

Bridging the Digital Divide in Health

The Role of Free and Open Source Software

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Information and communication technologies (ICT) in health today

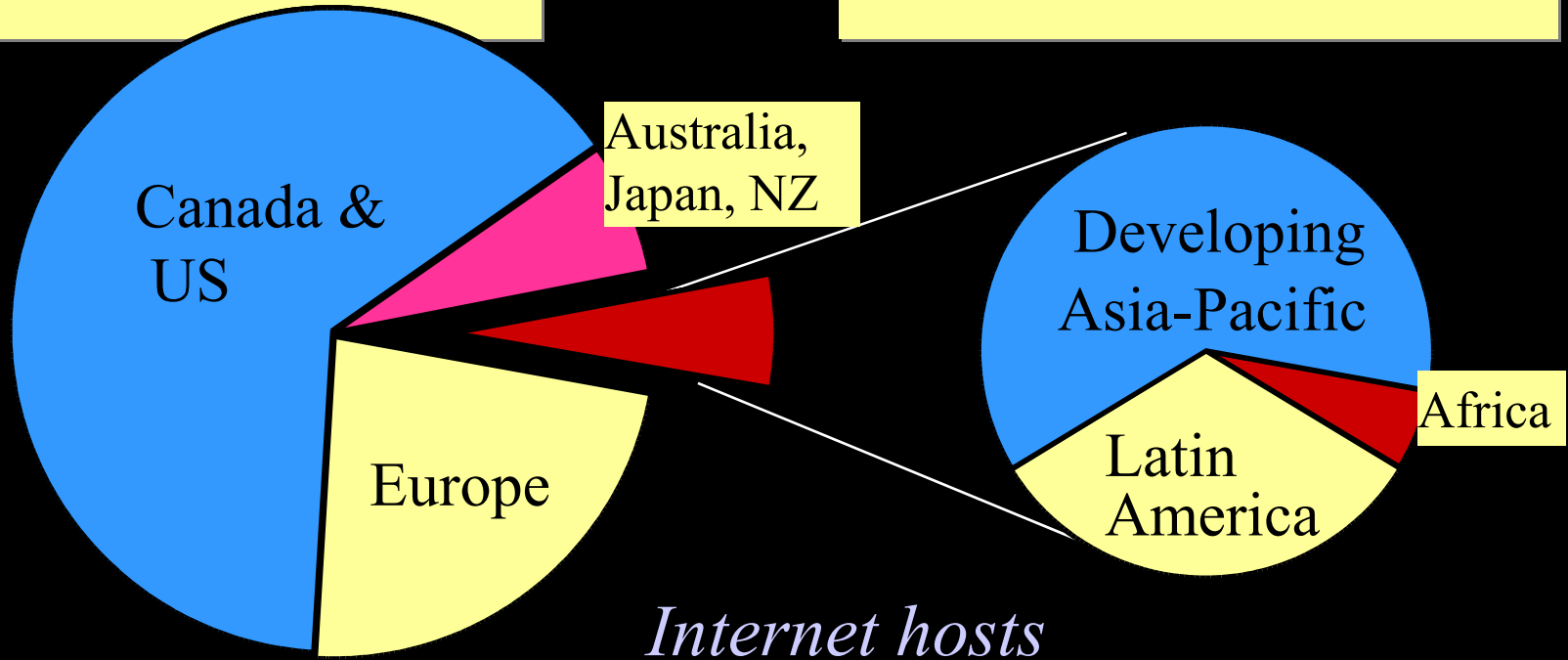
- Growing but uneven use worldwide
- Blurring of legal and geographic boundaries
- New services, actors, markets and issues
- Policies, standards, laws and regulations have not kept pace with growth



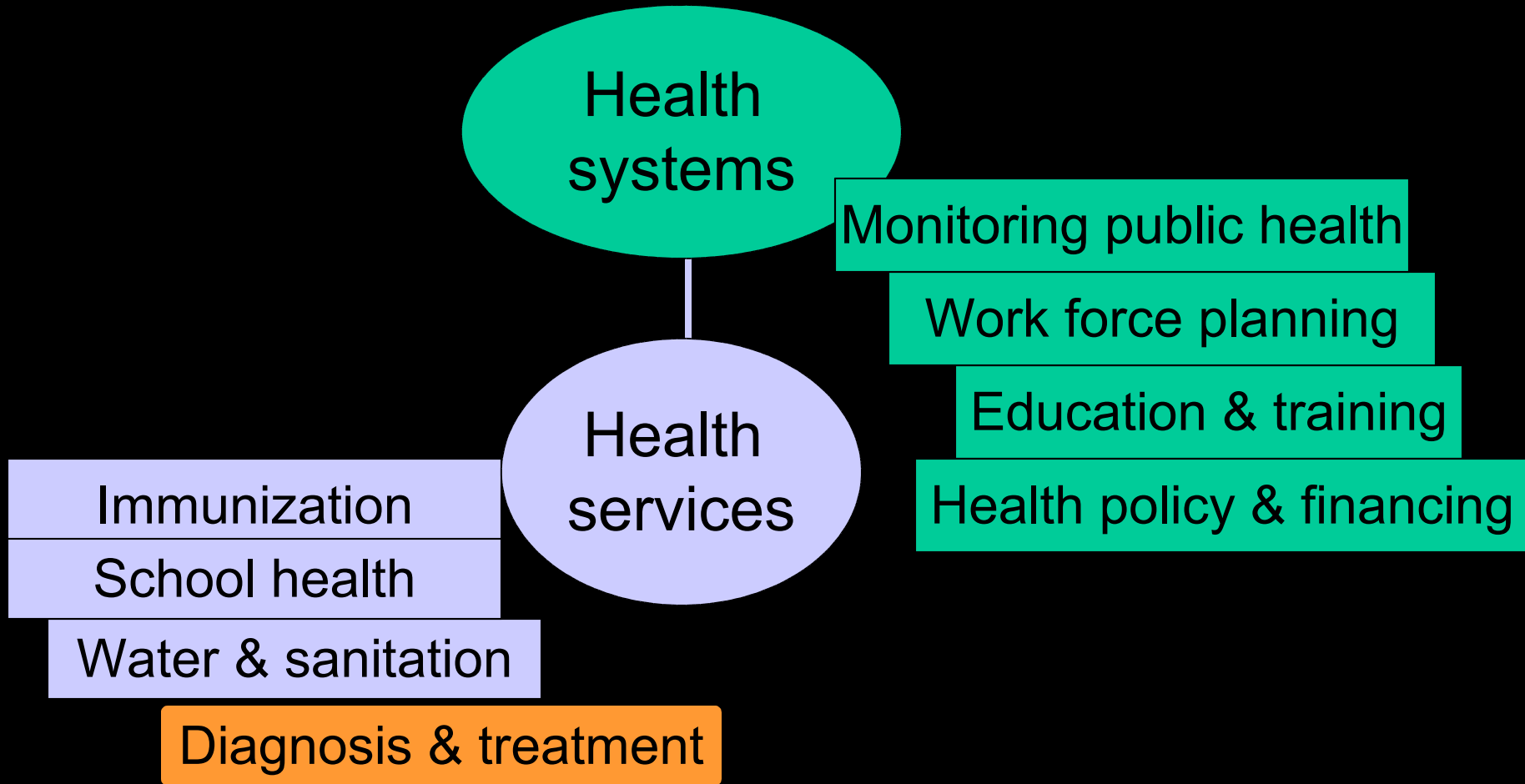
Equity: Our biggest challenge

High-income countries:
16% population
7% burden of disease
89% health spending
94% Internet hosts

Low-income countries:
84% population
93% burden of disease
11% health spending
6% Internet hosts



ICT is fundamental at all levels



ICT in clinical & laboratory services

- Track and provide patient information
- Facilitate research, diagnosis and testing
- Enable communication for professionals and patients
- Deliver services despite distance and time barriers (telemedicine)

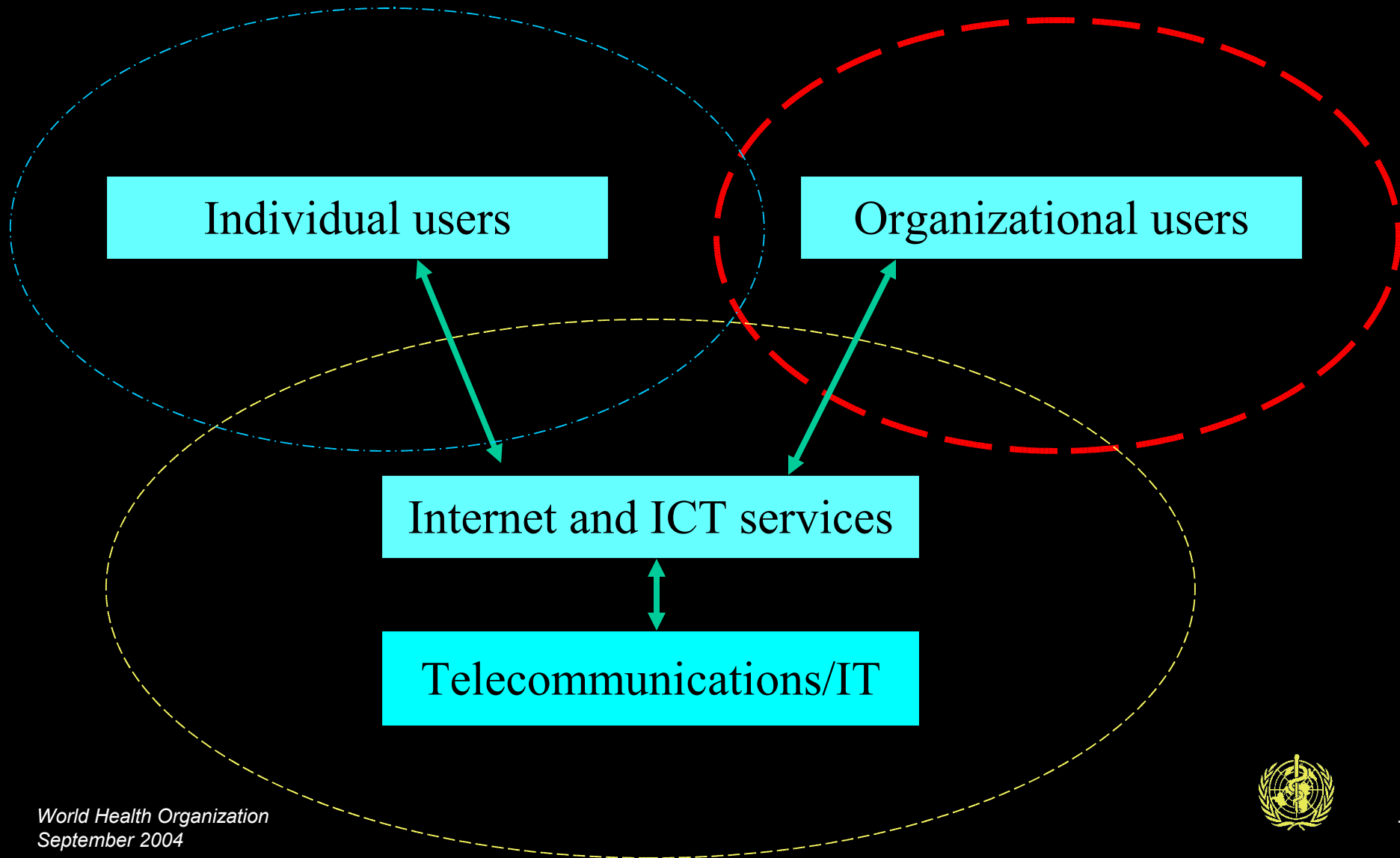


ICT in public health practice

- Identify disease and risk factor trends
- Model diseases in populations
- Analyze demographic and social data
- Access publications and databases
- Monitor potential threats to health



Where does FOSS fit for health?



Bridging the digital divide in health: Health InterNetwork (HIN)

One of four major initiatives of the UN
Millennium Action Plan, Sept 2000

Supports public health programs and priorities

- Content: relevant, high quality, affordable
- Connectivity: improving Internet access
- Capacity: training to use information effectively
- Policy: creating a facilitating environment



High potential and appeal of FOSS concept: affordability, equity, responsiveness



HIN experience: Software (1)

- Public health "market" in many countries not well served by available software
- Much software used in public health is adapted from other uses, not developed specifically for health
- Proprietary software is freely copied and distributed by users when it is not affordable or easily available



HIN experience: Software (2)

- National and international coordination can optimise use of limited resources
- Local adaptation and training for specialized applications are key to successful uptake and continued use - an ongoing challenge
- FOSS awareness and preference: mixed



Main need: robust, scalable, affordable applications & qualified technical support



HIN experience: FOSS

- FOSS can help in quality assurance, meeting local needs, and affordability
- Practical aspects: time and logistics for development, testing, distribution and training
- Challenges: compatibility with other systems, sustainability/support not assured, competition with pirated software



Well-managed FOSS development takes time, communication & commitment



From local to national solutions: what is the best way to promote and share FOSS?



Bridging the digital divide in health

For ICT to benefit health, there must be:

- immediate tangible benefits
- a skilled workforce
- reliable basic infrastructure
- a foundation of effective public health practice
- **commitment to affordability, equity and local solutions**

*... FOSS has an important role in public health:
innovative partnerships are key to its success*



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