

## Digital Healthcare Platform



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# Digital Healthcare Platform

Pekka Neittaanmäki, Elmira Galeieva

## **ABOUT THE PROJECT**

This report was conducted under the Platform Value Now project funded by Finland's Strategic Research Council. Platform Value Now will focus on understanding the fast emerging platform ecosystems, their value creation dynamics and requirements of the supportive institutional environment. We will analyze ecosystems with systems tools and develop new methods for platform-centric ecosystems management. Data collection is based on active scanning of global technology and platform ecosystems and fast solution oriented case experiments with Finnish corporations and policy planners. The aim of the project is to operationalize the collected understanding into a Platform Profile framework that will enable more efficient method and tool development for ecosystem management.

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# HEALTHCARE ECOSYSTEM

## Digital Healthcare Ecosystem



Read article:

<https://www.infosys.com/digital/white-papers/Documents/digital-healthcare-ecosystem.pdf>

## Why the Healthcare Ecosystem Matters



Read article:

<http://www.dtcperspectives.com/why-the-healthcare-ecosystem-matters/>



## Platform Economy. Ecosystems are the new bedrock of digital healthcare

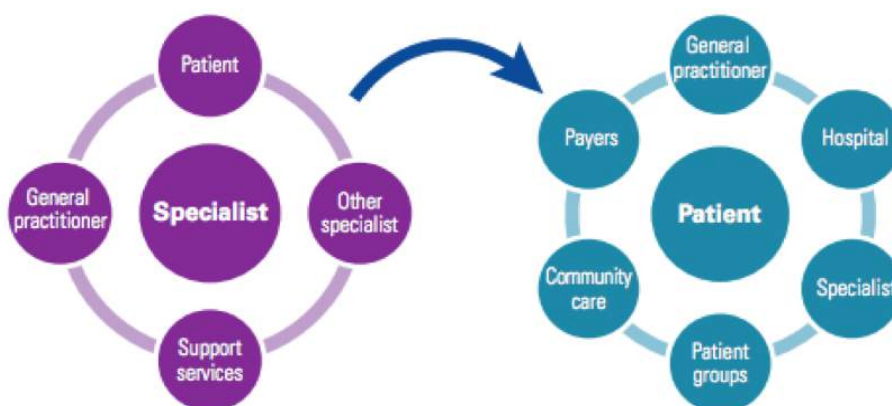


Read article:

<https://www.accenture.com/us-en/insight-platform-economy-digital-health#block-example>

## More than medicine

Figure 2: New healthcare ecosystems are centered on the patient



Source: KPMG International, 2012

Read article:

<http://www.kpmg.com/ZA/en/IssuesAndInsights/ArticlesPublications/General-Industries-Publications/Documents/More%20than%20medicine.pdf>

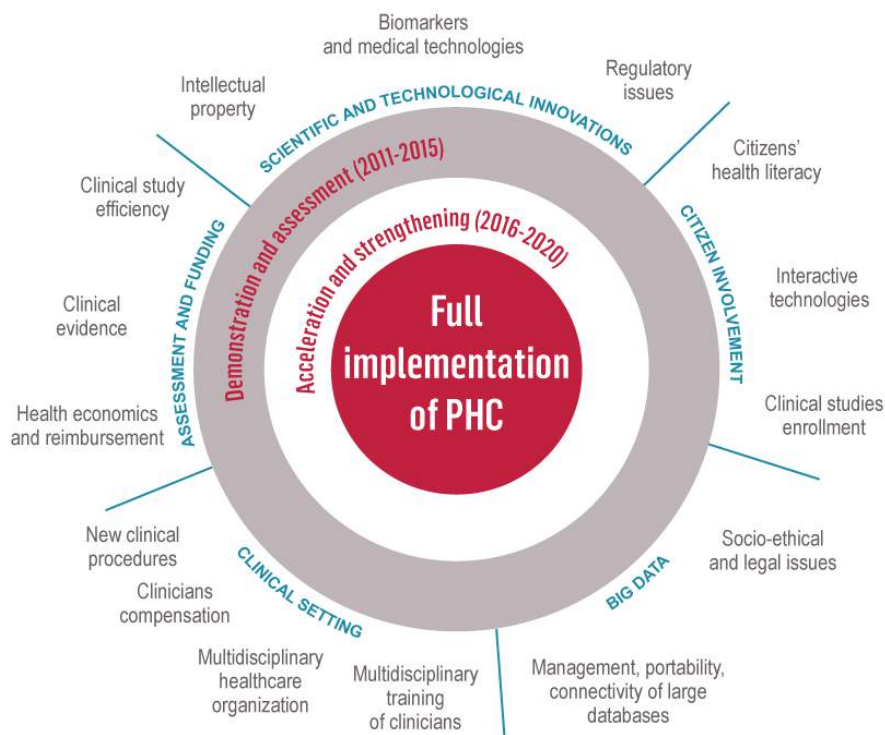
## Predictable Disruption. Digital ecosystems blur healthcare's boundaries, in a foreseeable way.



Read article:

<https://www.accenture.com/us-en/insight-predictable-disruption-digital-health>

## PHC Ecosystem



Read article:

<http://qnphc.org/personalized-health-care/phc-ecosystem/>

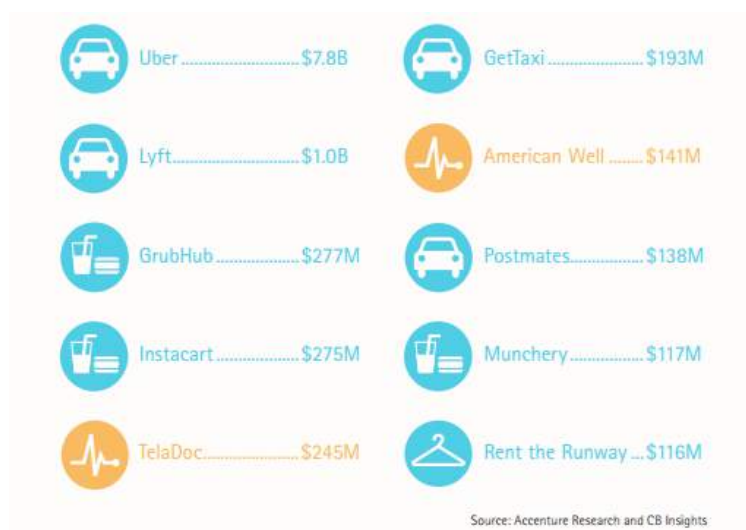
## Why patient experience is key to acquisition and retention in coordinated care networks



Read article:

<https://www.accenture.com/us-en/insight-patient-experience-acquisition-retention-coordinated-care>

## Healthcare: For here or to go?



Read article:

[https://www.accenture.com/t20151120T024431\\_w\\_us-en/\\_acnmedia/Accenture/Conversion-Assets/DotCom/Documents/Global/PDF/Dualpub\\_25/Accenture-Healthcare-for-Here-or-to-Go-v2.pdf#zoom=50](https://www.accenture.com/t20151120T024431_w_us-en/_acnmedia/Accenture/Conversion-Assets/DotCom/Documents/Global/PDF/Dualpub_25/Accenture-Healthcare-for-Here-or-to-Go-v2.pdf#zoom=50)

## Factors that promote or inhibit the implementation of e-health systems: an explanatory systematic review

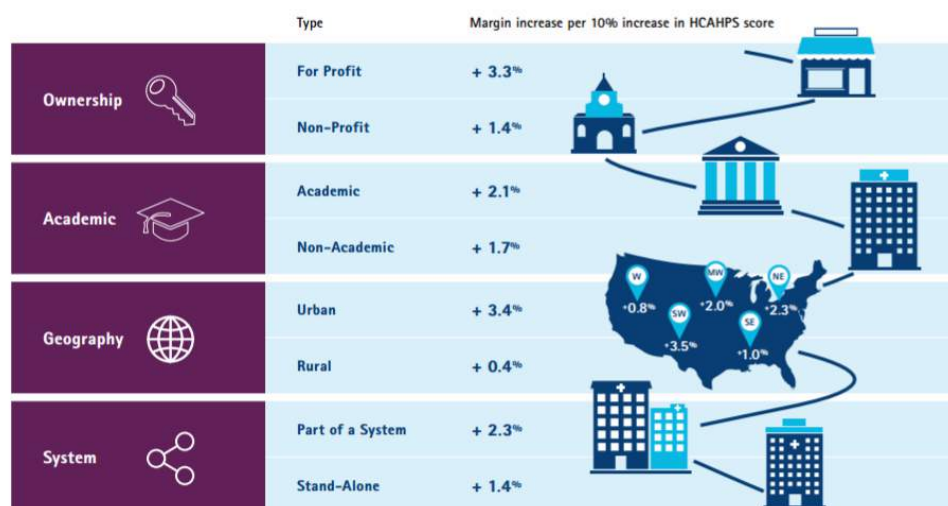
Table 1. Normalization process theory coding framework used for qualitative analysis of review data on e-health implementation

Coherence (Sense-making work)	Cognitive participation (Relationship work)	Collective action (Enacting work)	Reflexive monitoring (Appraisal work)
<b>Differentiation</b> Is there a clear understanding of how a new e-health service differs from existing practice?	<b>Enrolment</b> Do individuals "buy into" the idea of the e-health service?	<b>Skill set workability</b> How does the innovation affect roles and responsibilities or training needs?	<b>Reconfiguration</b> Do individuals try to alter the new service?
<b>Communal specification</b> Do individuals have a shared understanding of the aims, objectives and expected benefits of the e-health service?	<b>Activation</b> Can individuals sustain involvement?	<b>Contextual Integration</b> Is there organizational support?	<b>Communal appraisal</b> How do groups judge the value of the e-health service?
<b>Individual specification</b> Do individuals have a clear understanding of their specific tasks and responsibilities in the implementation of an e-health service?	<b>Initiation</b> Are key individuals willing to drive the implementation?	<b>Interactional workability</b> Does the e-health service make people's work easier?	<b>Individual appraisal</b> How do individuals appraise the effects on them and their work environment?
<b>Internalization</b> Do individuals understand the value, benefits and importance of the e-health service?	<b>Legitimation</b> Do individuals believe it is right for them to be involved?	<b>Relational integration</b> Do individuals have confidence in the new system?	<b>Systematization</b> How are benefits or problems identified or measured?

Read article:

<http://www.scielosp.org/pdf/bwho/v90n5/v90n5a11.pdf>

## Patient Engagement: Happy Patients, Healthy Margins



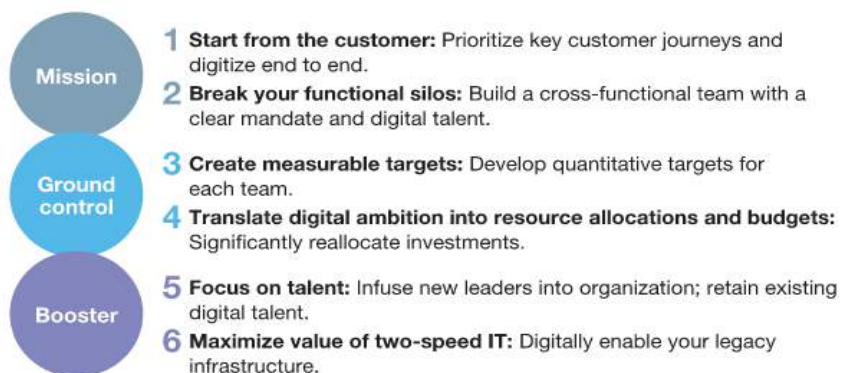
Sources: Accenture analysis, HCAHPS Hospital Survey, Centers for Medicare and Medicaid Services

Read article:

[https://www.accenture.com/t20151003T033201\\_w\\_/us-en/\\_acnmedia/Accenture/Conversion-Assets/DotCom/Documents/Global/PDF/Industries\\_17/Accenture-Happy-Patients-Healthy-Margins.pdf#zoom=50](https://www.accenture.com/t20151003T033201_w_/us-en/_acnmedia/Accenture/Conversion-Assets/DotCom/Documents/Global/PDF/Industries_17/Accenture-Happy-Patients-Healthy-Margins.pdf#zoom=50)

## Why digital transformation should be a strategic priority for health insurers

Six steps help get the digital transformation going.

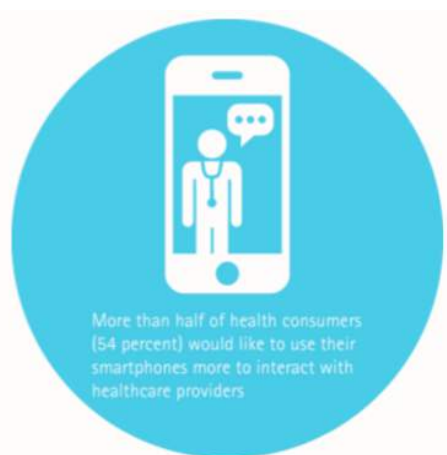


McKinsey&Company | Source: McKinsey analysis

Read article:

<http://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/why-digital-transformation-should-be-a-strategic-priority-for-health-insurers>

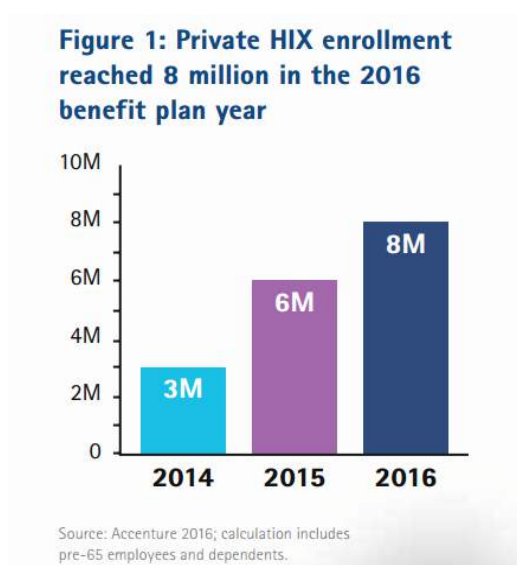
## Losing patience: Why hospitals must revive their digital health strategies



Read article:

[https://www.accenture.com/t20160516T051341\\_w\\_/us-en/\\_acnmedia/Accenture/Conversion-Assets/DotCom/Documents/Global/PDF/Dualpub\\_24/Accenture-Losing-Patience.pdf#zoom=50](https://www.accenture.com/t20160516T051341_w_/us-en/_acnmedia/Accenture/Conversion-Assets/DotCom/Documents/Global/PDF/Dualpub_24/Accenture-Losing-Patience.pdf#zoom=50)

## Private Health Insurance Exchange Enrollment Increases 35 Percent to 8 Million in 2016



Read article:

[https://www.accenture.com/\\_acnmedia/PDF-3/Accenture-Private-Health-Insurance-Exchange-Enrollment-Increases.pdf](https://www.accenture.com/_acnmedia/PDF-3/Accenture-Private-Health-Insurance-Exchange-Enrollment-Increases.pdf)

## How healthcare systems can become digital-health leaders



Read article:

<http://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/how-healthcare-systems-can-become-digital-health-leaders>

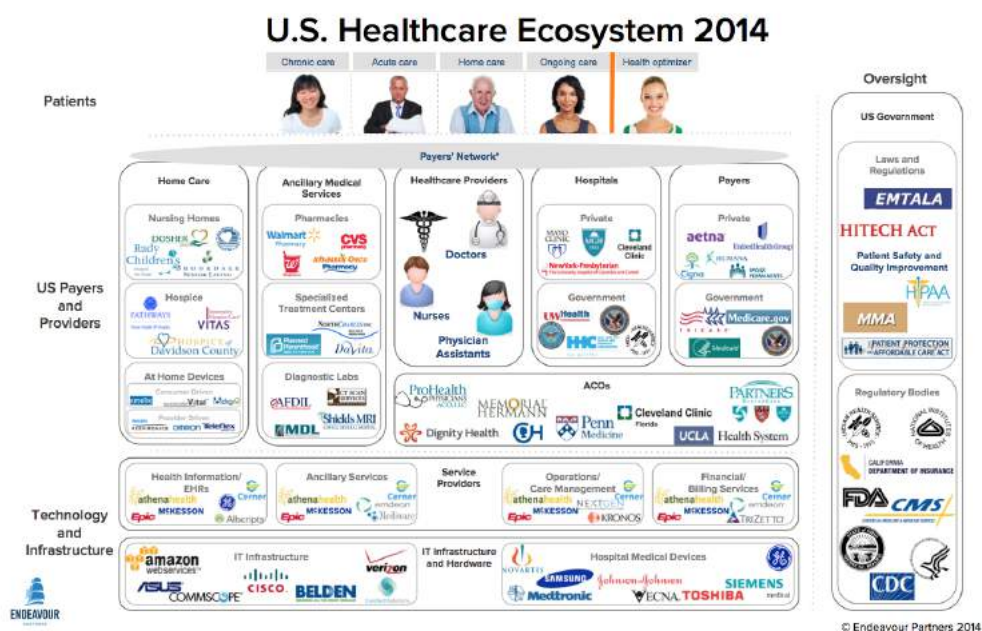
## ehealth 2.0: How health systems can gain a leadership role in digital health



Read article:

<http://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/e-health-2-point-0-how-a-health-systems-can-gain-a-leadership-role-in-digital-health>

## Patient Engagement and the Healthcare Ecosystem 2.0



Read article:

<http://endeavourpartners.net/patient-engagement-and-the-healthcare-ecosystem-2-0/>

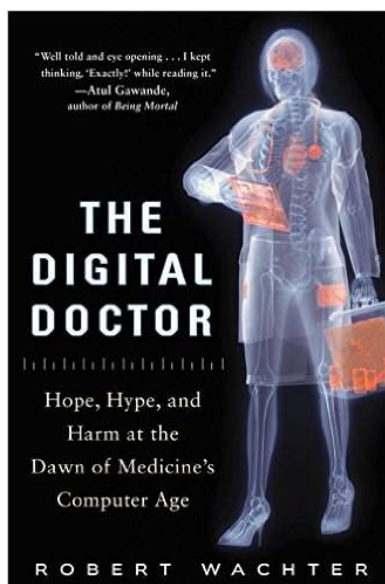
## Disrupting the health-care ecosystem



Watch video:

<http://live.wavecast.co/disrupting-the-health-care-ecosystem/>

## Did the digitization of healthcare leave the human element behind?

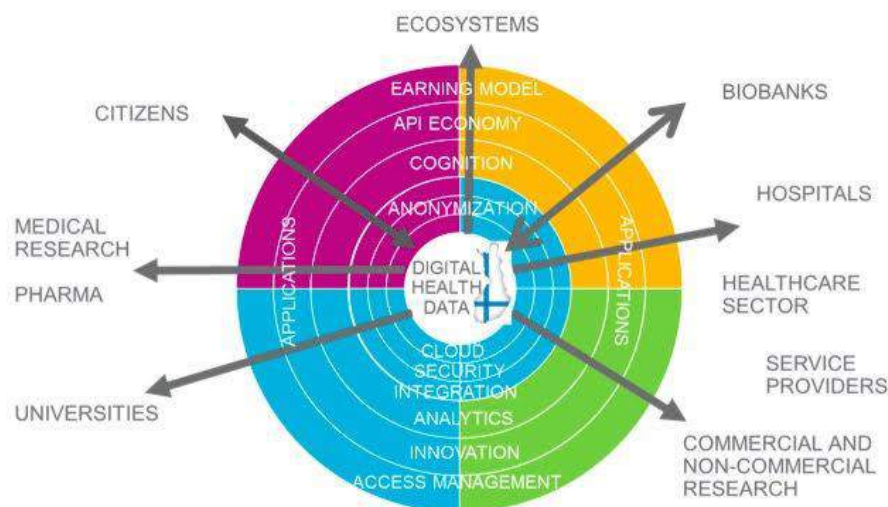


Read article:

<http://mobihealthnews.com/47357/did-the-digitization-of-healthcare-leave-the-human-element-behind>



## The new healthcare ecosystem: 5 emerging relationships



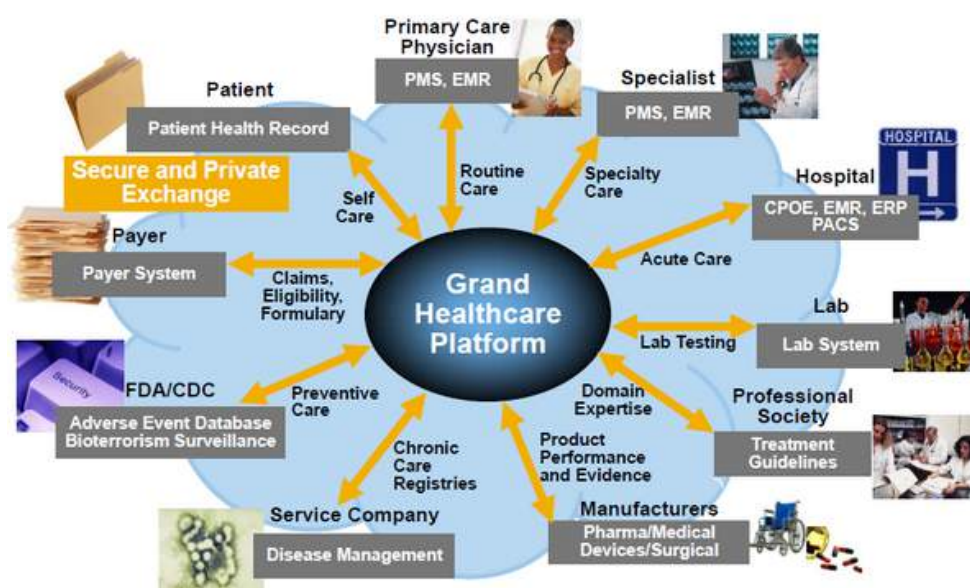
Read article:

<http://www.beckershospitalreview.com/hospital-management-administration/the-new-healthcare-ecosystem-5-emerging-relationships.html>

## Health Data Sources & Users / Healthcare Ecosystem

### The Future

Interconnected, Private, Secure Health Information Exchange



@RobertWahMD <http://himss.files.cms-plus.com/2014Conference/handouts/PHY1.pdf>

Read article:

<https://storify.com/HealthcareWen/health-data-sources-and-users>

## Getting the Best Business-Intelligence Solution for Healthcare

	Point Solutions	Internally Developed Solutions	EDW Platform
Agility and Flexibility	Minimal; built for specific purposes	Varies	High agility and flexibility
Use across multiple Systems	None	Not usually without expert help	Yes
Time to Value	Months to Years	Years	Weeks to Months

Read article:

<https://www.healthcatalyst.com/best-healthcare-business-intelligence-solution>

## HealthShare. You'll make breakthroughs in connecting care

The screenshot displays the HealthShare patient portal. At the top, there are navigation tabs for Home, Wellness, Messages, Library, Calendar, and My Account. The main content area is titled 'Health History' and shows a vertical timeline for the patient 'Marla GONZALEZ, 39 years old | Female'. The timeline includes several medical events with dates and details:

- July 17 Thursday: 8:35 AM Marshall, Joseph, MD at Emergency Room, Cambridge Community Hospital. View Details
- May 22 Friday: 8:00 AM Chang, Catherine, MD at Cardiology Associates. View Details
- April 8 Tuesday: 10:00 AM Gupta, Priya, MD at Memorial Family Medicine. View Details
- February 10 Monday: 12:00 PM Johnson, Brady, MD at Emergency Room, InterSystems General Hospital. View Details
- February 10 Monday: 9:30 AM Gupta, Priya, MD at Memorial Family Medicine. View Details

On the left side, there is a sidebar menu with options: Wellness Home, My Personal Information, Share My Records, My Health History (selected), My Medications, My Lab Results, My Conditions, and My Account.

The HealthShare intuitive timeline makes it easy for patients to review the medical record for accuracy, helping them partner with their providers for safer, high-quality care.

Patients can view, download and transmit records, send messages to providers, request services and efficiently manage their care.

Family members and others authorized by the patient can be granted access to help them better participate in care.

Read article:

<http://www.intersystems.com/our-products/healthshare/healthshare-overview/>

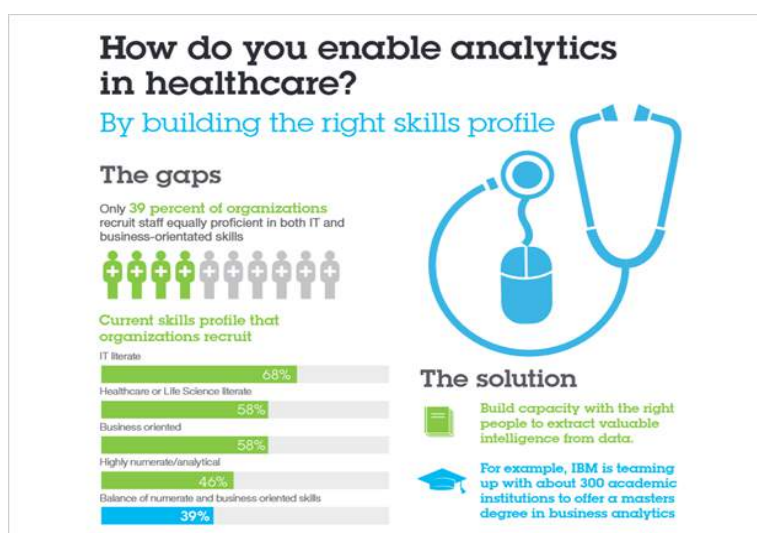
## Information in healthcare: EHR success requires more than system adoption



Read article:

<http://www.i-scoop.eu/information-in-healthcare-ehr-requires-more-than-system-adoption/>

## Analytics across the ecosystem. A prescription for optimizing healthcare outcomes



Read article:

<http://www-935.ibm.com/services/us/gbs/thoughtleadership/healthcare-ecosystem/>

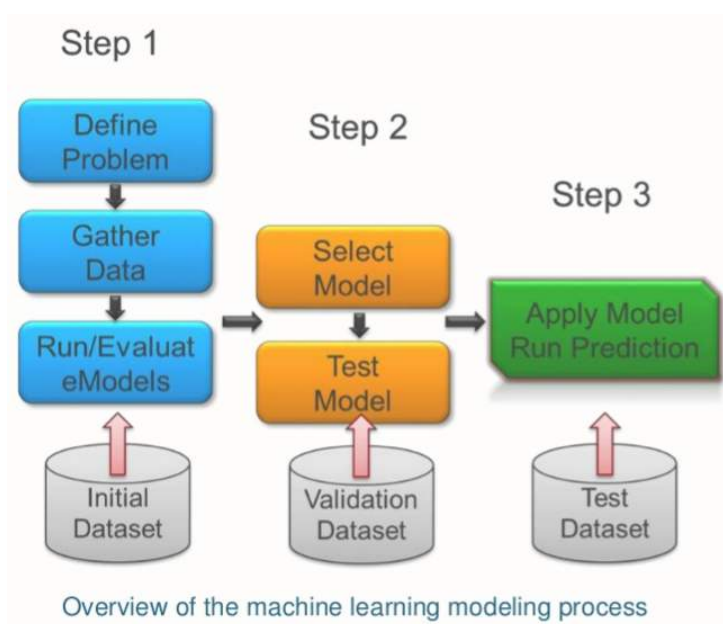
## 5 Reasons Why Healthcare Data is Unique and Difficult to Measure



Overview presentation:

<http://www.slideshare.net/healthcatalyst1/5-reasons-why-healthcare-data-is-difficult-to-measure>

## 4 Essential Lessons for Adopting Predictive Analytics in Healthcare



Overview presentation:

<http://www.slideshare.net/healthcatalyst1/4-essential-lessons-for-adopting-predictive-analytics-in-healthcare>

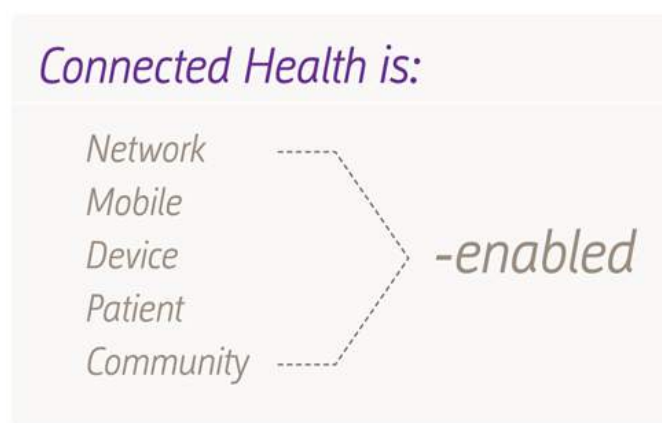
## Healthcare Analytics Adoption Model

<b>Level 8</b>	Personalized Medicine & Prescriptive Analytics
<b>Level 7</b>	Clinical Risk Intervention & Predictive Analytics
<b>Level 6</b>	Population Health Management & Suggestive Analytics
<b>Level 5</b>	Waste & Care Variability Reduction
<b>Level 4</b>	Automated External Reporting
<b>Level 3</b>	Automated Internal Reporting
<b>Level 2</b>	Standardized Vocabulary & Patient Registries
<b>Level 1</b>	Enterprise Data Warehouse
<b>Level 0</b>	Fragmented Point Solutions

Overview presentation:

<http://www.slideshare.net/healthcatalyst1/healthcare-analytics-adoption-model-oct-2013>

## The User-Driven Transformation of Health Care

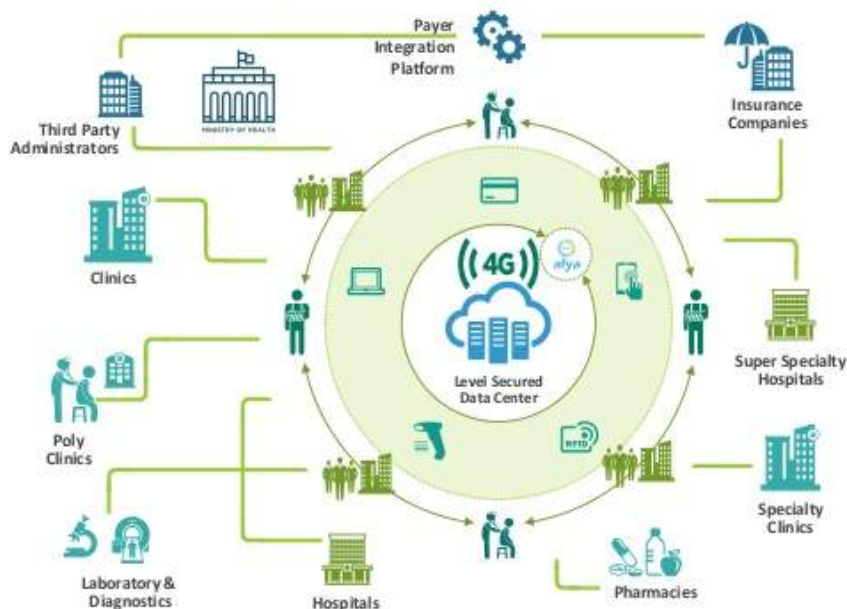


Read article:

<https://www.medtechintelligence.com/column/meddesign-the-user-driven-transformation-of-health-care/>

## Social Innovation Building a Smart Care Community

### Healthcare Ecosystem - Service Oriented



Future of "CARE" will be through an ecosystem localized to a "Geography"  
**"Healthcare Is Local"**

Social Innovation Building a Smart Care Community

8

Read article:

<http://www.slideshare.net/VasukumarNair1/social-innovation-building-a-smart-care-community-20150911upload>

## Digital Health Track Brings Together Health Tech, Pharma And Biotech

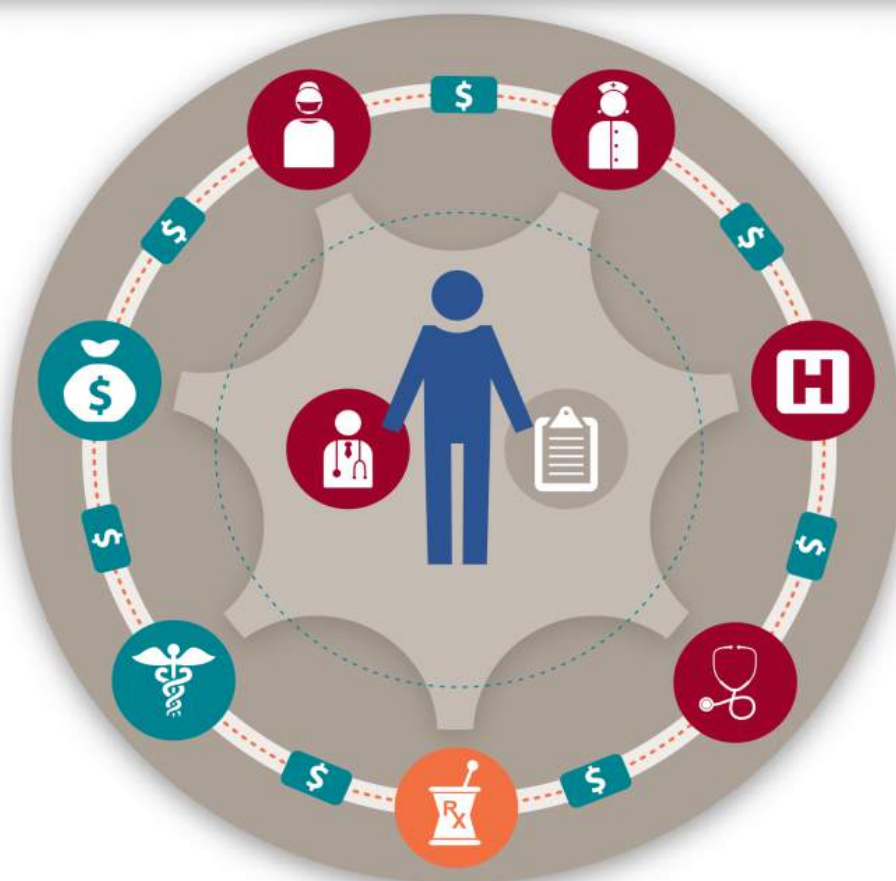


Read article:

<http://www.greentoscale.net/en/news/self-care/digital-health-track-brings-together-health-tech-pharma-and-biotech>

## The Emerging Role of the Pharmacist in the Healthcare Ecosystem

### COLLABORATION, INTEGRATION and IMPROVED OUTCOMES



Primary care physician develops a patient's care plan with the patient; is the hub of the medical team and is easily accessible to other players.

New models are emerging in the forms of consolidated and collaborative networks, like ACOs, PCMHs and Medical Neighborhoods.

Coordinated care teams provide efficient, patient-centered care. Provider reimbursement is based on outcomes, not volume of service.

**Results?** Increased accountability, fewer gaps in care, reduction in patient redundancies and value over volume.

Read article:

<http://rxtimes.com/the-emerging-role-of-the-pharmacist-in-the-healthcare-ecosystem-article-3/>

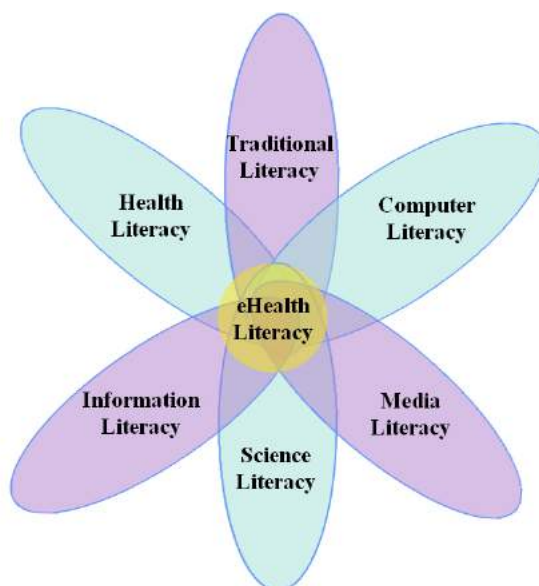
## Patient Use of Email for Health Care Communication Purposes Across 14 European Countries: An Analysis of Users According to Demographic and Health-Related Factors



Read article:

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4376107/>

## eHealth Literacy: Extending the Digital Divide to the Realm of Health Information

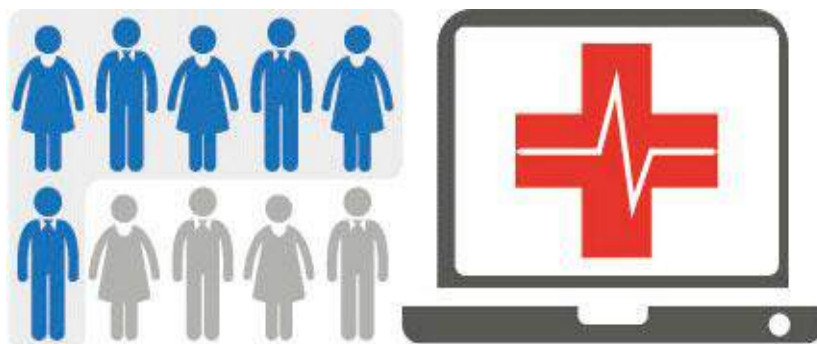


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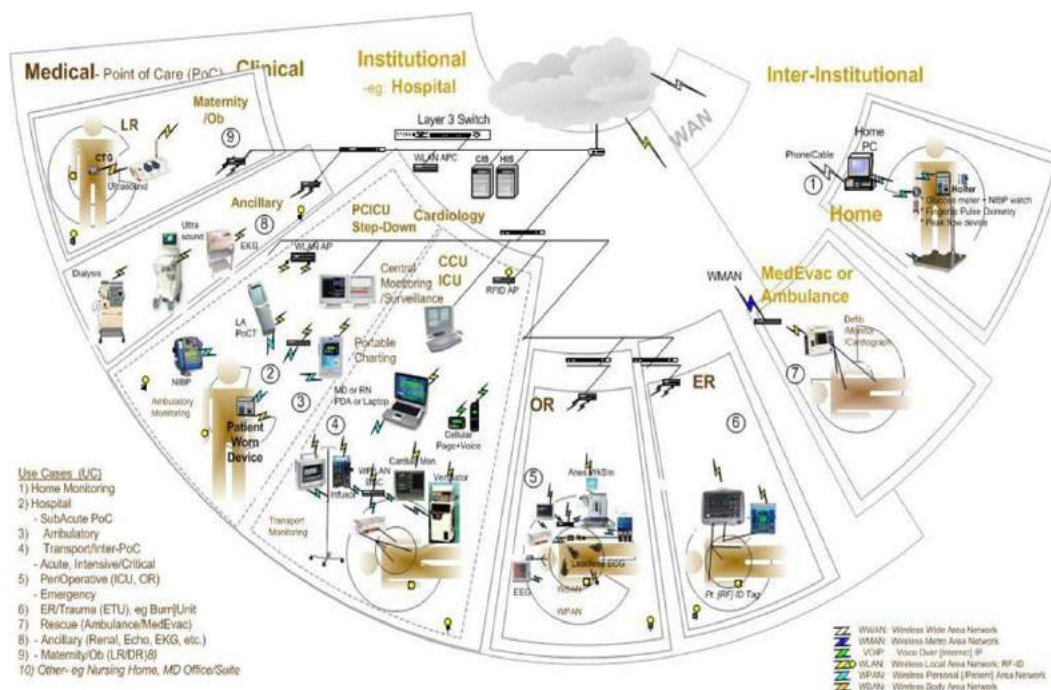
## European citizens' digital health literacy



Read article:

[http://observgo.uquebec.ca/observgo/fichiers/42526\\_res1.pdf](http://observgo.uquebec.ca/observgo/fichiers/42526_res1.pdf)

## White Paper: The Medical Grade Wireless Utility



Read article:

<http://www.woodharbinger.com/the-medical-grade-wireless-utility/>

## Digitizing the Safety Net: Health Tech Opportunities for the Underserved

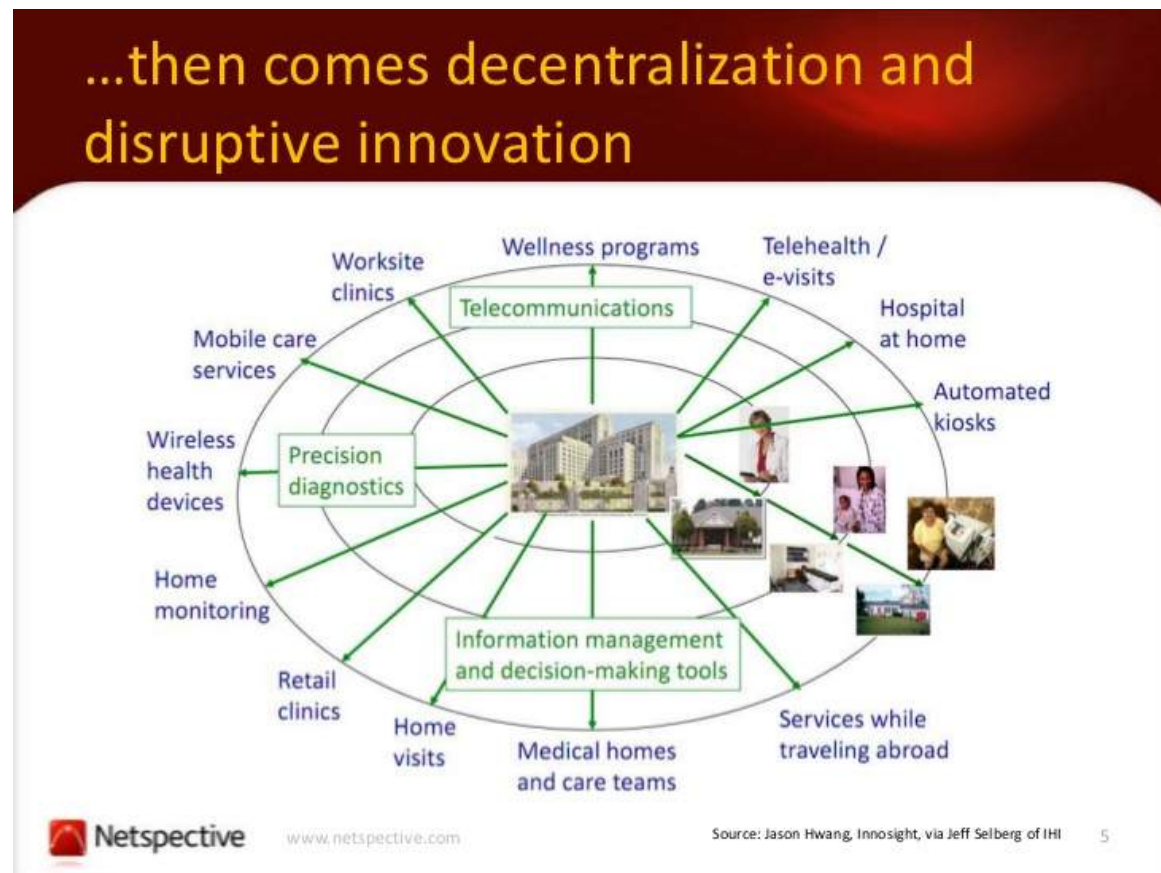


Read article:

<http://www.chcf.org/~media/MEDIA%20LIBRARY%20Files/PDF/PDF%20D/PDF%20DigitizingSafetyNet.pdf>

# HEALTHCARE PLATFORMS

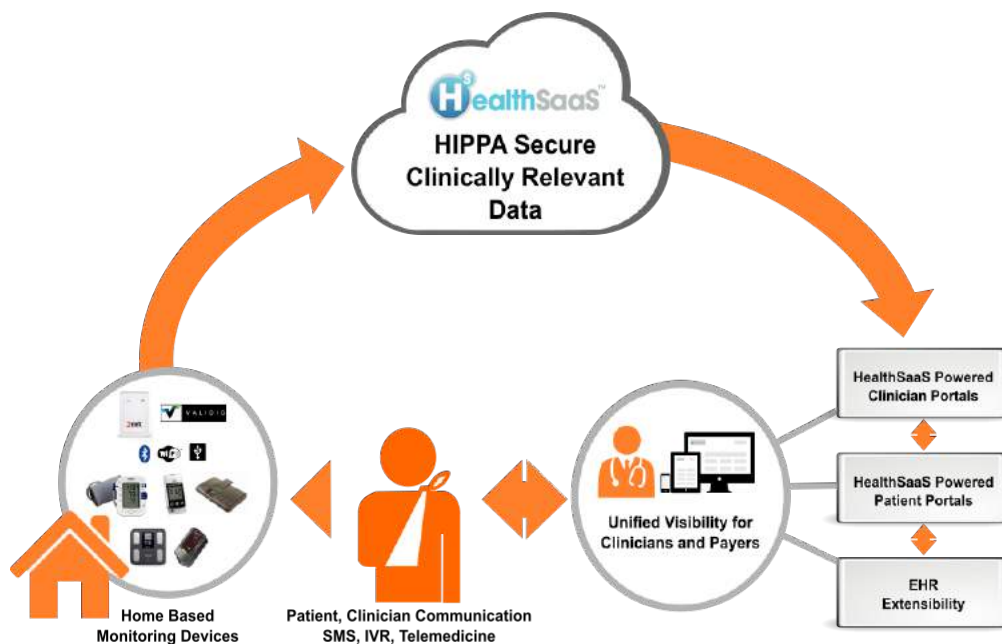
## What is a Healthcare IT Platform?



Overview presentation:

<http://www.slideshare.net/eddodds/shahslides1>

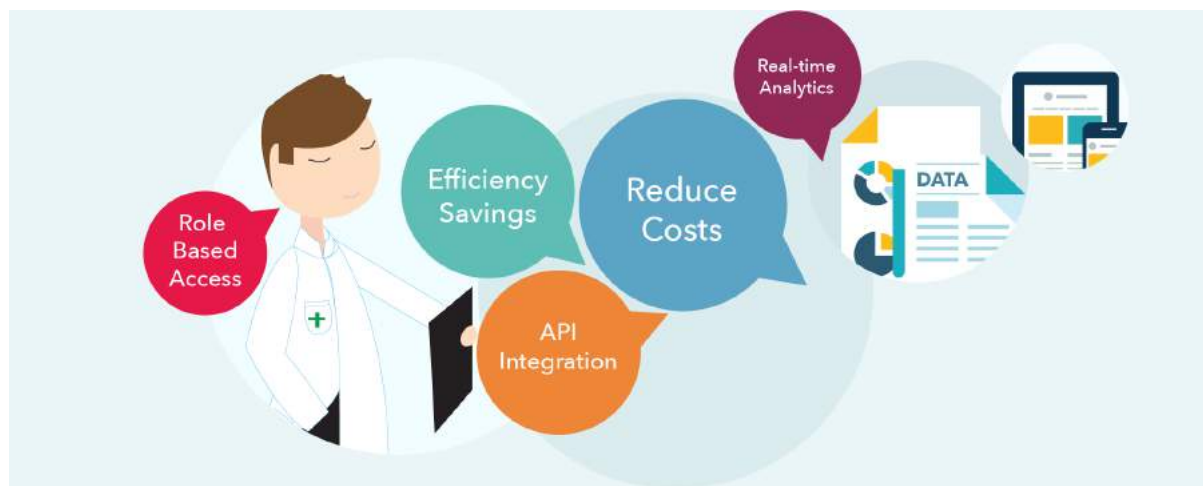
## The HealthSaaS Platform



Read article:

<https://www.healthsaas.net/>

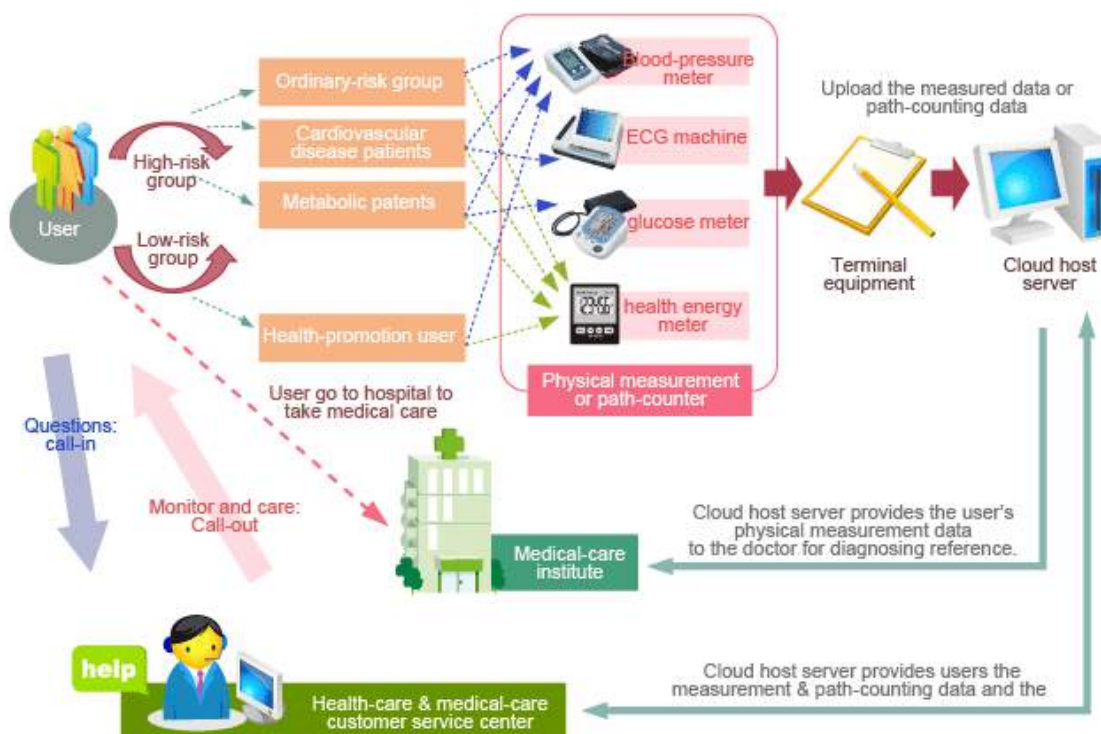
## Taking the NHS on the digital journey



Read article:

<http://www.comtacthealthcare.com/digital-platform.html>

## Remote Healthcare Service Platform



Read article:

<http://www.iisigroup.com/en/services/saa-saas.html>

## Defining the mobile health platform



Read article:

<http://www.healthcarelive.com/news/defining-the-mobile-health-platform/372228/>

## Mobile Healthcare Delivery Platform. Case study

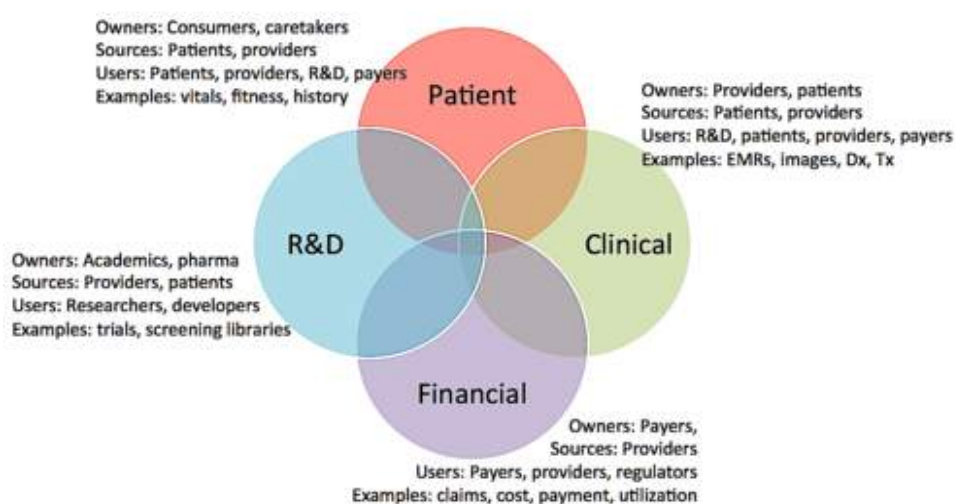


Read article:

<http://www.azoft.com/case-studies/mobile-healthcare-delivery-platform/>

## Is there a “Platform gap” in Healthcare? A Stanford Medicine X Panel

### Medical Data

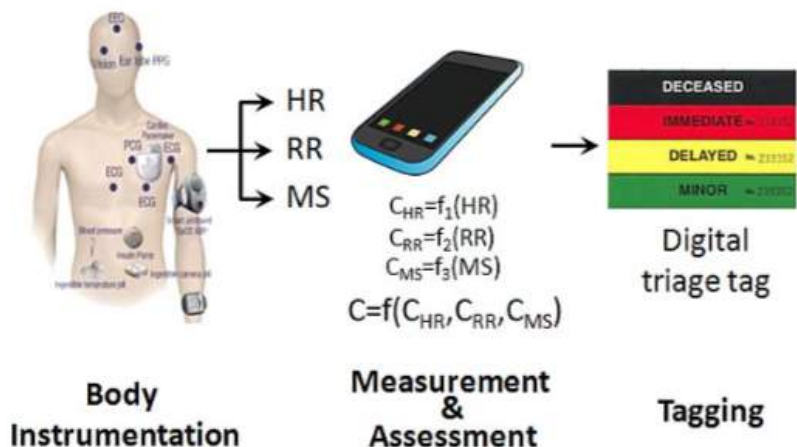


Source: McKinsey

Read article:

<http://thedoctorweighsin.com/platform-gap-healthcare-stanford-medicine-x-panel/>

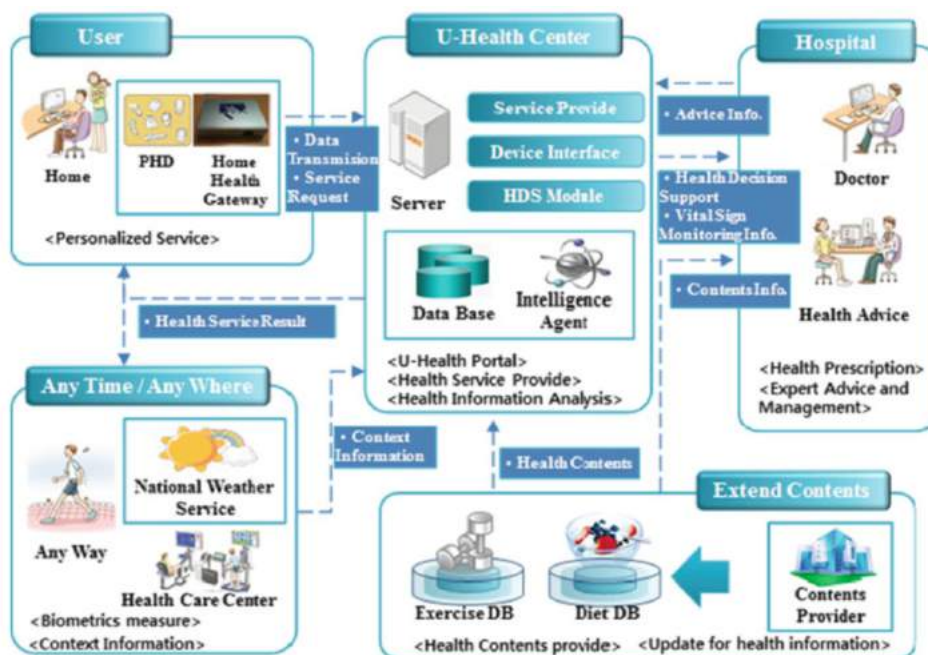
## DigiAID: A Wearable Health Platform for Automated Self-tagging in Emergency Cases



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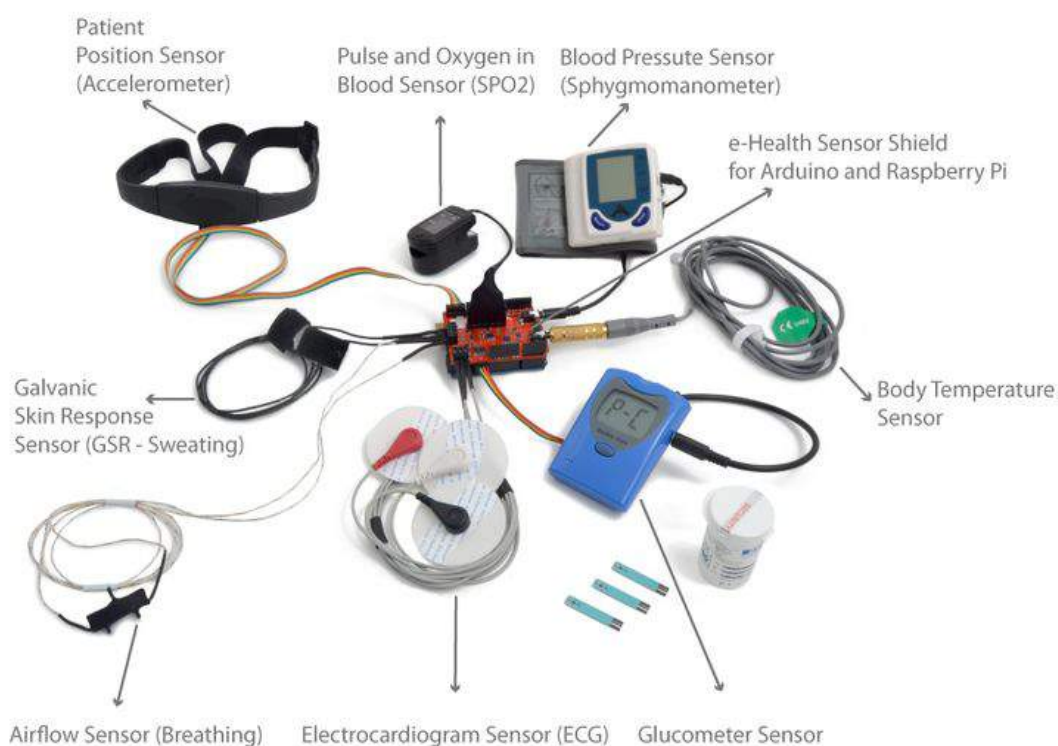
## Home Health Gateway Based Healthcare Services Through U-Health Platform



Read article:

<http://link.springer.com/article/10.1007/s11277-013-1231-8>

## Wearable sensors network for health monitoring using e-Health platform



Read article:

<http://search.proquest.com/docview/1646717323/fulltext/F1A021F55854427FPQ/1?accountid=11774>

## Design and Implementation of a Web-Service-Based Public-Oriented Personalized Health Care Platform



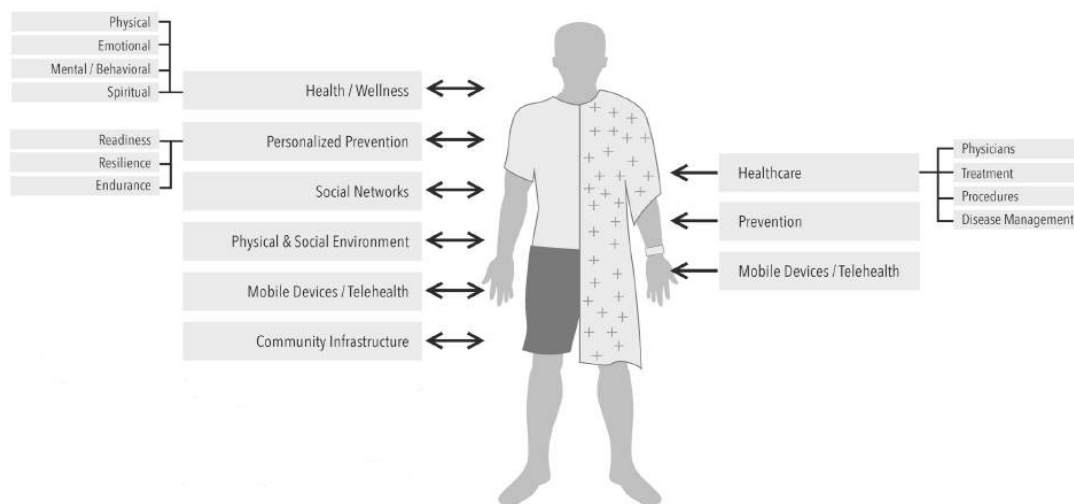
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## An Innovative Platform for Person-Centric Health and Wellness Support

### Person-Centric & Patient-Centered



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## Is your workers' compensation technology platform ready for healthcare reform?

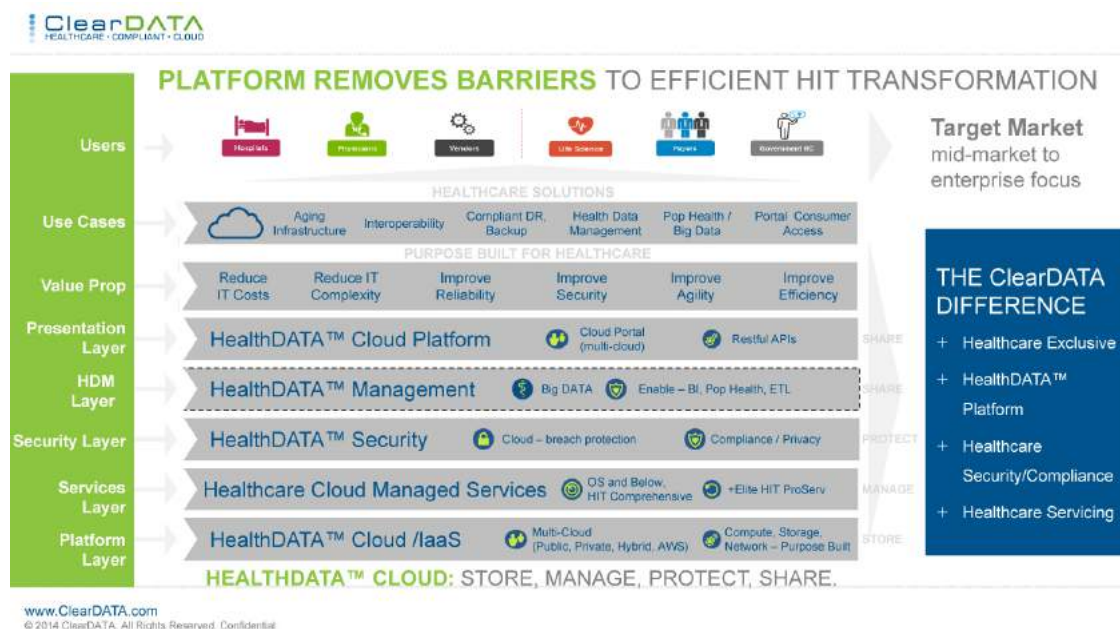


Read article:

<http://www.mobilehealthmarketplace.com/is-your-workers-compensation-technology-platform-ready-for-healthcare-reform/>

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## Removing technology barriers to make healthcare healthier



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<https://www.cleardata.com/solutions/healthcare-cloud-computing/>

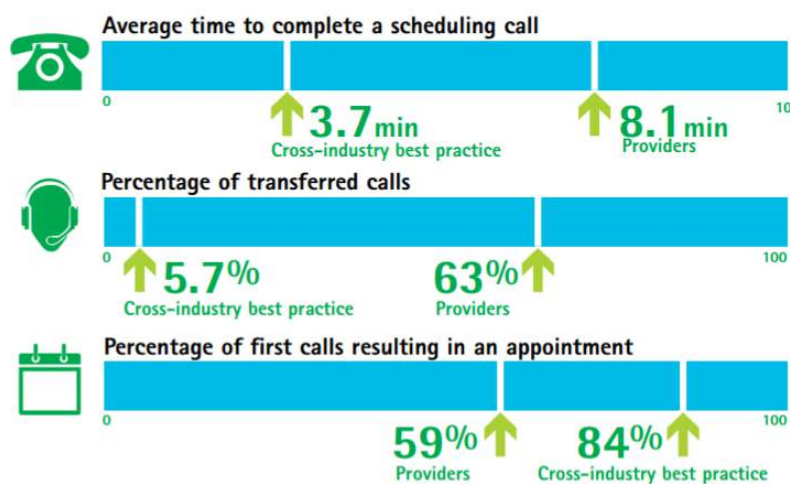
## The Digitization of Healthcare



Read article:

<http://www.itbriefcase.net/the-digitization-of-healthcare>

## Using healthcare IT to improve patient access



Source: How Patients Access the US Healthcare System, Accenture Research December 2013, and Benchmark Portal, All Industries Benchmark Report: Best-in-Class Call Center Performance, May 2013

Read article:

<https://www.accenture.com/us-en/insight-healthcare-providers-risking-patient-satisfaction-summary>

## Enhancing Clinical Practice with Wearables



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[https://www.accenture.com/t20160519T051015\\_w\\_/fi-en/\\_acnmedia/PDF-19/Accenture-Wearables-Health-PoV.pdf#zoom=50](https://www.accenture.com/t20160519T051015_w_/fi-en/_acnmedia/PDF-19/Accenture-Wearables-Health-PoV.pdf#zoom=50)

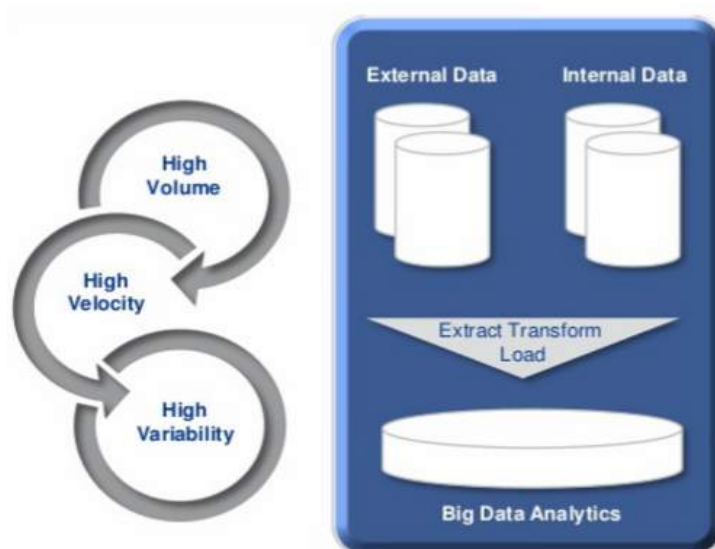
## The role of big data in medicine



Read article:

<http://www.mckinsey.com/industries/pharmaceuticals-and-medical-products/our-insights/the-role-of-big-data-in-medicine>

## Big Data In Healthcare



Overview presentation:

<http://www.slideshare.net/sanderklous/big-data-in-healthcare>

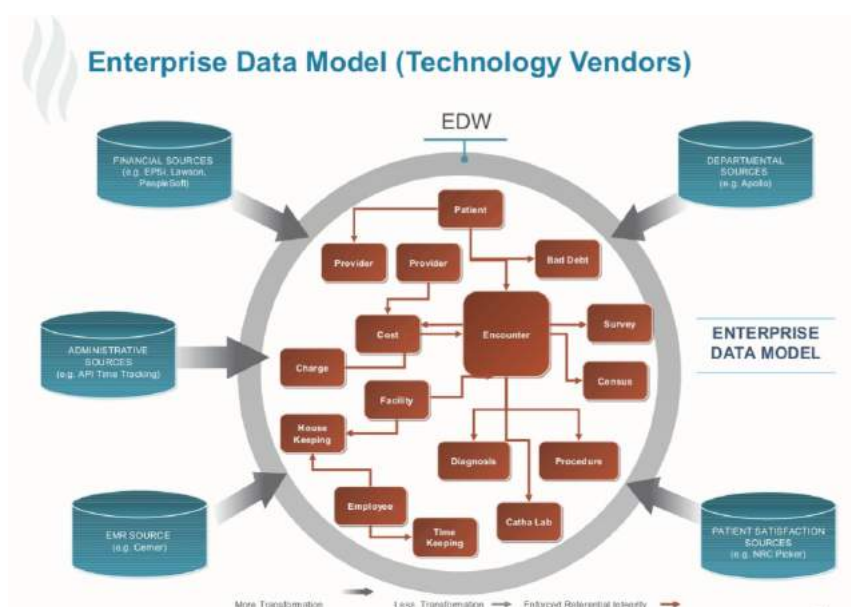
## Why Your Healthcare Business Intelligence Strategy Can't Win without a Data Warehouse



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<https://www.healthcatalyst.com/wp-content/uploads/2014/08/Why-Your-Healthcare-Business-Intelligence-Strategy-Can%E2%80%99t-Win-without-a-Data-Warehouse.pdf>

## What is the best Healthcare Data Warehouse Model for Your Organization?



Overview presentation:

[http://www.slideshare.net/healthcatalyst1/what-is-the-best-healthcare-data-warehouse-model-for-your-organization?next\\_slideshow=1](http://www.slideshare.net/healthcatalyst1/what-is-the-best-healthcare-data-warehouse-model-for-your-organization?next_slideshow=1)

## Open a world of cloud-based connected health care

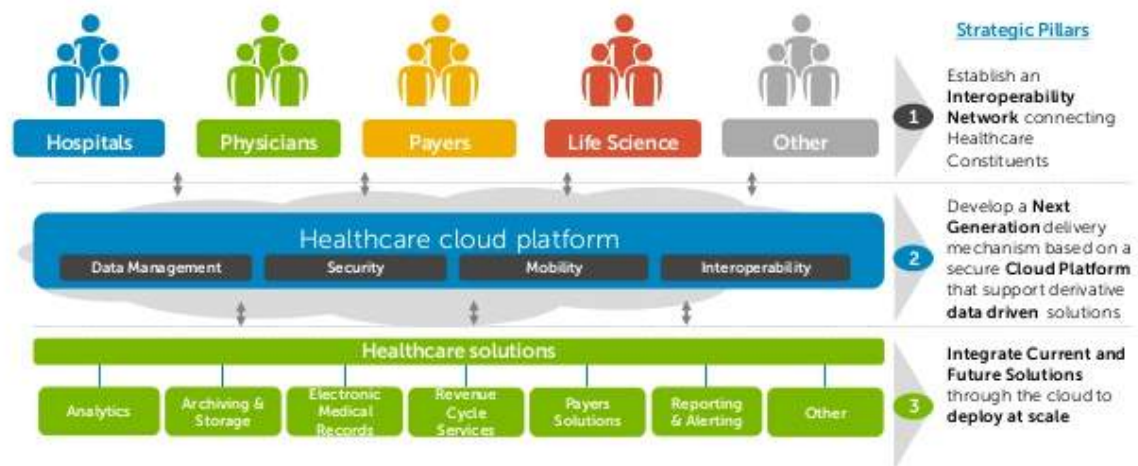


Read article:

<http://www.usa.philips.com/healthcare/innovation/about-health-suite>

## Building Future-Ready Healthcare IT Platforms: Get To The Cloud

### Dell cloud strategy for healthcare



Dell World 2013



Overview presentation:

<http://www.slideshare.net/DellWorld/building-futureready-healthcare-it-platforms-get-to-the-cloud>

## Hadoop in Healthcare - A No-Nonsense Q & A



Overview presentation:

<http://www.slideshare.net/healthcatalyst1/hadoop-in-healthcare-a-nononsense-q-and-a>

## Moving Healthcare Analytics to Hadoop to Build a Better Predictive Model

### Roadmap of building Dignity Health Insights Big Data Hub

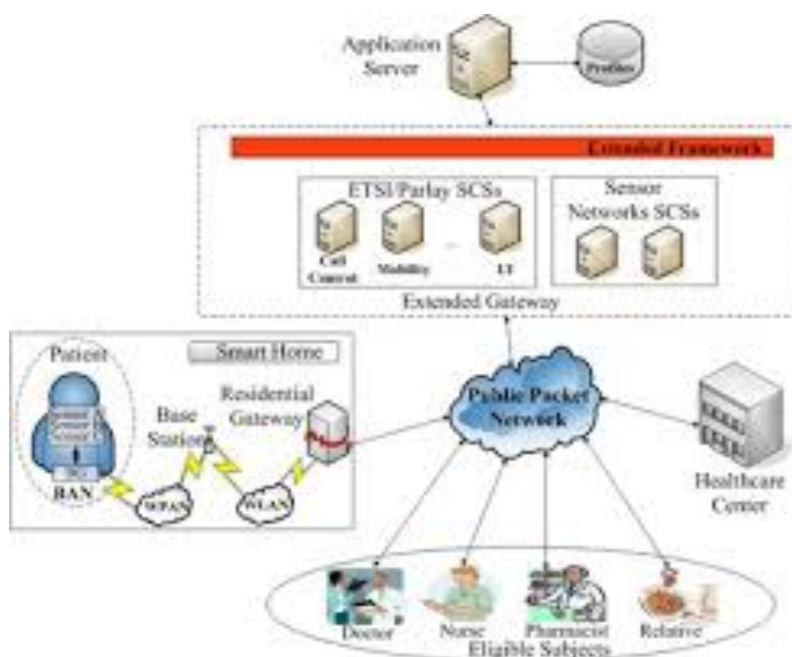


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Overview presentation:

[http://www.slideshare.net/Hadoop\\_Summit/moving-health-care-analytics-to-hadoop-to-build-a-better-predictive-model](http://www.slideshare.net/Hadoop_Summit/moving-health-care-analytics-to-hadoop-to-build-a-better-predictive-model)

## A New Framework Architecture for Next Generation e-Health Services



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## Exploring a methodology for eHealth indicator development

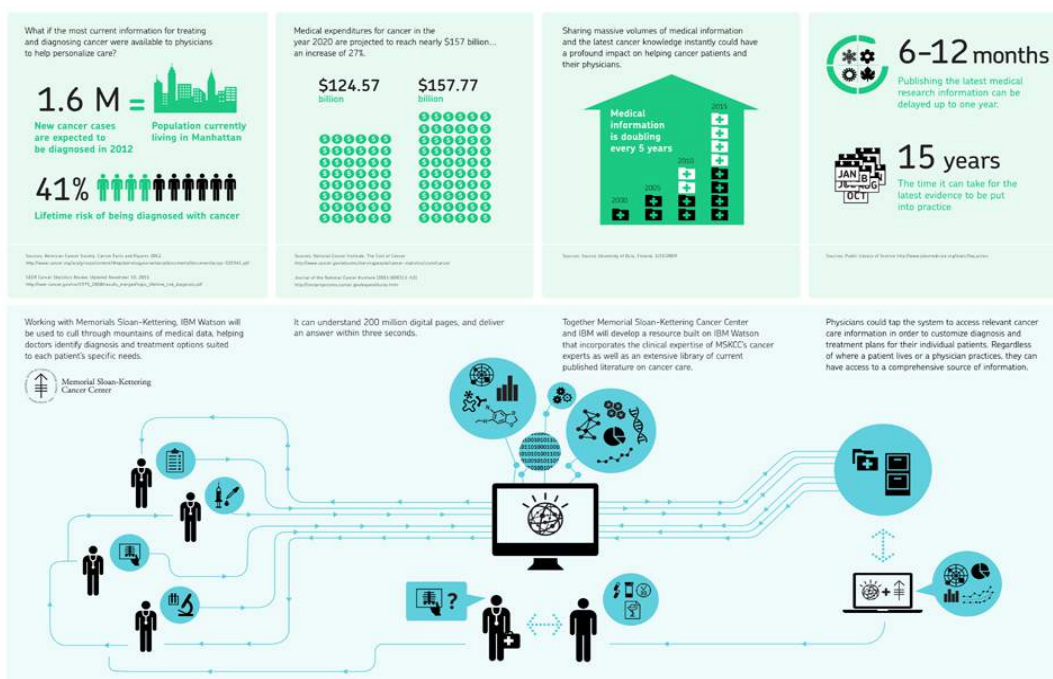
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## Applying Watson technology for personalized cancer care

### Memorial Sloan Kettering & IBM Watson: Advancing the Future of Personalized Cancer Care



Read article:

<http://www.kurzweilai.net/applying-watson-technology-for-personalized-cancer-care>

## Kone liittää hissinsä verkkoon - valvojana IBM Watson



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<http://www.kauppalehti.fi/uutiset/kone-liittaa-hissinsa-verkkoon---valvojana-ibm-watson/gwhmwRaL>

## HEALTHCARE DATA SECURITY

**Digital Trust. As healthcare data security risks increase, so do opportunities to earn consumer trust**



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<https://www.accenture.com/us-en/insight-digital-trust-digital-health>

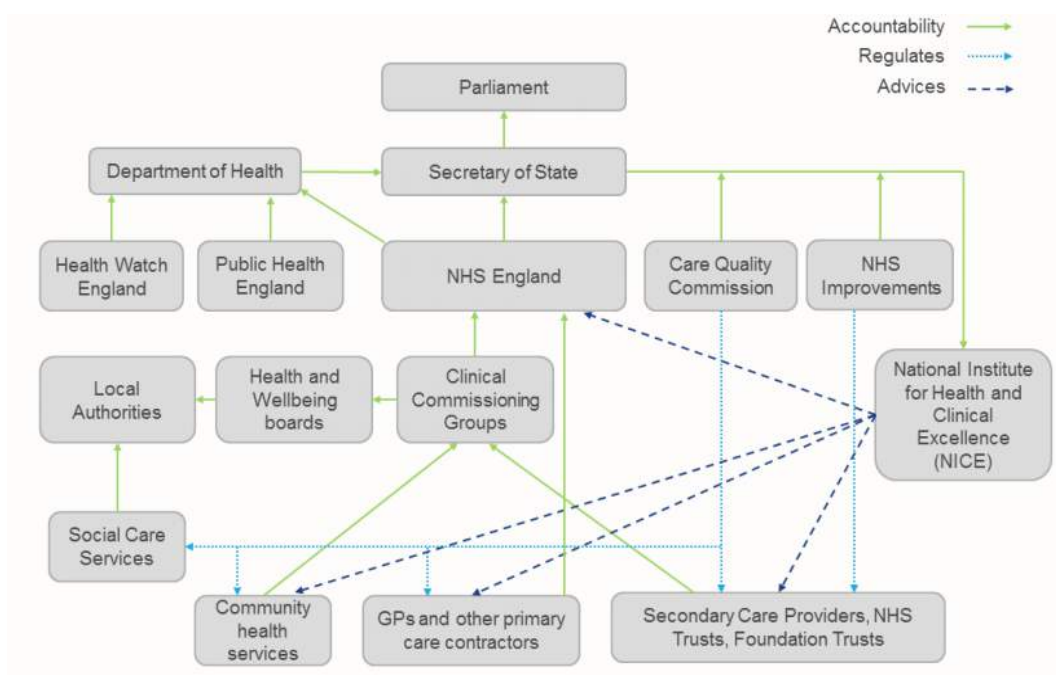
**Building trust using patient engagement and the wisdom of the crowd**



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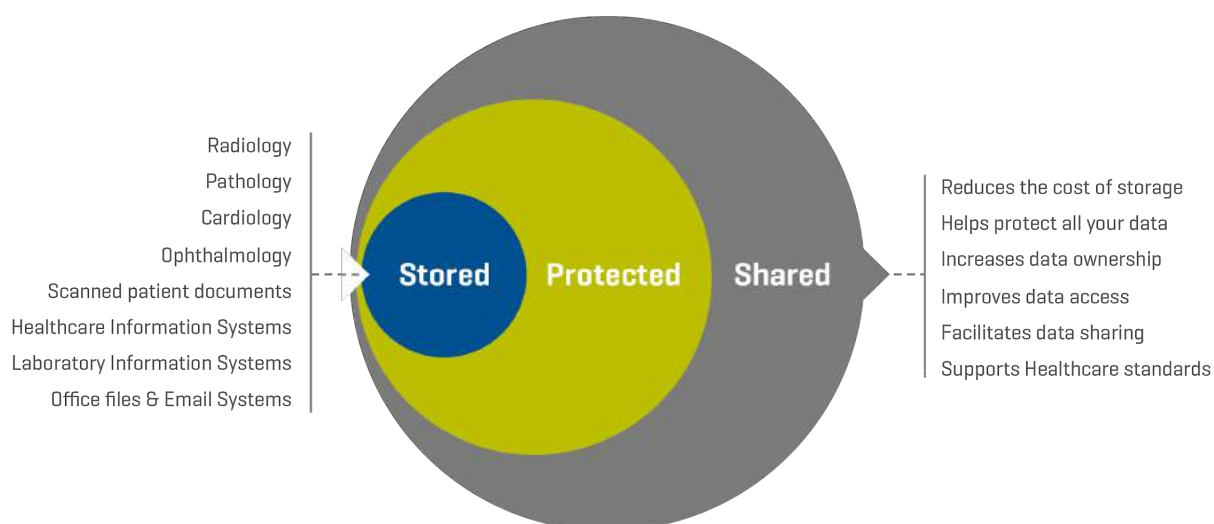
## International review. Secondary use of health and social care data and applicable legislation



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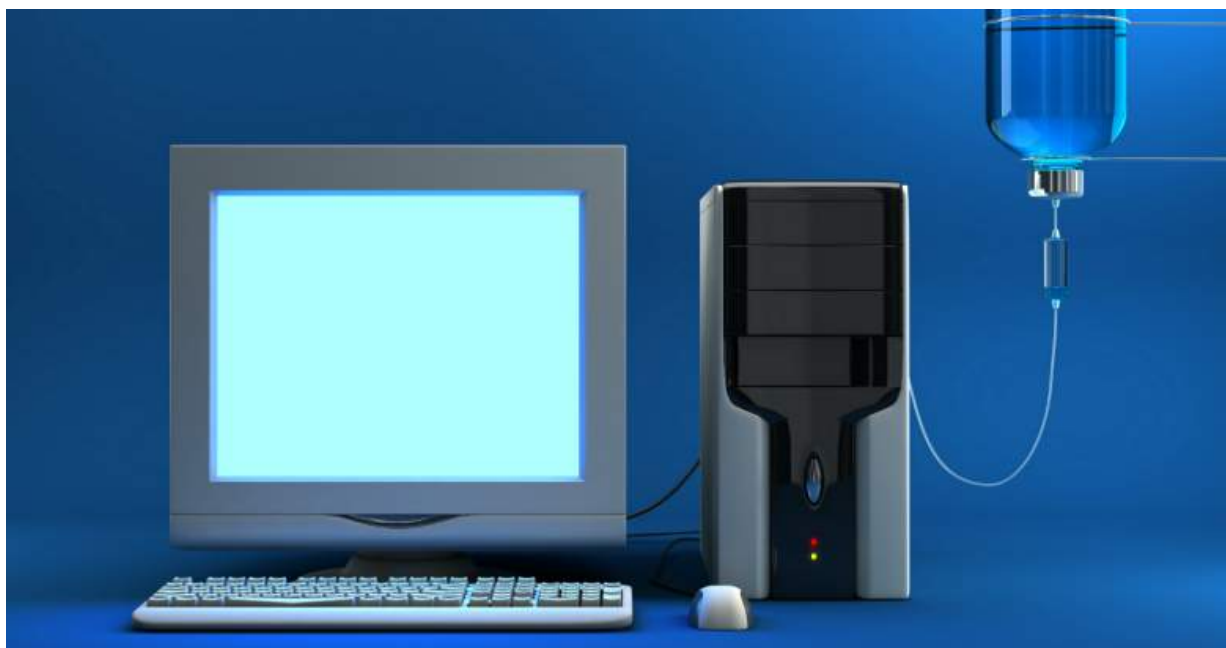
## ENTERPRISE DATA MANAGEMENT (EDM) SOLUTIONS



Read article:

<http://ccxmed.co.za/healthcare-data-management-solutions-hdm/>

## Why cybercriminals attack healthcare more than any other industry



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<https://nakedsecurity.sophos.com/2016/04/26/why-cybercriminals-attack-healthcare-more-than-any-other-industry/>

## A New Approach To Protecting Healthcare Data Security



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<http://www.healthcare-informatics.com/article/new-approach-protecting-healthcare-data-security>

## Key steps to big data security in healthcare

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<http://www.computerweekly.com/podcast/Key-steps-to-big-data-security-in-healthcare>

## 50 things to know about healthcare data security & privacy



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<http://www.beckershospitalreview.com/healthcare-information-technology/50-things-to-know-about-healthcare-data-security-privacy.html>

## Data security threat scars digital healthcare



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<http://www.ft.com/cms/s/2/ee688f1a-e622-11e5-a09b-1f8b0d268c39.html#axzz4AB2CCQmq>

## Electronic Health Records Security and Privacy Concerns



Read article:

<http://www.ironmountain.com/Knowledge-Center/Reference-Library/View-by-Document-Type/General-Articles/E/Electronic-Health-Records-Security-and-Privacy-Concerns.aspx>

## Fifth Annual Benchmark Study on Privacy & Security of Healthcare Data



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[http://media.scmagazine.com/documents/121/healthcare\\_privacy\\_security\\_be\\_30019.pdf](http://media.scmagazine.com/documents/121/healthcare_privacy_security_be_30019.pdf)



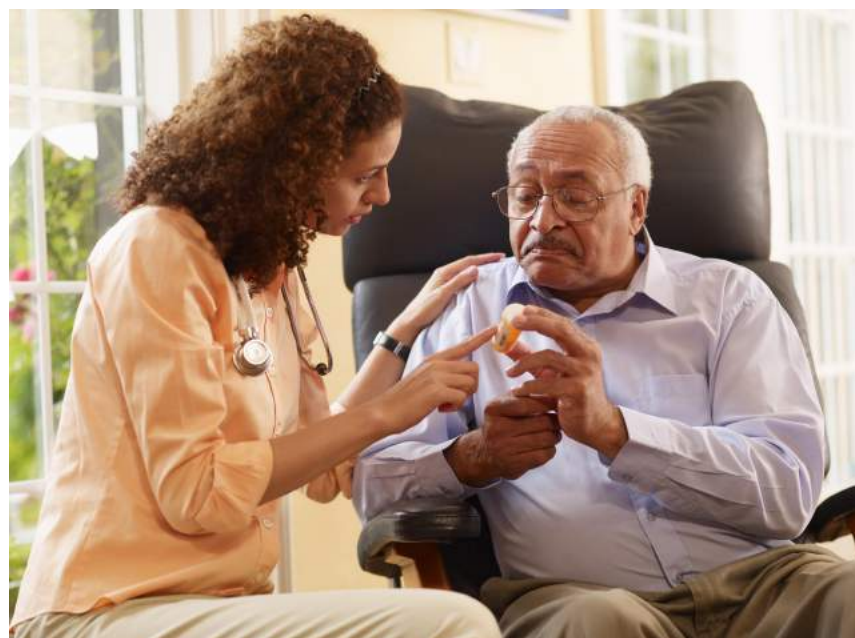
## What Digital Innovation in Healthcare Will Look Like



Read article:

<http://observer.com/2016/05/what-digital-innovation-in-healthcare-will-look-like/>

## Connected Health: 4 Trends Shaping The Future Of Digitized Healthcare



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<http://www.digitalistmag.com/digital-economy/2016/03/16/4-trends-shaping-future-of-digitized-healthcare-04080034>



## Big Data in Healthcare Made Simple: Where It Stands Today and Where It's Going



Overview presentation:

<http://www.slideshare.net/healthcatalyst1/big-data-in-healthcare-made-simple-where-it-stands-today-and-where-its-going>

## 2015 Health Plans Industry Outlook

**Deloitte.**  
**2015 HEALTH PLANS INDUSTRY OUTLOOK**  
 AN INTERVIEW WITH GREG SCOTT, U.S. HEALTH PLANS LEADER & VICE CHAIRMAN, DELOITTE LLP

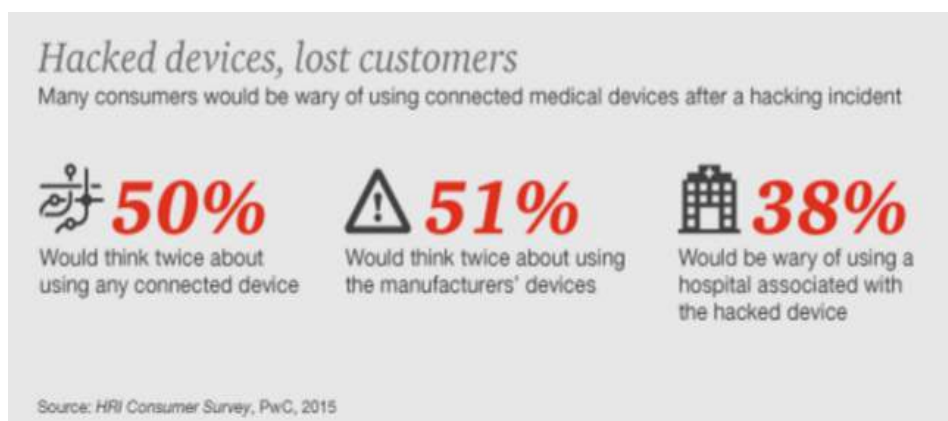
Read a copy of this interview at [www.deloitte.com/us/2015plansoutlook](http://www.deloitte.com/us/2015plansoutlook)

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<http://www2.deloitte.com/us/en/pages/life-sciences-and-health-care/articles/2015-health-plans-outlook.html>

## Top health industry issues of 2016



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## Healthcare and Life Sciences Predictions 2020



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<http://www2.deloitte.com/us/en/pages/life-sciences-and-health-care/articles/healthcare-and-life-sciences-predictions-2020.html>

## Global health 2035: a world converging within a generation



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## With 2 acquisitions, IBM builds out Watson Health



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<http://www.healthcareitnews.com/news/ibms-big-buy>

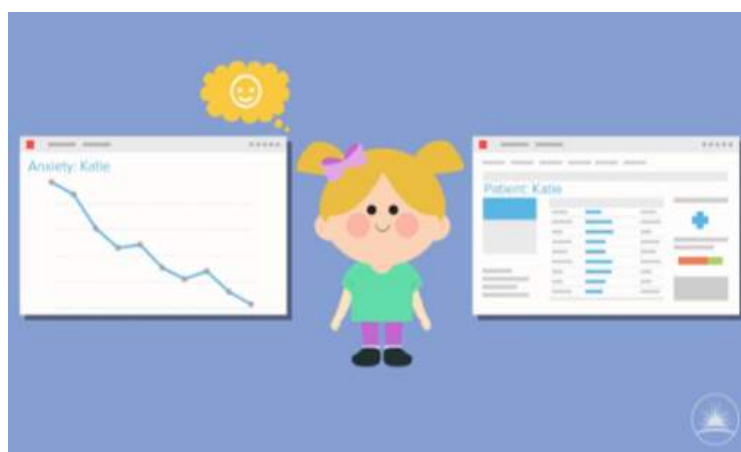
## IBM to Invest up to \$150M to Support Italian Research Hub



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<https://www.genomeweb.com/informatics/ibm-invest-150m-support-italian-research-hub>

## Alder Hey Children's Hospital Set to Become UK's First 'Cognitive' Hospital



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# Personalized Prevention: Harnessing Technology Catalysts for Change



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<http://insights.wired.com/profiles/blogs/personalized-prevention-harnessing-technology-catalysts-for#axzz49z8JuXJe>

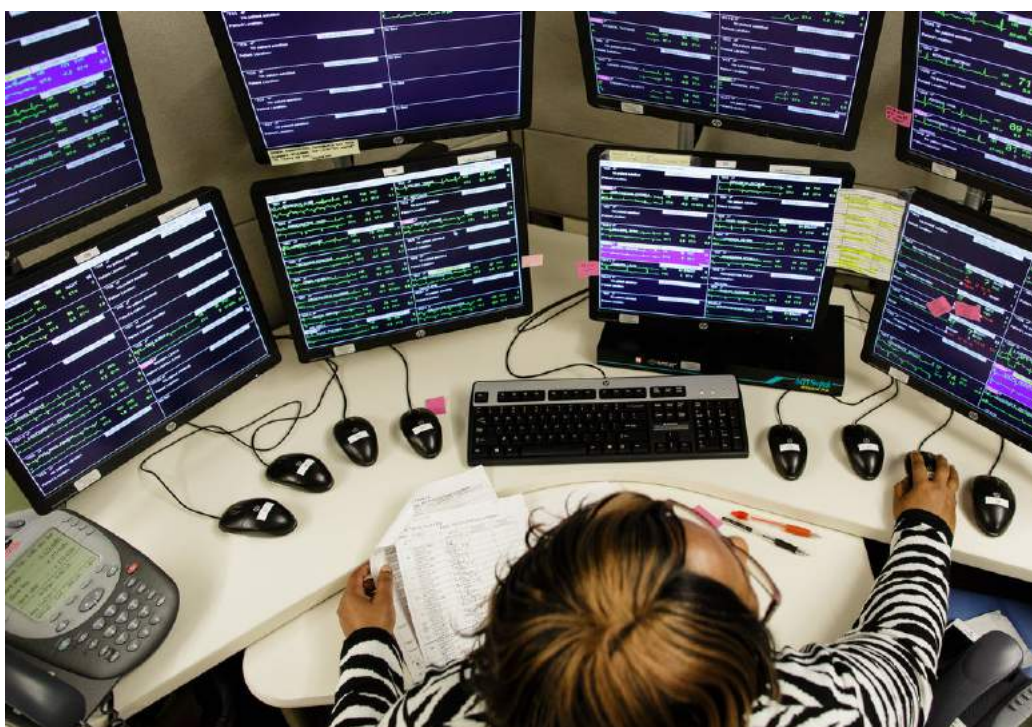
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<http://content.healthaffairs.org/content/32/2/376.full>

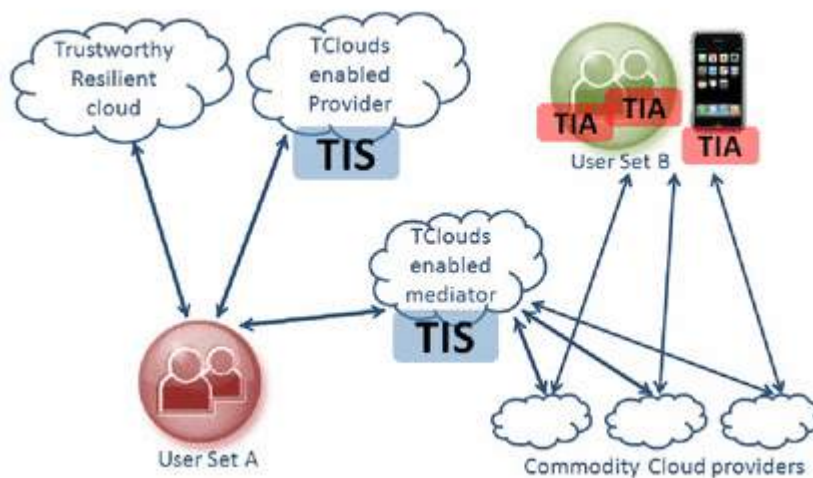
## Modern Doctors' House Calls: Skype Chat and Fast Diagnosis



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## Towards Trustworthy Health Platform Cloud



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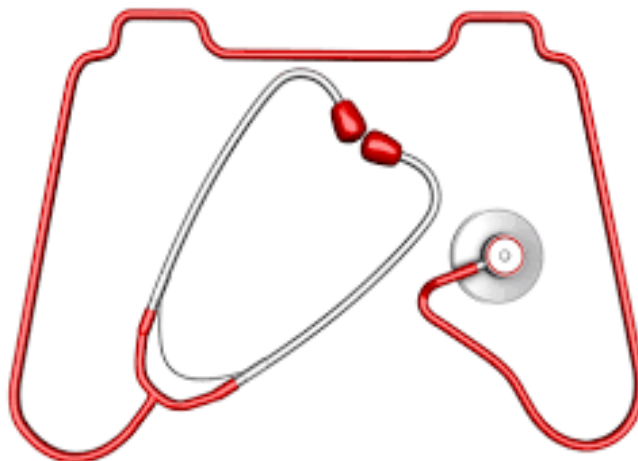
[http://link.springer.com/chapter/10.1007/978-3-642-32873-2\\_12](http://link.springer.com/chapter/10.1007/978-3-642-32873-2_12)

## Patient Engagement and Reported Outcomes in Surgical Recovery: Effectiveness of an e-Health Platform



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<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4307817/>



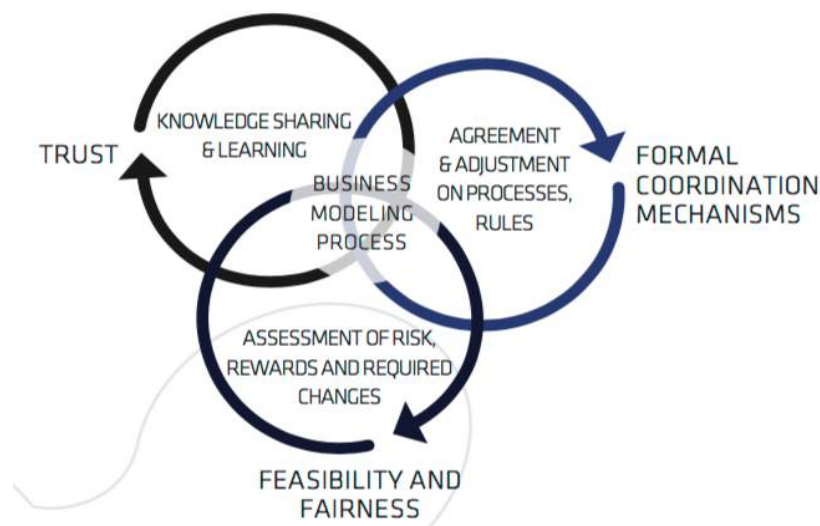
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### Human Factors in the Large: Experiences from Denmark, Finland and Canada in Moving Towards Regional and National Evaluations of Health Information System Usability.

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## Nordic EHealth Indicators: Organisation of Research, First Results and the Plan for the Future



### Nordic eHealth Indicators

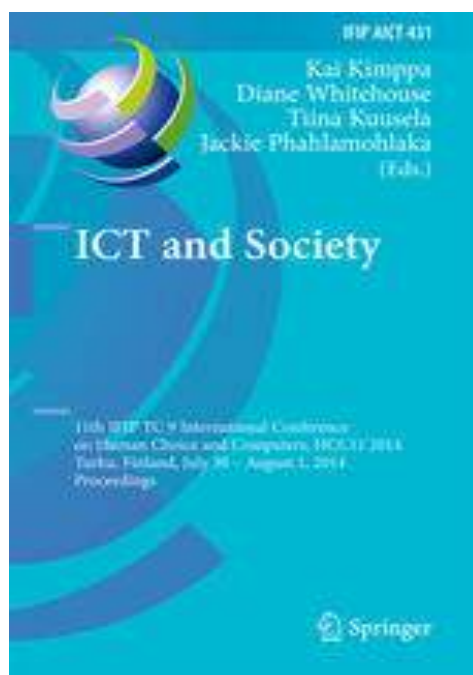
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## Problem in Patient Information System Acquirement in Finland: Translation and Terminology



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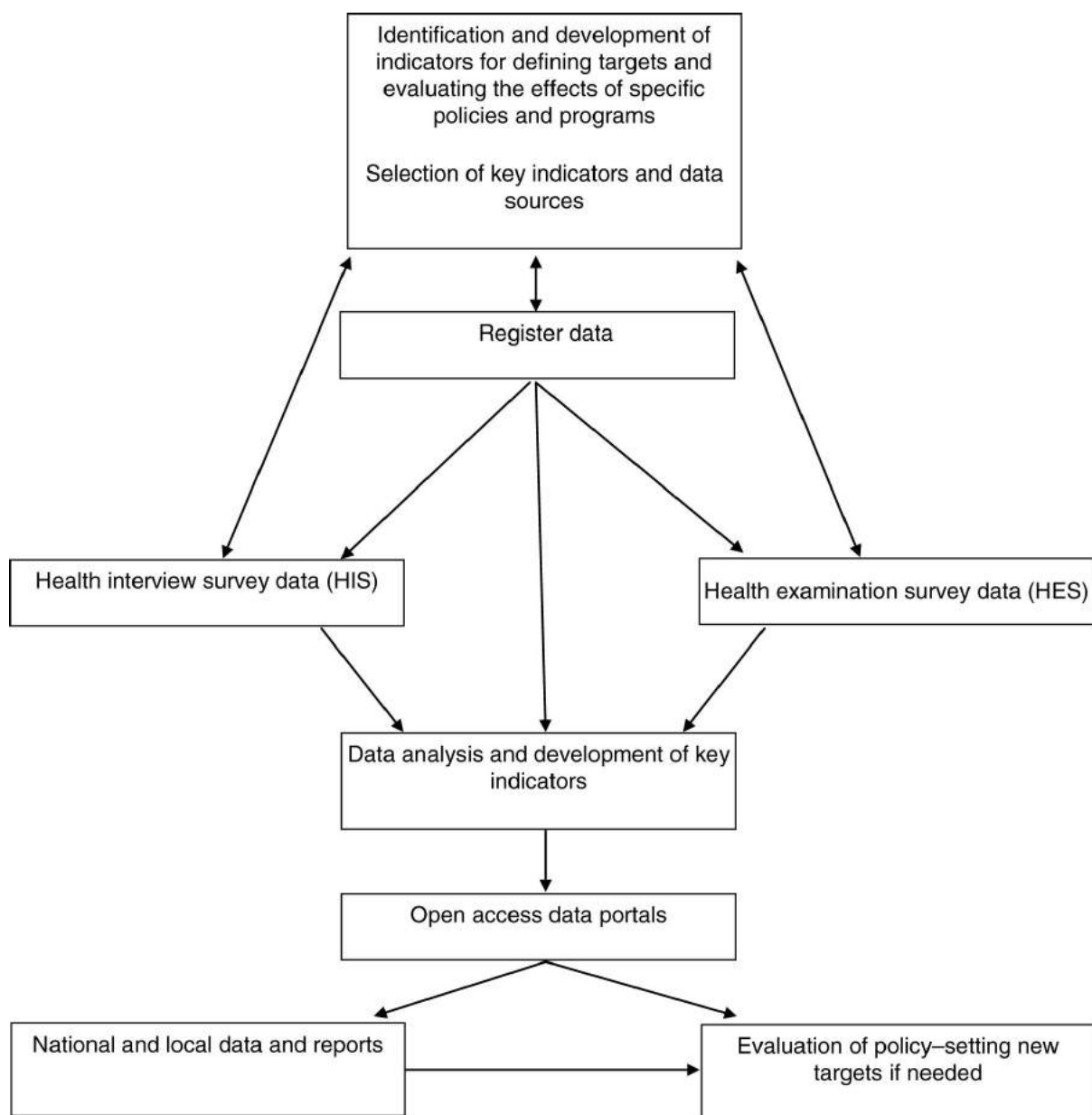
## Barriers to and advantages of e-health from the perspective of elderly people: A literature review

<p><b>Strengths</b></p> <ul style="list-style-type: none"> <li>• Positive attitude <sup>[8,9,10]</sup></li> <li>• More value attached to good health <sup>[4]</sup></li> <li>• Cost effective <sup>[,8,13]</sup></li> <li>• High penetration <sup>[11,15]</sup></li> <li>• Better education <sup>[8,9,10,11,12,13]</sup></li> </ul>	<p><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>• Lack of evidence-based research <sup>[12,15]</sup></li> <li>• Physical disability of the elderly <sup>[8,9]</sup></li> <li>• Quality of e-health <sup>[8,13]</sup></li> <li>• Lack of education <sup>[9,14,16]</sup></li> </ul>
<p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>• Better education <sup>[2, 23]</sup></li> <li>• Improvement of quality of study: more practical and evidence-based <sup>[24]</sup></li> <li>• Economic growth ( wealth) <sup>[2, 23]</sup></li> <li>• Rapid development of technology <sup>[12, 24]</sup></li> </ul>	<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>• Digital divide <sup>[11,14,16,]</sup></li> <li>• Complexity of rapid technology advances <sup>[16]</sup></li> <li>• Data privacy and protection <sup>[16]</sup></li> </ul>

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## Finnish experiences of health monitoring: local, regional, and national data sources for policy evaluation



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## Report on eHealth and eWelfare of Finland: Usability improvement necessary for health care digitalization to proceed

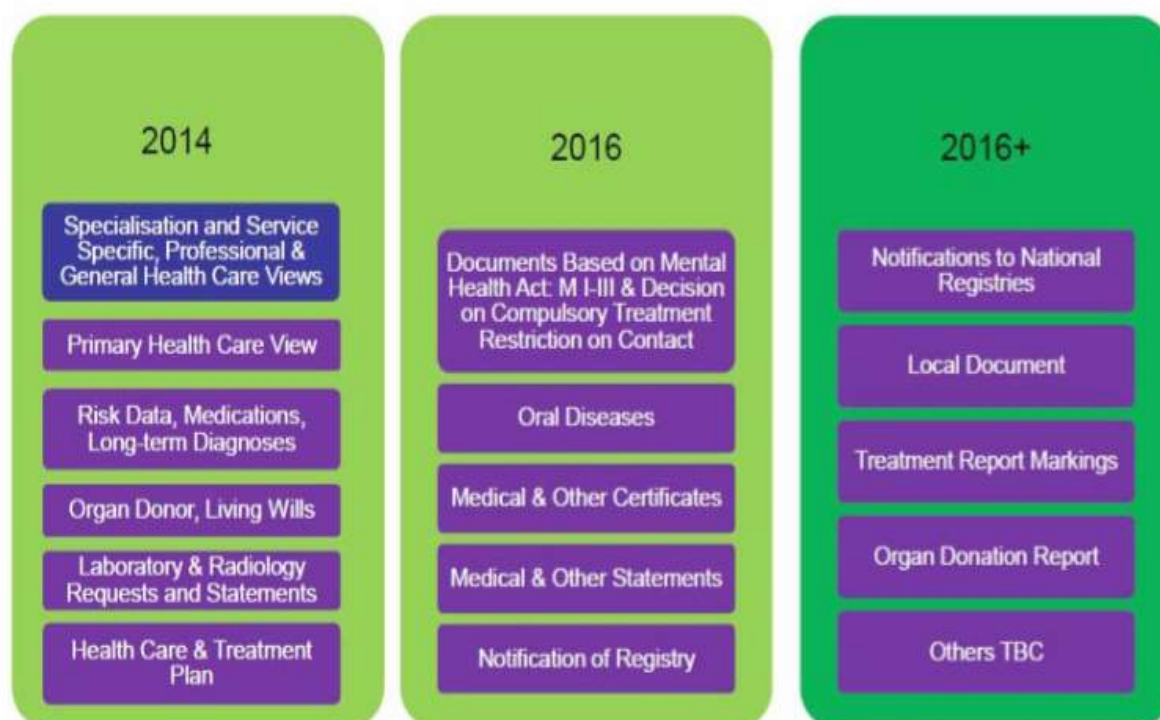


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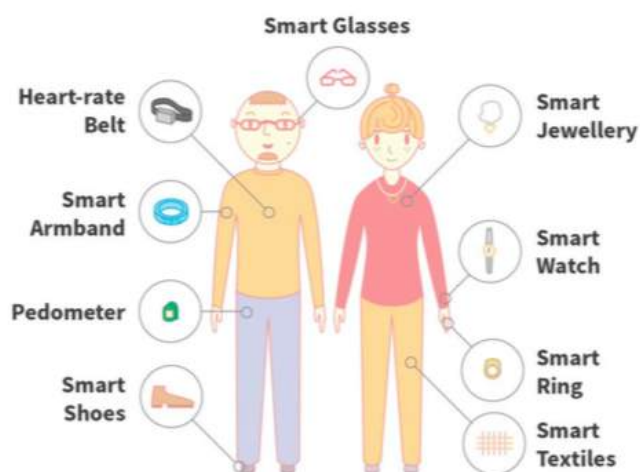
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## User experiences with different regional health information exchange systems in Finland

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## Charting Design Preferences on Wellness Wearables



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## Expanding choice of primary care in Finland: much debate but little change so far

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<http://finland.fi/business-innovation/oulu-leads-with-innovative-healthcare/>

## Towards data-driven healthcare in Finland

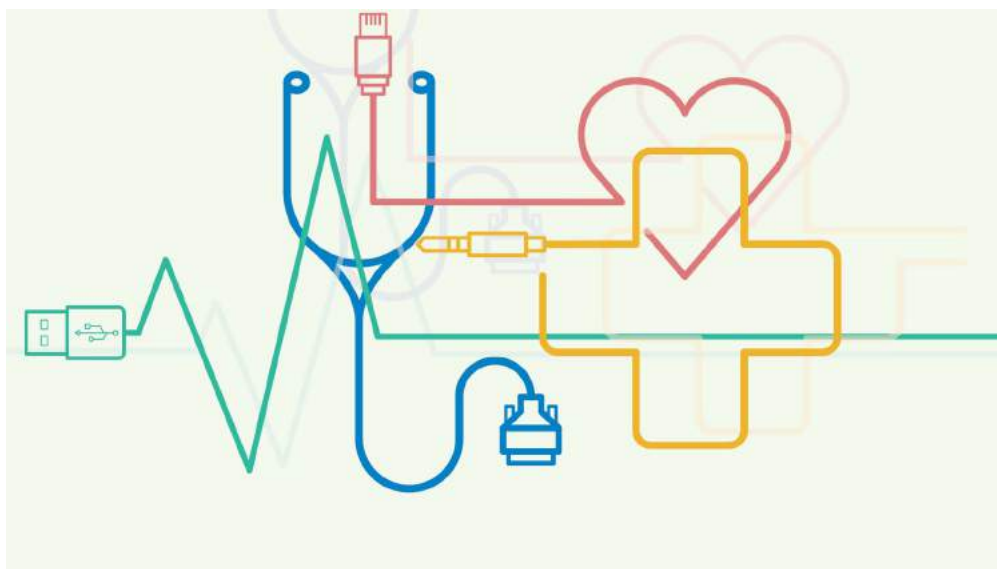


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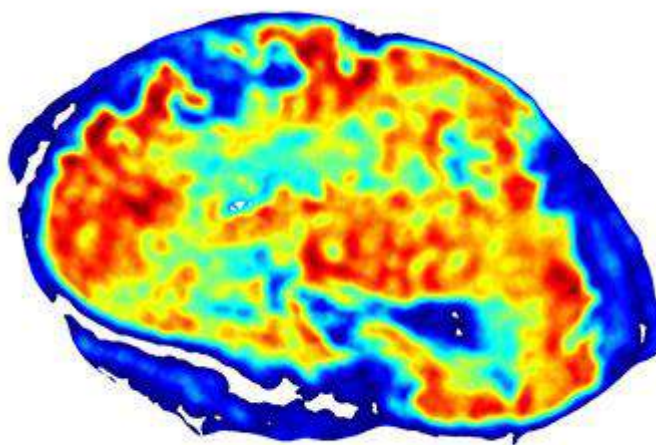
## Finland's future digital health stars showcase services in the USA



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## **Finland's strong health ecosystem and strengths in digital health attract investments and innovation collaboration**

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## **Investor's Perspective: Finnish Digital Health Ecosystem – The Next Big Thing?**



Read article:

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