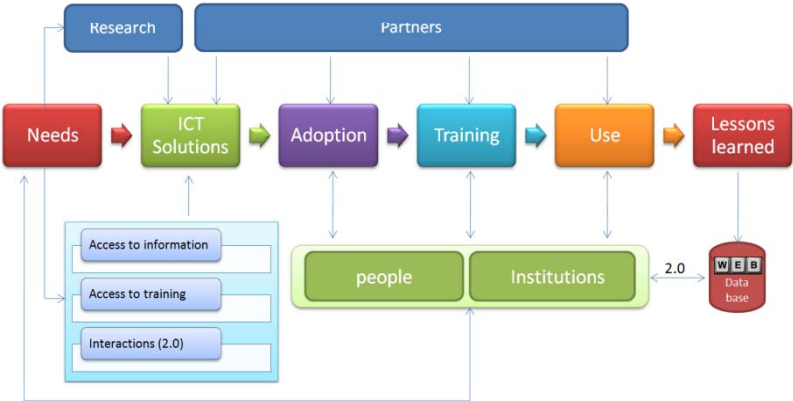
- **Universal Access to Health Services with improved quality of care;**
- **Extension of Social Protection in Health through PHC-Based Health Systems;**
- **Available, competent and motivated Health Workforce;**
- **Real Time Qualified Information Sources for Decision Making;**
- **Knowledge and Information Sharing within and among disperse populations;**
- **Monitoring and Surveillance Systems using mobile and wireless communication devices (i.e., Expanded Program on Immunization);**
- **Real Time Learning Objectives for eLearning and Training to develop competencies and motivation of PHC teams;**
- **Social networking tools and methodologies for disasters and Emergency Situations;**
- **Access to open access and certified public health content; and**
- **Access to Specialized Clinical Services for increased capacity at first level of care.**

ICT tools and methodologies to improve Public Health in the Americas Region

Challenges and Opportunities



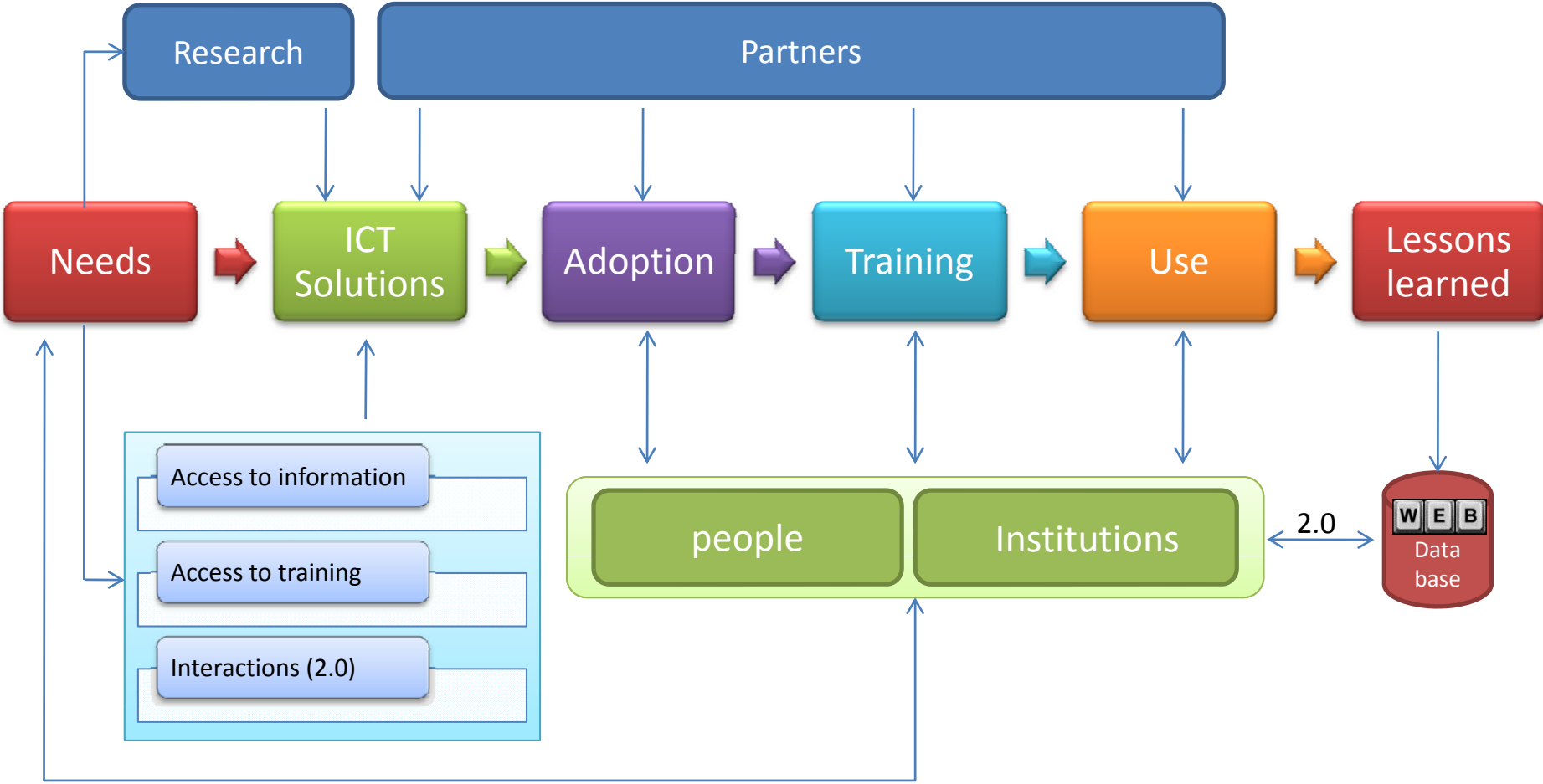
- Convergence of eHealth initiatives worldwide;
- Web mobile-based applications for healthcare management;
- Fast Technology Changes;
- New role of Digital Government;
- New models of technical cooperation in the context of “National Digital Agendas” and “eGovernment initiatives;”
- Active participation in the world summit on the information society with emphasis in Health;
- Investments in connectivity by National Governments with support from Development Banks;
- Increased interest in Public/Private Partnerships.



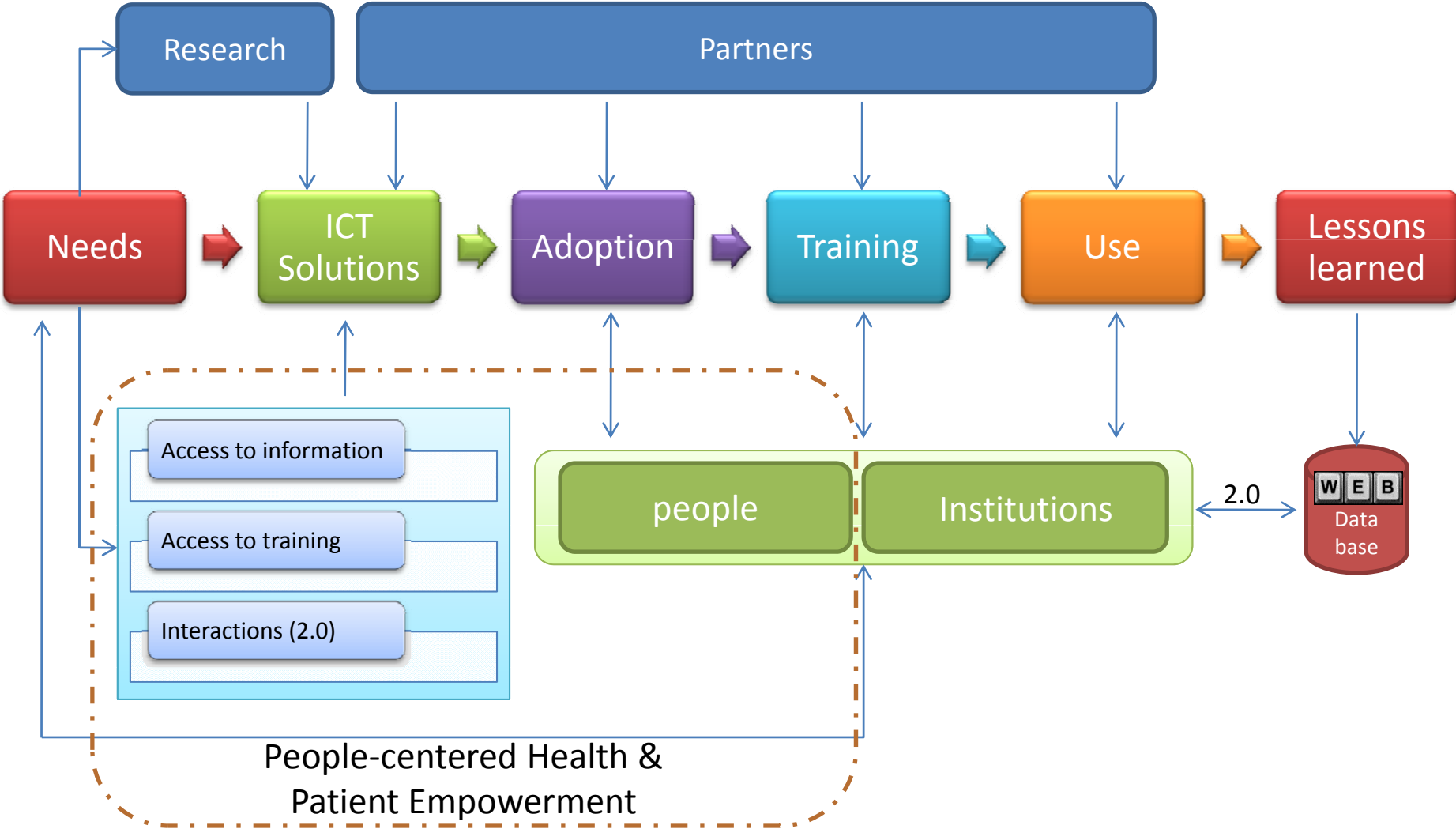
PAHO hEALTH Program

CONCEPTUAL MODEL

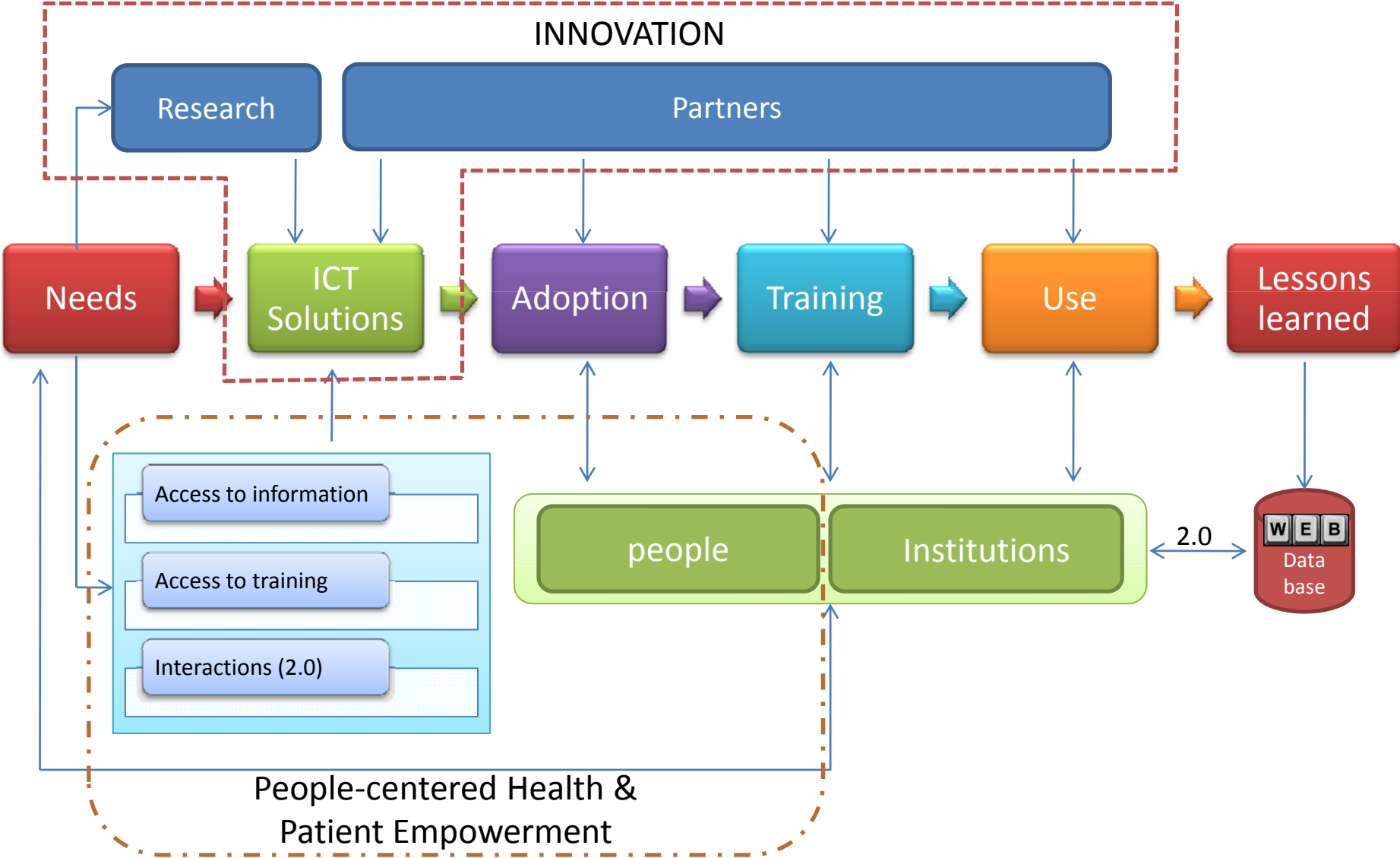
ICT tools and methodologies to improve Public Health in the Americas Region



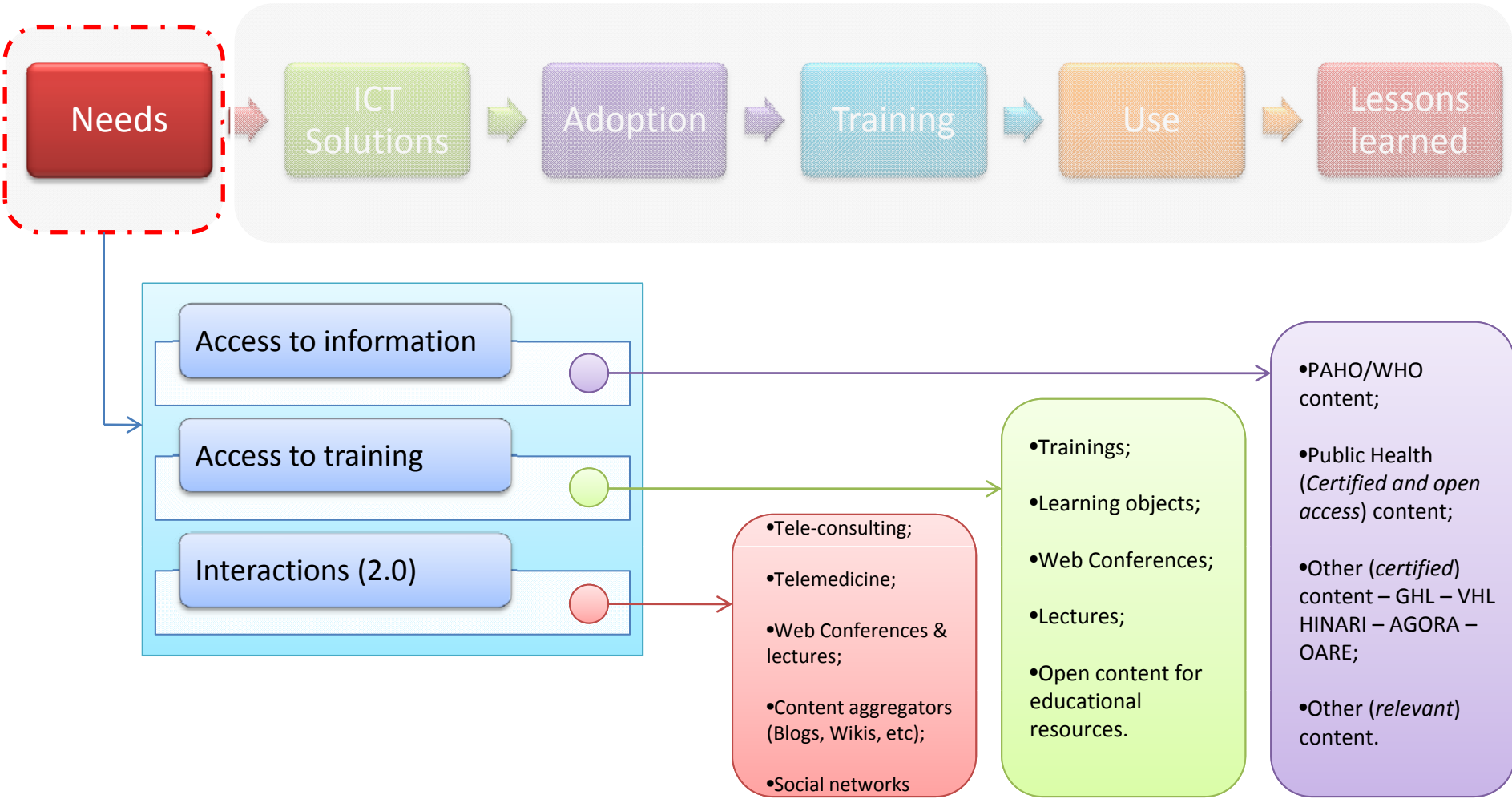
ICT tools and methodologies to improve Public Health in the Americas Region



ICT tools and methodologies to improve Public Health in the Americas Region



ICT tools and methodologies to improve Public Health in the Americas Region



Needs

ICT Solutions

Adoption

Training

Use

Lessons learned

Access to information

Access to training

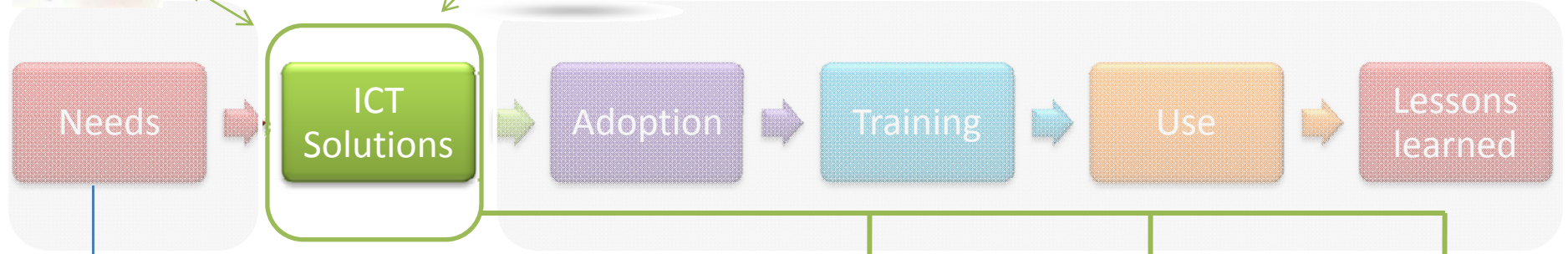
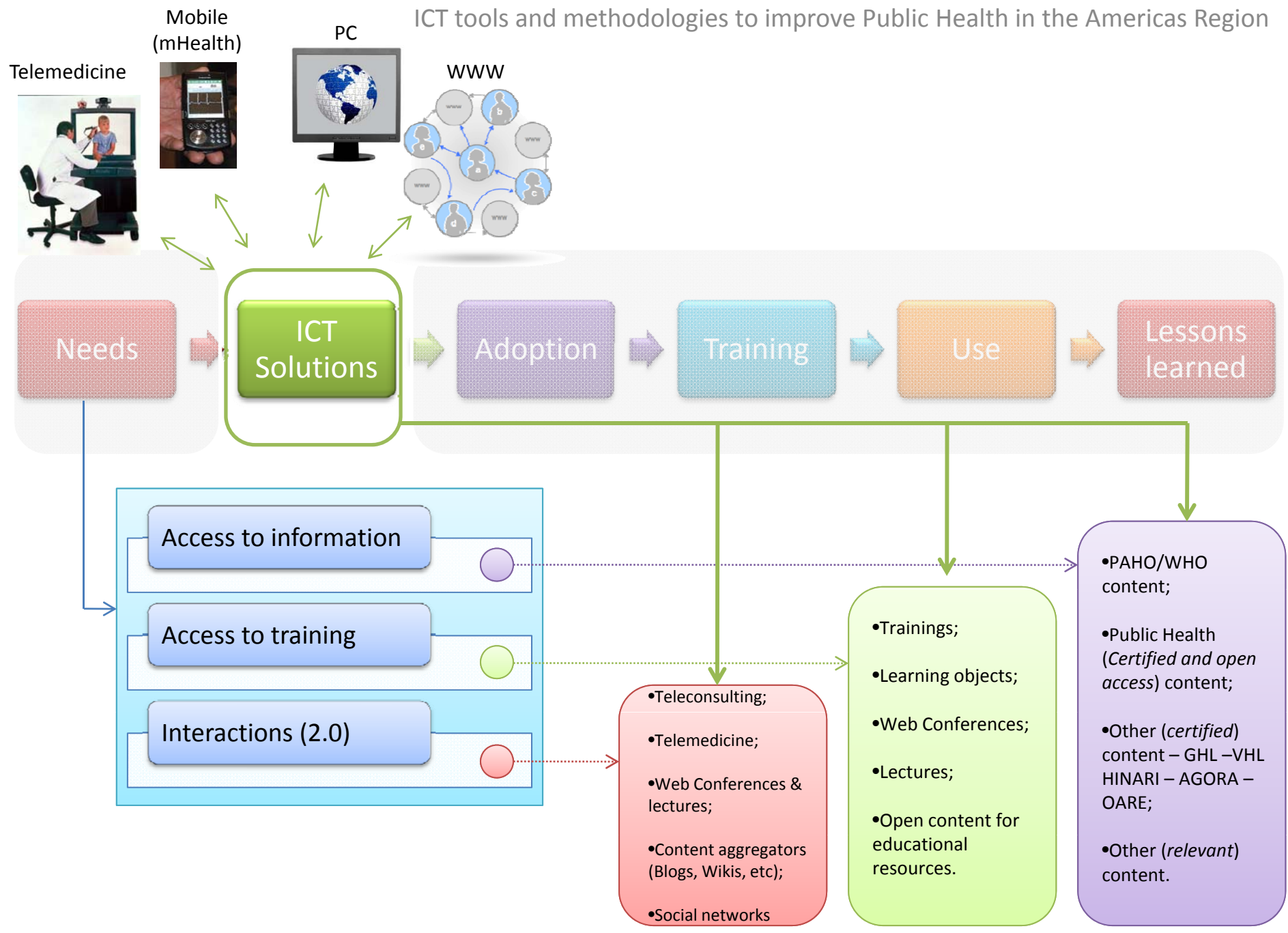
Interactions (2.0)

- PAHO/WHO content;
- Public Health (*Certified and open access*) content;
- Other (*certified*) content – GHIL – VHL HINARI – AGORA – OARE;
- Other (*relevant*) content.

- Trainings;
- Learning objects;
- Web Conferences;
- Lectures;
- Open content for educational resources.

- Tele-consulting;
- Telemedicine;
- Web Conferences & lectures;
- Content aggregators (Blogs, Wikis, etc);
- Social networks

ICT tools and methodologies to improve Public Health in the Americas Region

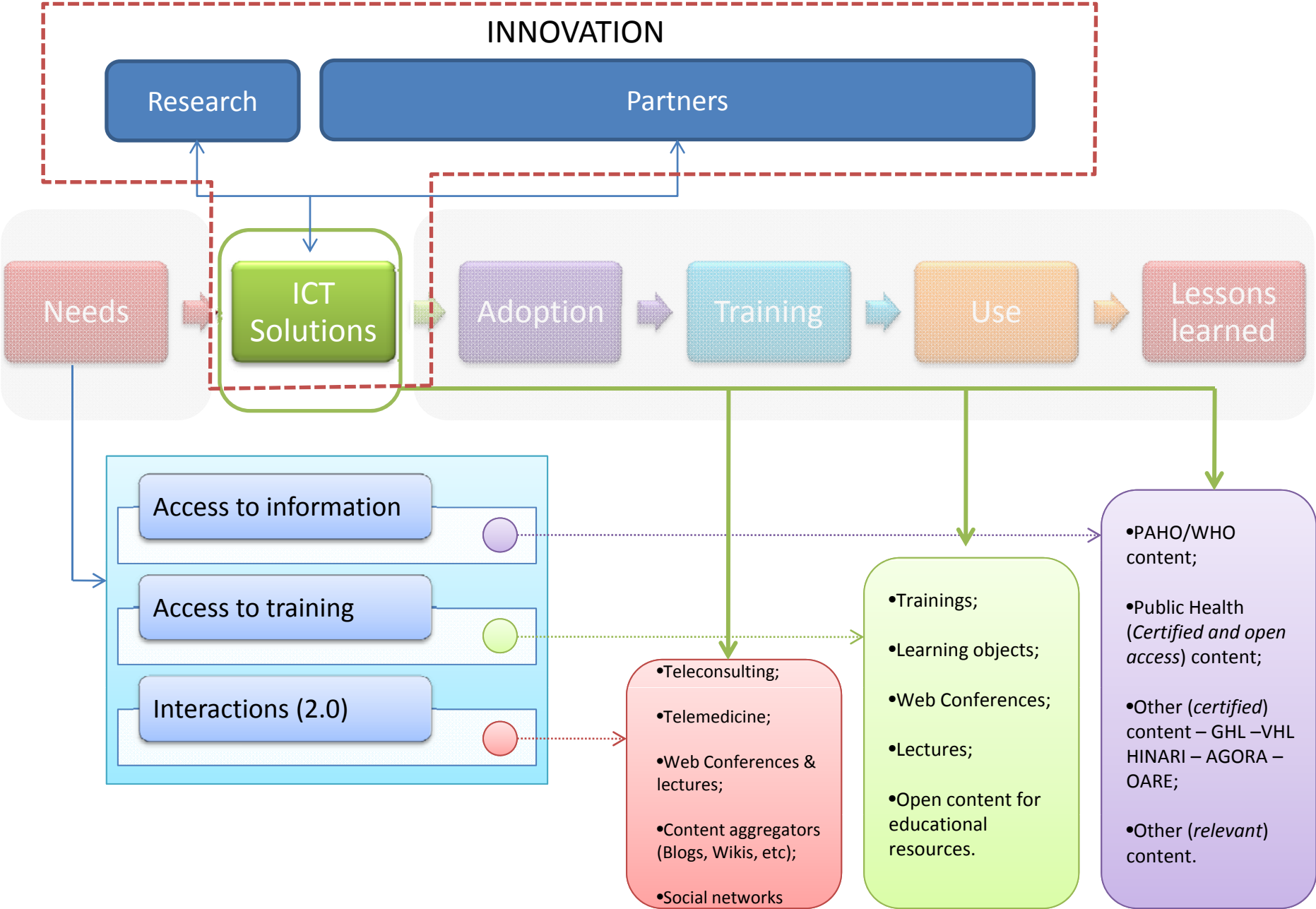


- Teleconsulting;
- Telemedicine;
- Web Conferences & lectures;
- Content aggregators (Blogs, Wikis, etc);
- Social networks

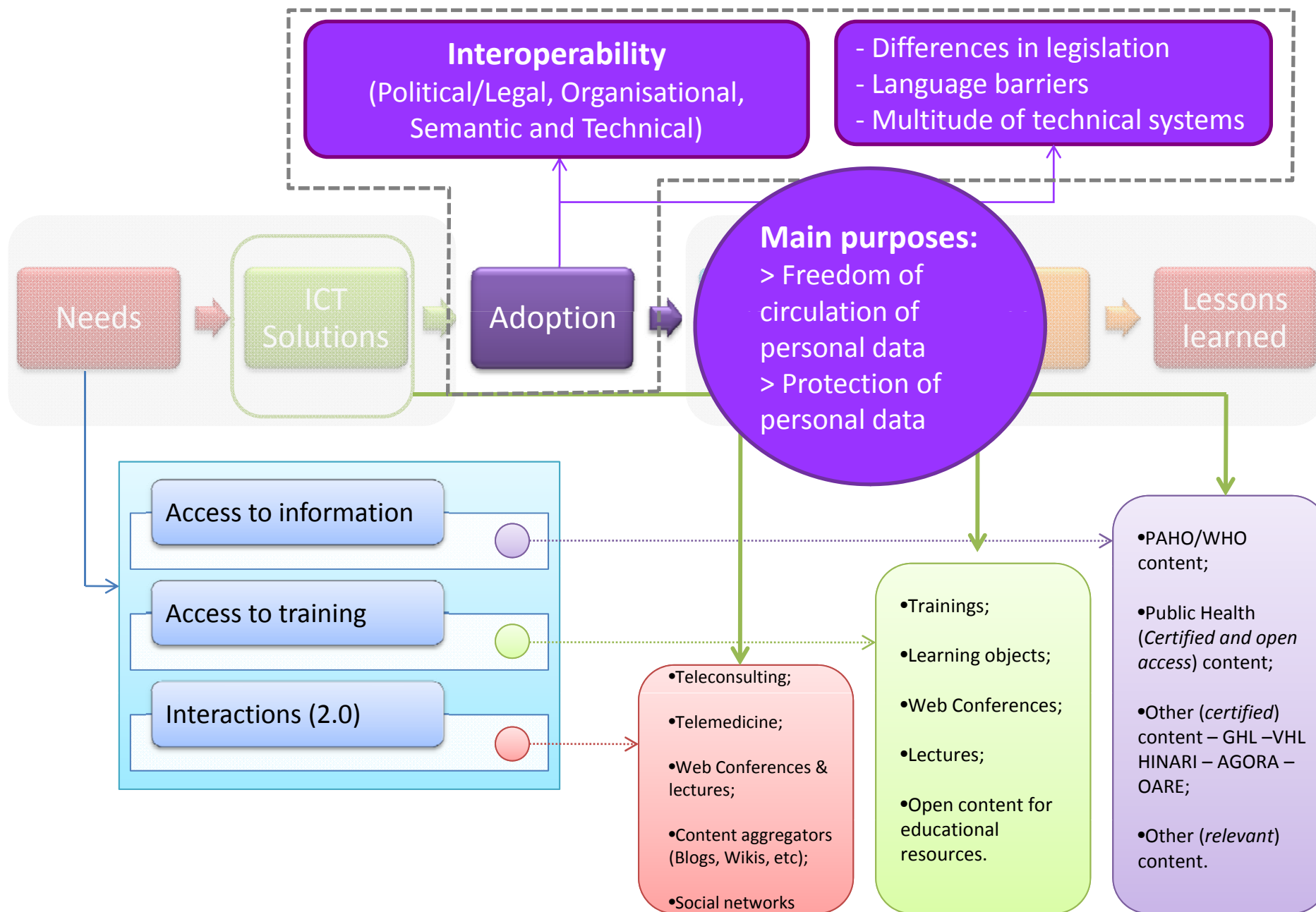
- Trainings;
- Learning objects;
- Web Conferences;
- Lectures;
- Open content for educational resources.

- PAHO/WHO content;
- Public Health (Certified and open access) content;
- Other (certified) content – GHIL – VHL HINARI – AGORA – OARE;
- Other (relevant) content.

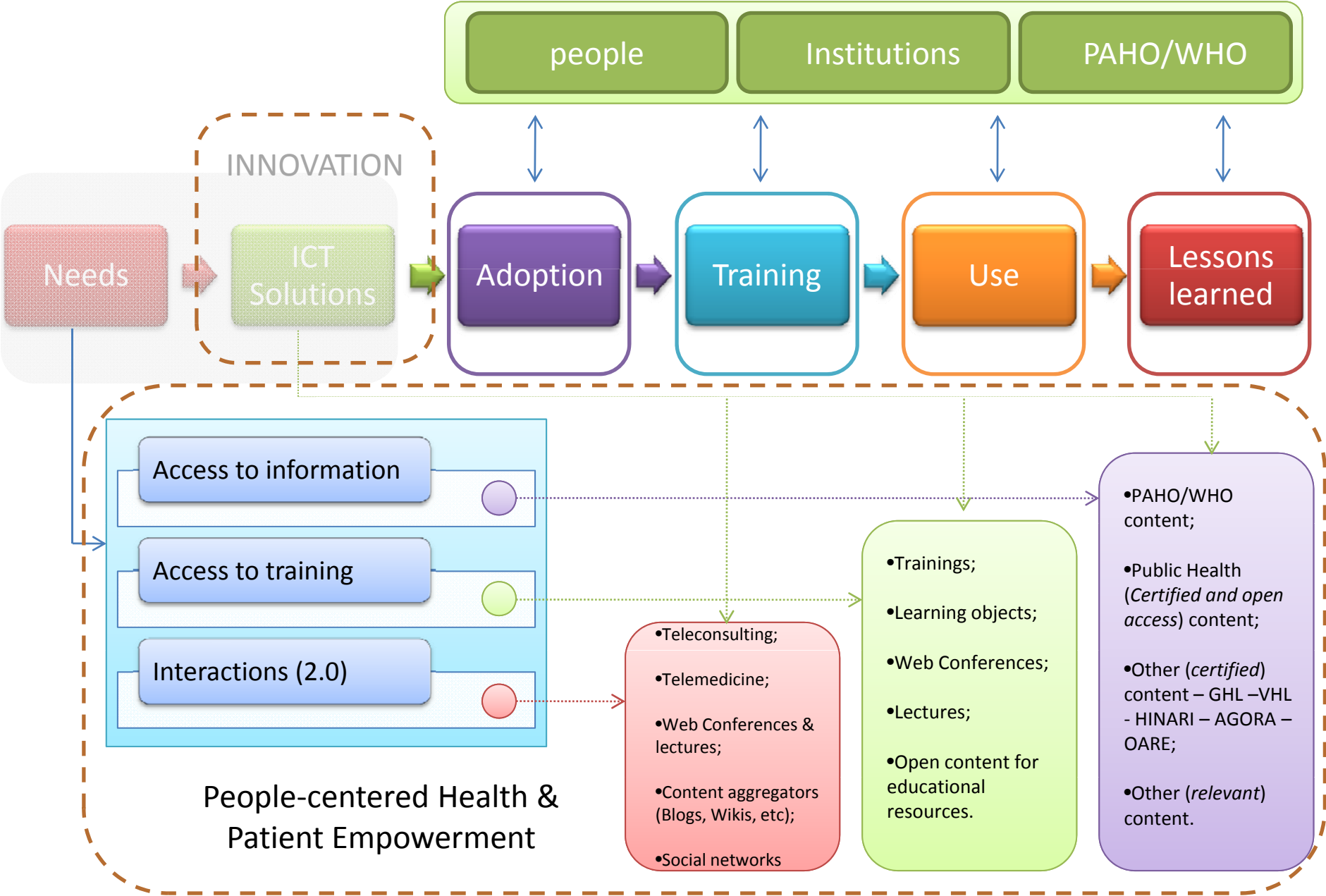
ICT tools and methodologies to improve Public Health in the Americas Region



ICT tools and methodologies to improve Public Health in the Americas Region



ICT tools and methodologies to improve Public Health in the Americas Region





PAHO **H**EALTH Program

PAHO PROJECT



eHealth



Vision



Goal



Expected results



Indicators



Corporate initiatives

eHealth

Projects, ICT Developments, Health
Professionals, Patients and Population

ICT tools and methodologies for improving public health in the Region of the Americas

Project	ICT Development	For Healthcare Workers	For Population and Patients
<p>Personal Health Card (PHC)</p>	<p>Common database for health card</p>	<ul style="list-style-type: none"> > Access to clinical information from any site where it has been stored > Measuring incidence/prevalence of certain diseases as well as risk factors which enable evaluating the effect of specific interventions 	<ul style="list-style-type: none"> > Unequivocal identification in the entire health system

ICT tools and methodologies for improving public health in the Region of the Americas

Project	ICT Development	For Healthcare Workers	For Population and Patients
<p>Digital Clinical History</p>	<p>Set of clinical data which gather the relevant healthcare information, ensuring security, confidentiality and control</p>	<ul style="list-style-type: none"> > To access a set of personal data and images from a patient (assistive use) > To support decision making in clinical practice > Improved coordination among different healthcare levels > To improve the access to retrieval 	<ul style="list-style-type: none"> > To access personal clinical reports and observe who is having access > Improved healthcare delivery outside their usual geographical setting > To select a set of data inaccessible for other regions

ICT tools and methodologies for improving public health in the Region of the Americas

Project	ICT Development	For Healthcare Workers	For Population and Patients
Electronic prescription	Data repository available from any national pharmacy	<ul style="list-style-type: none"> > Drug prescription using ICTs > Less bureaucratic areas > More time for healthcare delivery > Rational use of medication > Facilitates epidemiological data analysis 	<ul style="list-style-type: none"> > Medication delivery using ICTs > Reduced visits to healthcare facilities
Appointment via Internet	Service to schedule an appointment using the Internet		<ul style="list-style-type: none"> > More agile service for making an appointment > Confer other programmed appointments > Reception of messages via SMS

ICT tools and methodologies for improving public health in the Region of the Americas

Project	ICT Development	For Healthcare Workers	For Population and Patients
<p>Health portals and social web</p>	<ul style="list-style-type: none"> > Blogs, health portals and collaboration in forums 	<ul style="list-style-type: none"> > New role as author of information > New opportunity to guarantee the access to reliable health information 	<ul style="list-style-type: none"> > To facilitate informed decision making > Population and patient empowerment
<p>Risk management and patient security</p> <p>(1/2)</p>	<ul style="list-style-type: none"> > Databases which gather adverse effects 	<ul style="list-style-type: none"> > Reduction of medication mistakes > More accurate measurement of interventions at sanitary and economic level 	<ul style="list-style-type: none"> > Improved health care delivery > Reduction of adverse effects

ICT tools and methodologies for improving public health in the Region of the Americas

Project	ICT Development	For Healthcare Workers	For Population and Patients
<p>Risk management and patient security (2/2)</p>		<ul style="list-style-type: none"> > Improved prioritization of available resources > More time for complex decision making 	
<p>Telemedicine</p>	<p>Development of personal portable systems and other ICT tools</p>	<ul style="list-style-type: none"> > To guarantee that patient benefits will remain equal to conventional healthcare > More time for healthcare delivery > To deliver a more personalized healthcare > Best use of geographical limitations 	<ul style="list-style-type: none"> > Improved access to specialists > Less wait time

Tools and methodologies for improving public health in the Region of the Americas

Project	ICT Development	For Healthcare Workers	For Population and Patients
Regional Call Centre	> Call Centre	> Improved time effectiveness	> To improve information access of individuals to healthcare services
Digitalization of clinical and administrative documentation	> Clinical documentation database	> To improve efficacy and effectiveness of processes	> To ease the access and retrieval of clinical documentation

Vision

Universal Access to Health Services in the
Information Age

Goal

To improve Public Health in the Americas through the use of innovative ICT tools and methodologies

Expected Results

- **Web-based data base** of “ICT solutions for Public Health” and “Healthcare Management” implemented in the context of PAHO Web 2.0 Strategy;
- **eHealth, Web and Mobile Strategies** implemented in “Health Care Organizations” and in “Public Health Institutions” of the Americas Region;
- **Knowledge and Information Sharing** within and among disperse and/or disadvantaged populations, people and public health institutions; and
- **Patients and people empowered** through the use of ICT tools.

Expected results

- **Public and Private Partnerships** established as part of PAHO/WHO technical cooperation projects;
- **People, public health workers and public health institutions** from disperse and/or disadvantage populations **more connected**;
- “**eHealth Technical cooperation projects**” established within member states;

Indicators

- **PAHO/WHO eHealth portal** with access to a Web-based data base of “ICT solutions for Public Health” and for “Healthcare Management;”
- **Model of eHealth, Web and Mobile Strategies** for “Health Care Organizations” and for “Public Health Institutions” developed;
- **Communities of practices** to improve Knowledge and Information Sharing within and among disperse and/or disadvantaged populations, people and public health institutions; and
- **Metrics** on the use of ICT tools in Patients.

Indicators

- **Terms of collaboration** in eHealth with Public and Private institutions;
- **Metrics on the use of Web-based Collaboration tools** by People, public health workers and public health institutions from disperse and/or disadvantaged populations; and
- eHealth **Technical cooperation projects**.

Corporate Initiatives



