

HEALTHCARE IN THE CLOUD

Baldur Johnsen, Director
Healthcare Provider Product Management
Office of Strategy & Technology
HP Business Solutions Organization



FORWARD-LOOKING STATEMENTS

This document contains forward looking statements regarding future operations, product development, product capabilities and availability dates. This information is subject to substantial uncertainties and is subject to change at any time without prior notification. Statements contained in this document concerning these matters only reflect Hewlett Packard's predictions and / or expectations as of the date of this document and actual results and future plans of Hewlett-Packard may differ significantly as a result of, among other things, changes in product strategy resulting from technological, internal corporate, market and other changes. This is not a commitment to deliver any material, code or functionality and should not be relied upon in making purchasing decisions.



One of the World's Largest Healthcare IT Companies

HP's broad product portfolio is integrated into...and has IP, service offerings and extensive delivery capabilities across industry segments

...active industry participation since 1961



Health Plans

HP services enable key plan-specific solutions

- Healthcare administration and claims processing software & services
- Eligibility & human services offerings
- Medical informatics, care management, & decision support services
- IT infrastructure & application services

Life Sciences

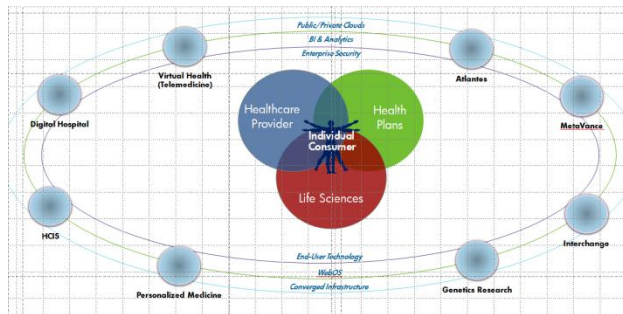
HP products are key to pharma & life sciences product development

- Product tracking & authentication
- Modeling and simulation tools
- Product lifecycle management
- Digital Discovery and Development (SOA)

Providers

HP software & hardware is core to creating provider based solutions

- Digital hospital
- Electronic health records
- Care Management
- Medical archiving
- Health Care Information System



MAJOR TRENDS & DIRECTIONS



3 Global Mega Trends





70%

The increase in real health
spending per capita in the
OECD countries since 1990

Source: OECD



19%

The average proportion of time
a nurse spends on direct patient
care on the active nursing part
of a shift

Source: The Permanente Journal Summer 2008: 'A 36-Hospital Time and Motion Study: How Do Medical-Surgical Nurses Spend Their Time?'



1 year

Increase in life expectancy
every four years since 1990 in
the OECD countries

Source: OECD



60%

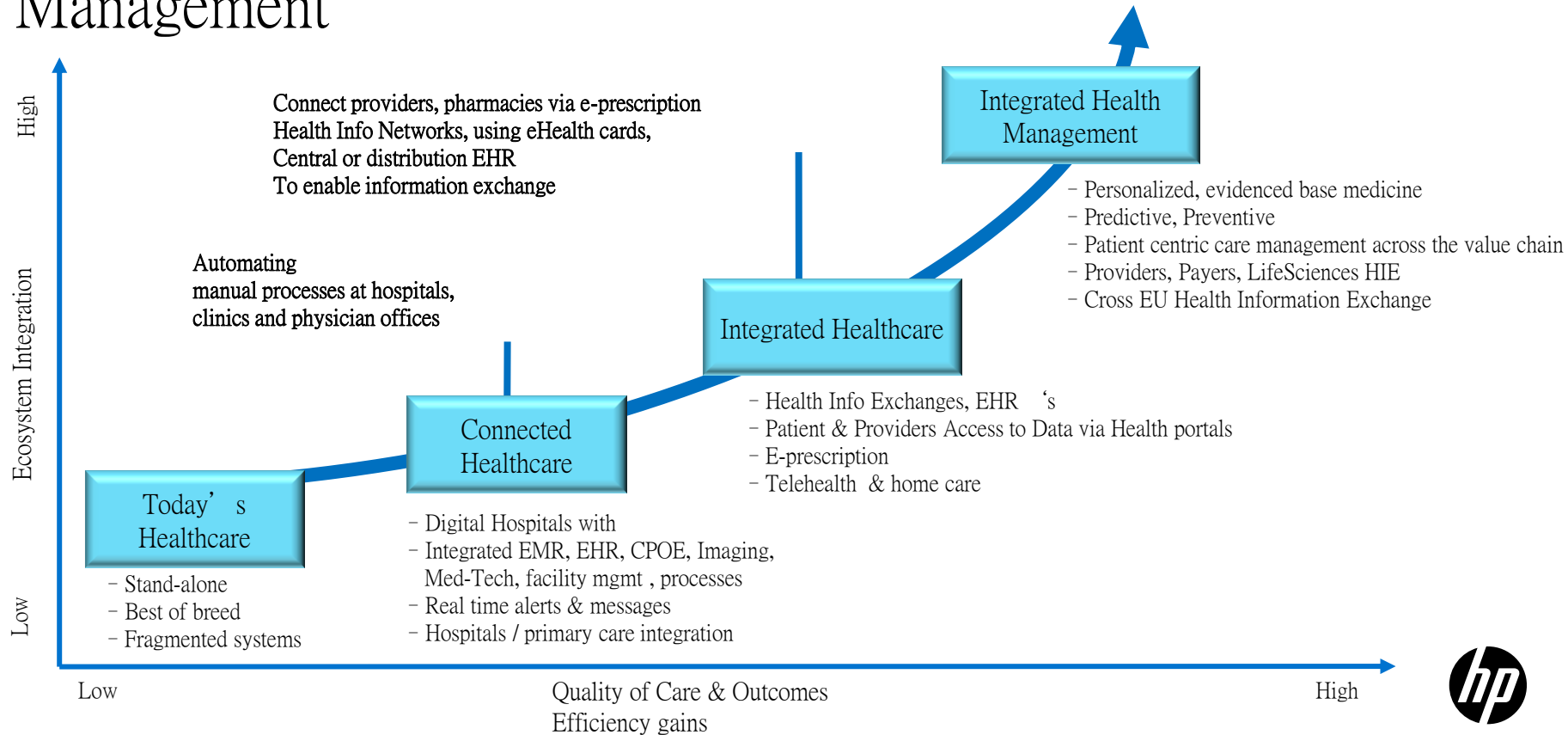
The World's Disease Burden
carried by Chronic Diseases

Source: World Health Organization

*HP'S POINT OF VIEW &
SOLUTION PORTFOLIO*

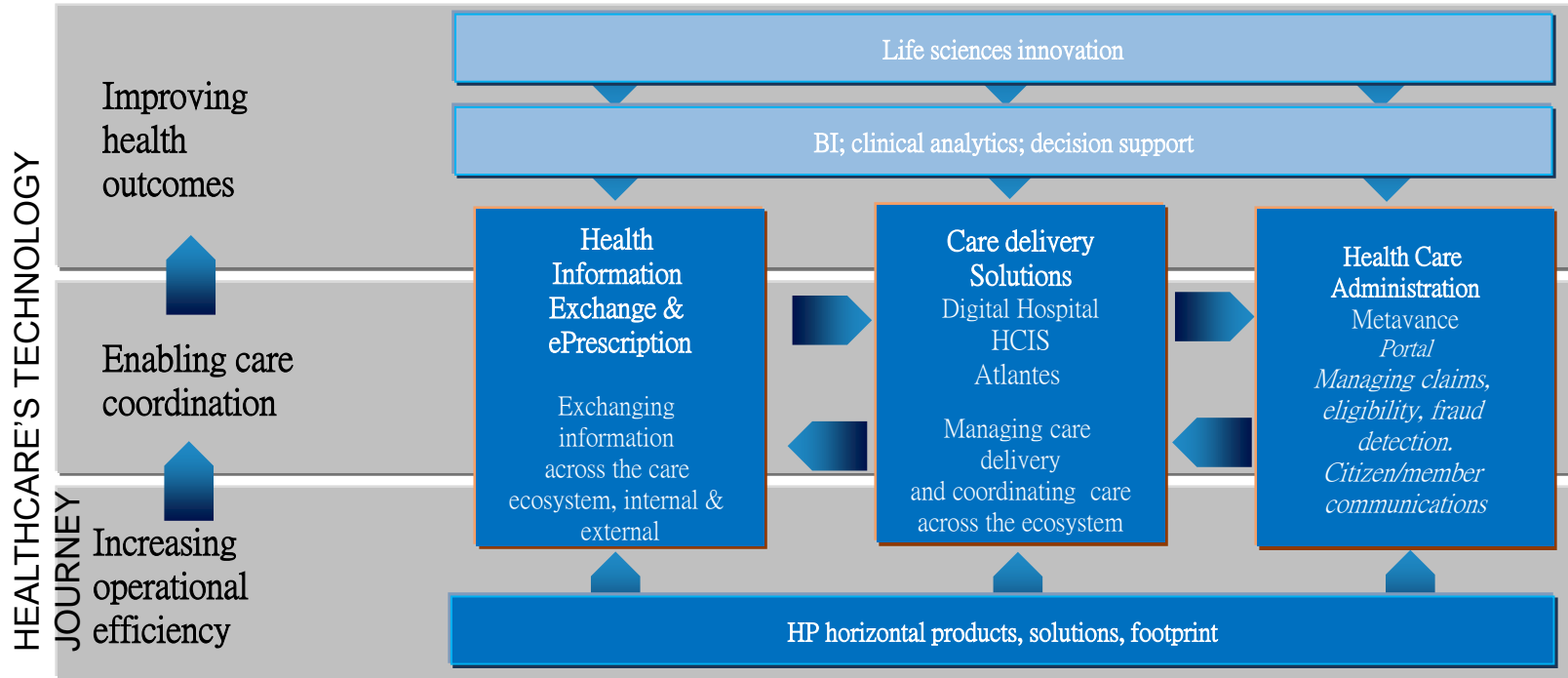


From Healthcare (“Sickcare”) to Integrated Health Management



HP's Healthcare Solutions Portfolio

HP's portfolio of industry software, solutions and intellectual capital represent the enabling technologies required to build and support an integrated care delivery system... the building blocks in transforming business and health outcomes.



HEALTHCARE CLOUD



Key technology trends

Major shifts across the technology industry occurring

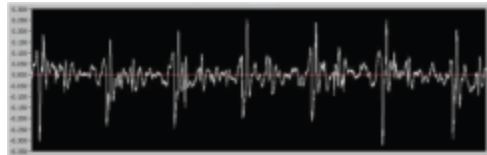
New forms of computing

- Mobile
- The Cloud – EaaS
- Pervasive/Ubiquitous Computing

Consumer Driving Enterprise

Connectivity

- Sensors – Richter 1000x more sensitive



HP Richter



A Brief Cloud Primer

Cloud Definition - *US Federal Government*

Definition

- Cloud computing is a pay-per-use model for enabling available, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, services) that can be rapidly provisioned and released with minimal management effort or service provider interaction. This cloud model promotes availability and is comprised of five **key characteristics**, three **delivery models**, and four **deployment models**.

Key Characteristics

- On-demand self-service
- Ubiquitous network access
- Resource pooling
- Rapid elasticity
- Homogeneity
- Location independence
- Measured service
- Multi-tenancy



A Brief Cloud Primer

Service Delivery Concepts



- Everything as a Service
- Software as a Service
- Platform as a Service
- Infrastructure as a Service

A Brief Cloud Primer

4 Deployment Models

Private Cloud

- Enterprise owned or leased

Community Cloud

- Shared infrastructure for specific community

Public Cloud

- Sold to the public, mega-scale infrastructure

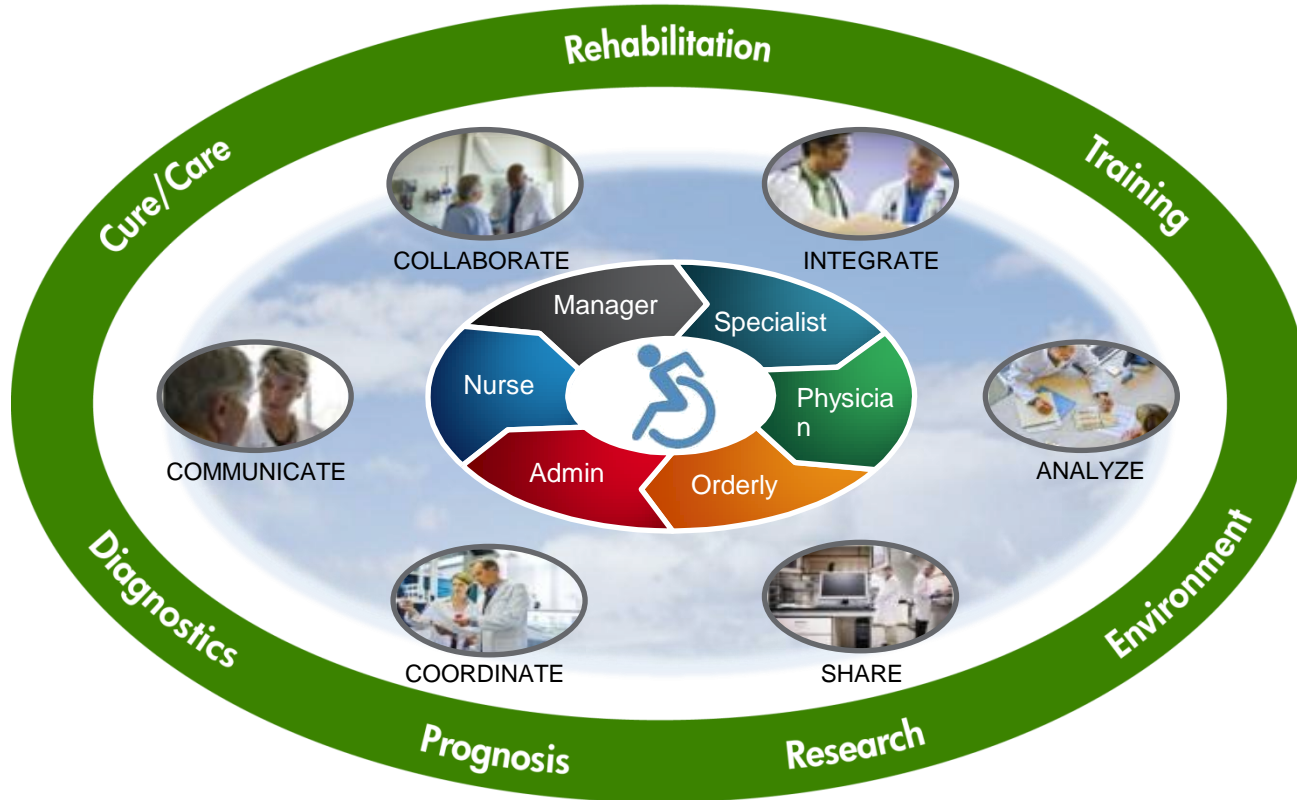
Hybrid Cloud

- Composition of two or more clouds



Cloud Impact: Enabling Care Ecosystem Integration

New computing models supporting ubiquitous adoption & accelerating benefits



Impediments to Cloud adoption



Risks



Technology



Transparency



Global Authentication Service

Improving Health in the Cloud



A patient texts a code from the prescription drug package to a designated phone number.

mPedigree works with pharmaceutical companies to print a unique code on each package of drugs. When a patient texts a code, it is checked against the authentic codes stored in HP's secure cloud.

The patient receives an immediate SMS reply indicating whether the drugs are real or counterfeit.

Working with nonprofit mPedigree to combat counterfeit drugs



Key take-aways

Healthcare services are in a dire need of a paradigm shift in terms of providing care more efficiently; current course and speed is unsustainable

Applying technology in innovative ways to enhance operational efficiency, enabling care coordination and improving patient outcomes is achievable

The Cloud can bring significant economic benefits and accelerate the formation and effective organization of integrated health delivery systems

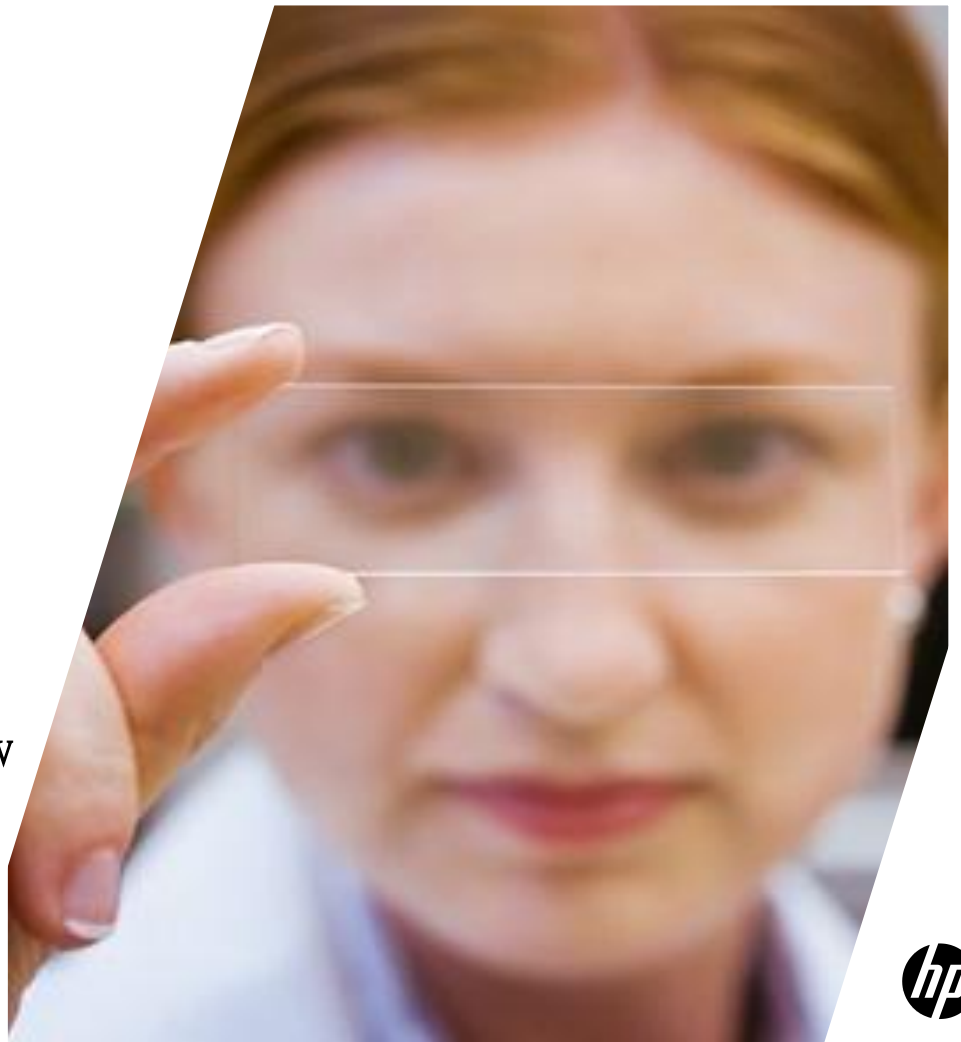
I invite you to discuss this topic further with Hewlett-Packard



Finally

“The reasonable man adapts himself to the world: the unreasonable one persists in trying to adapt the world to himself. Therefore all progress depends on the unreasonable man.”

George Bernard Shaw
“Man and Superman”



THANK YOU





THE **INSTANT-ON**
ENTERPRISE IS HERE.