Can technology reduce the need for health workers??

Magda Rosenmoller
Prof. Health Management, IESE Business School
EIP AHA B3 AA3 Integrated Care Workforce
EIT Health Core Partner
New technologies will make the receptive doctors better at their jobs — quicker, more accurate, and more fact-based. There is a tremendous opportunity in the influx of data that has never before been available. Once we have a large enough dataset, and an addressable database of research studies, we’ll be able to identify patterns and physiological interactions in ways that weren’t possible before.

Data-driven healthcare won’t replace physicians entirely, but it will help those receptive to technology perform their jobs better.

FORTUNE — Healthcare today is often really the “practice of medicine” rather than the “science of medicine.”

Take fever as an example. For 150 years, doctors have...
A 58-year-old woman presented to her primary care physician after several days of dizziness, anorexia, dry mouth, increased thirst, and frequent urination. She had also had a fever and reported that food would "get stuck" when she was swallowing. She reported no pain in her abdomen, back, or flank and no cough, shortness of breath, diarrhea, or dysuria. Her history was notable for cutaneous lupus, hyperlipidemia, osteoporosis, frequent urinary tract infections, three uncomplicated cesarean sections, a left oophorectomy for a benign cyst, and primary hypothyroidism which had been diagnosed a year earlier. Her medications were levothyroxine, hydroxychloroquine, pravastatin, and alendronate. She lived with her husband and had three healthy adult children. She had a 20-pack-year history of smoking but had quit 3 weeks before presentation. She reported no alcohol or drug abuse and no exposure to tuberculosis. Her family history included oral and bladder cancer in her mother, Graves' disease in two sisters, hemochromatosis in one sister, and idiopathic thrombocytopenic purpura in one sister.
The Impact of Technology

Opportunities to transform the HC system?

Kaiser Permanente
- better coordination ⇒ fewer expensive specialists
- EHR - 25% reduction in office visits

Geisinger:
- Team & IT 1 GP /2,000 ⇒ 2,5-5,000 population

Bask Health Reform
- 17,000 fewer hospital admissions
- 20% PHC made by telephone (25% self-appointed)
- COPD 32% lower hospitalisation, 81% satisfaction

General
- imaging - ↓ exploratory surgery
- stents and angioplasty ↓ bypass surgeries
- Laparoscopy ↑ demand (gallbladder removal)

Source: Various
Cunningham, R, Health Workforce Needs: Projections Complicated by Practice and Technology Changes
B3 Integrated Care Collaborative

Regions, delivery organisations, patient / carers organisations, academia, industry

- iterative, flexible process
- provide input – expertise, best practice
- inspiration
- collect experience, evidence to support policy-making
- synergies
- scale up innovative solutions

+2 HEALTHY LIFE YEARS by 2020
A triple win for Europe
EIP AHA B3 Action Plan

Increase the average number of healthy life yrs by 2 in the EU by 2020
Health status and quality of life  |  Supporting the long term sustainability and efficiency of health and social systems  |  Enhancing competitiveness of EU industry

Chronic Conditions

By 2015
Chronic Conditions’ Programmes available at least 10% of target population in at least 50 regions

Integrated Care

By 2015 - 2020
Integrated Care Programmes serving older people, supported by innovative tools and services, in at least 20 regions

Implementation and Scale Up of Chronic Care + Integrated Care Programmes

Action Area 1: Organisational Models
Map of partnership models for implementation of Chronic and Integrated Care Programme

Action Area 2: Change Management
Map of best practice methodologies to support the implementation of Chronic and Integrated Care

Action Area 3: Workforce Development
Map of reusable learning resources

Action Area 4: Risk Stratification
Stratification of the population

Action Area 5: Care Pathways
Mapping Best Practices in the EU regions

Action Area 6: Patient / User Empowerment
Map of coaching, education and support patient/user empowerment and adherence

Toolkit

2013  Monitoring impact and outcomes  2015
The B3 Action Group (B3) was established to develop as a response for Integrated care to the challenges set by the Strategic Implementation Plan (SIP) of the EIP on AHA:

The overall objective of the B3 is to:

“Reduce avoidable/unnecessary hospitalisation of older people with chronic conditions, through the effective implementation of integrated care programmes ad chronic disease management models that should ultimately contribute to the improved efficiency of health systems”
B3 Action Group since 2012…

- **B3 Co-ordination Group** was set up in 2012 to oversee the development and implementation of B3 Action Plan;
- **9 Action Areas** were established within the B3 group to deliver tangible deliverables and outcomes;
- **A collaborative governance model** was adopted;
- **450 participants** representing **141 commitments** received on behalf of regions, sub-national administrations, delivery organisations, patient/user and carer organisations, academic institutions and industry and member organisations.
B3 Action Group on Integrated Care
AA3 Workforce

Good practices related to **Workforce Development, Education and Training** offer replicable training programmes, and show how a skilled health workforce can answer to the challenges.
B3 Maturity Model
Technology to Care Initiative (UK)

www.technologytocare.org.uk

Developed new knowledge and skill sets for social care workers (+workforce strategy)

... recognition of ‘distinct areas’ that needed to be addressed ‘regardless of traditional service boundaries’

- Confidence in Technology (KS1)
- Rights and values (KS2)
- Sourcing Technologies (KS3)
- Assessment and Review (KS4)
- Safe Installation, Maintenance and Disposal (KS5)
- Remote or Virtual Monitoring & Response Systems (KS6)
B3 Good Practices

• Product of the **unique collaborative work** of the B3 members to map existing initiatives relevant to the delivery of integrated health and social care.

• The mapping exercise was not meant to select or validate a limited number of practices.

• **Over 100 good practices collected throughout 2013-2014** demonstrating that integrated care practices have potential to improve the quality and sustainability of services.

EIP AHA Good Practices related to Workforce Skills (15)

- **89 ParkinsonNET** Radboud University Nijmegen Medical Centre
- **101 School of Diabetes** - Courses for Health Professionals APDP - Diabetes Portugal
- **123 FOCUSS** Bio-Med Aragón
- **135 OPIMEC** - Observatory of Innovative Practices for Complex Chronic Disease Management Andalusian School of Public Health
- **143 Population Intervention Plans PIP’s** Department of Health of the Basque Country
- **147 PROMIC** - Congestive heart failure Department of Health of the Basque Country
- **155 TELBIL** Department of Health of the Basque Country
- **163 Building Capacity and Competency** for Staff Using Telehealthcare Education and Training Strategy Scottish Centre for Telehealth and Telecare, NHS 24
- **169 Everyone Matters: 2020 Workforce Vision for healthcare in Scotland** Scottish Government - Health and Social Care Directorates
- **189 Supporting an Integrated Telehealth and Telecare Learning Network** NHS 24, Scottish Centre for Telehealth and Telecare
EIT Health: a powerful alliance for healthy living and active ageing
A strong partnership across Europe
Integrating innovation, education and entrepreneurship

Integrating Activity Pyramid

Projects

‘Go Global’ programmes

Education of professionals
Focus areas support citizens’ desire for an active and self-determined life, even at old age.

**Promote Healthy Living**
- Self-management of health
- Lifestyle intervention
- Motivate active personal lifestyles
- Metabolic Health

**Support Active Ageing**
- Workplace interventions
- Overcoming functional loss
- Ageing with a Healthy Brain
- Mobility and independence throughout Life

**Improve Healthcare**
- Improving healthcare systems
- Treating and managing chronic diseases
- Personalised Oncology and Integrated Cancer Care
- Sustainable Continuum of Care to Support Active Living in Europe
CAMPUS: education of professionals and executives is a key education component

Aim: citizen-centred active ageing and well-being

Develop patient-centred and personalised healthcare

Engage professional citizens for healthy living and active ageing

Create sustainable and innovative workplace

Enable executives to realise the full potential of innovations

Aim: citizen-centred active ageing and well-being

Develop patient-centred and personalised healthcare

Engage professional citizens for healthy living and active ageing

Create sustainable and innovative workplace

Enable executives to realise the full potential of innovations
European synergies for health
Joint Action Health Workforce Planning and Forecasting

Thank you very much for your interest!

magda@iese.edu