



# mHealth in India: Challenges and opportunities

Atanu Garai, Advisor – mHealth, InnovadorsLab & MCA Candidate, IGNOU

OECD Technology Foresight Forum, Paris, 26 Oct 11

Fellowship of the Internet Society, Geneva

*Photo credit: ASHA Assist Project, Divya Ramachandran*

# Outline

1. Why mHealth
2. Key application areas
3. Example: Mobile video for health promotion
4. Challenges
5. Opportunities
6. Summary

# 1. Why mHealth?

## Comparative reach and growth of ICT media

ICT Reach and Growth (a)	Rural Uttar Pradesh							
	Married Woman 18-34 yrs		Married Man 18-34 yrs		Married Woman 35+ yrs		Married Man 35+ yrs	
	Reach (%)	Growth (%)	Reach (%)	Growth (%)	Reach (%)	Growth (%)	Reach (%)	Growth (%)
TV Viewer-ship (last week)	22.6	10	27.5	(-3)	18.6	23	20.7	14
Radio listener-ship (last week)	14.7	10	29.7	(-9)	14.5	45	21.8	(-10)
Used internet (last month) (b)	0.1	33	0.2	(-40)	0.1	206	0.2	37
Ownership of mobile phone	1.5	48	13.7	50	0.8	9	7.5	66

(a) Growth between 2007 and 2008 (b) Data reported for rural India as number of users was too low in rural Uttar Pradesh Source: IRS

## 2. Key application areas

<p><b>Beneficiaries</b> <b>Low interactivity</b></p> <ul style="list-style-type: none"><li>• Bulk SMS</li><li>• Bulk voice calls</li></ul>	<p><b>Service providers</b> <b>Low interactivity</b></p> <ul style="list-style-type: none"><li>• HMIS</li><li>• Surveillance, Logistics, Finance</li></ul>
<p><b>Beneficiaries</b> <b>Medium/ High interactivity</b></p> <ul style="list-style-type: none"><li>• Treatment adherence &amp; monitoring</li><li>• Supporting through behavior change continuum</li><li>• Community monitoring</li></ul>	<p><b>Service providers</b> <b>Medium/High interactivity</b></p> <ul style="list-style-type: none"><li>• Collecting &amp; using transactional data</li><li>• Tele-medicine</li><li>• Decision support systems</li><li>• Training</li></ul>

# 3. Example: mobile video



## Mechanism

- CHW play short videos in mobile phones
- **During counseling**
- Used cartoon animations

## Impact

- Developed concrete idea
- Gained knowledge

# 4. Challenges

Areas	Challenges
Mobile-based data collection	Low adoption among health workers; Low usability of SMS and mobile form
Personalized messages	Lack of evidence-based content
Education and training	Limited evidence and deployment
Beneficiary messages	Limited deployment in multiple health areas

# 5. Opportunities

- **R&D**
  - **Medical devices**
  - **Network**
  - **Security**
  - **Data**
  - **Language**
  - **Others**
- **Pilot deployments**
- **Business models**

# 6. Summary

- **mHealth is a necessity**
- **Multiple applications in health system**
- **Challenges – technological, social, HCI**
- **R&D opportunities**