

Strategic use of IT in health sector

Dr Octavian Purcarea
Worldwide Health Team
Microsoft Corporation





Agenda

Improving Efficiency in your Health Organization

Microsoft in Health

Chronic Disease is a Growing Problem

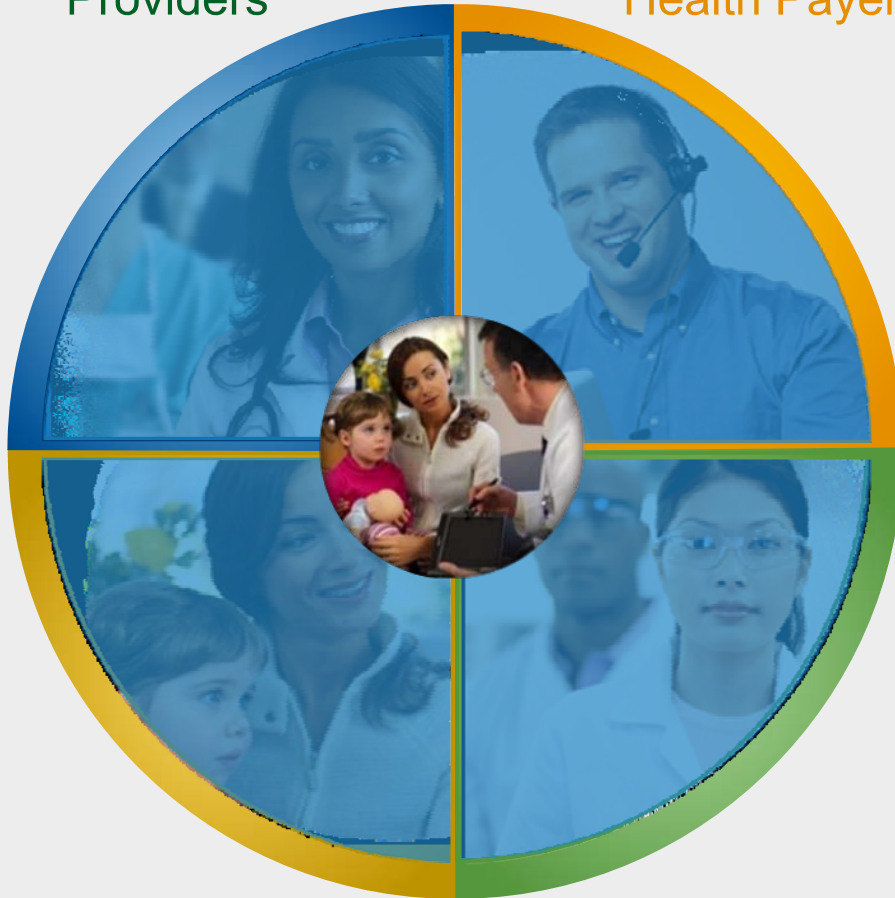
Microsoft Health & Wellness Solutions

A Complete Solution for Proactive Care

A Challenging World

Providers

Health Payers



Public Health

Life Sciences

Consumerism and Empowerment

Aging population

Increasing citizen expectations

Skilled labor shortage

Increasing regulations

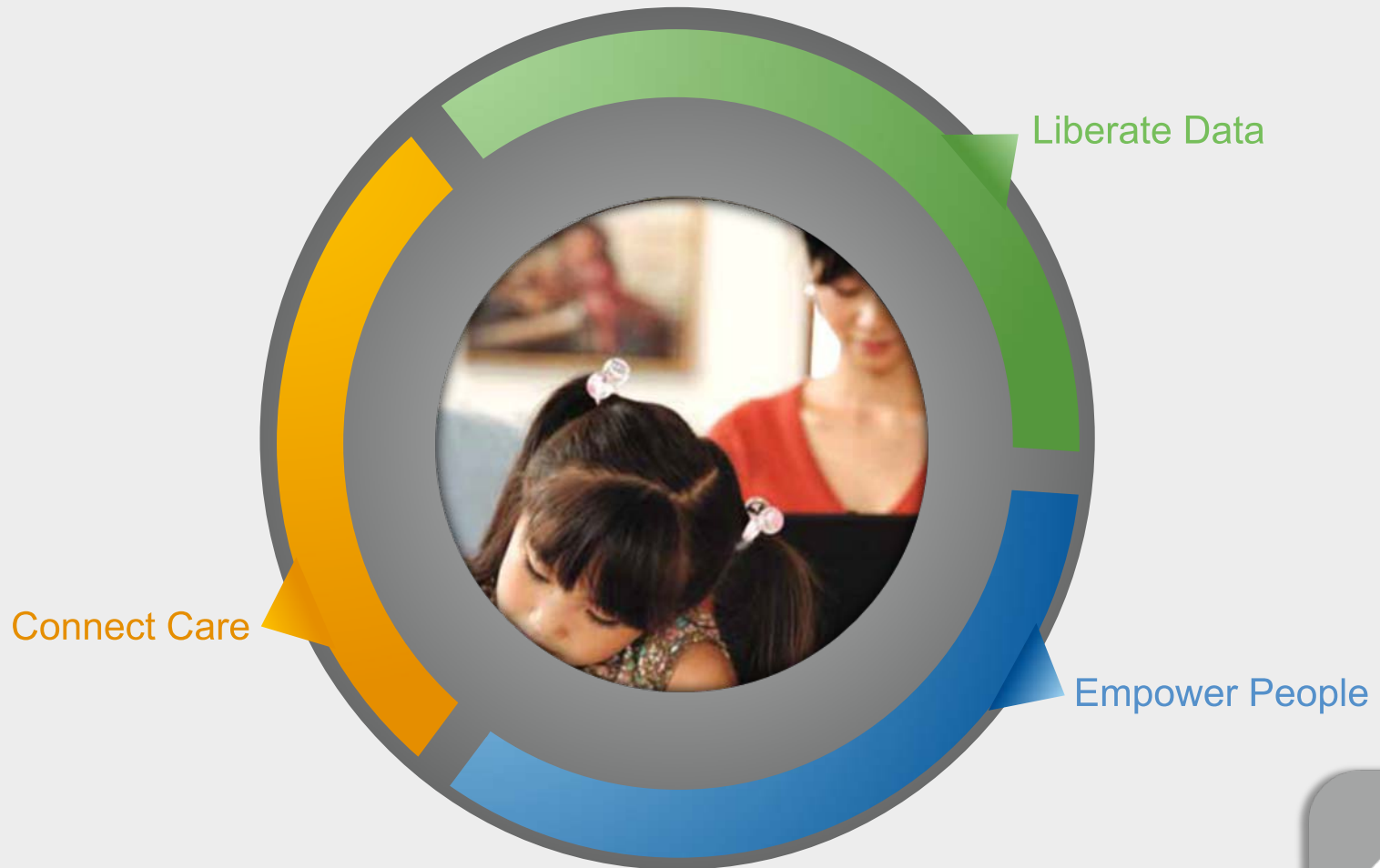
Increased worldwide competition

Growing middle class

Increasing burden of chronic disease

A Step by Step Approach

Achieve more with less effort



Aligned with Customer Priorities

Improve Health
& Wellness



Improve
Organizational
Efficiency



Optimize ICT
Investments



Transforming Health Delivery



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Chronic Disease is Expensive

“...adoption of systems for prevention and early diagnosis of such diseases by 10% of the European population could prevent more than 100,000 early deaths and save more than €20bn annually.”

- 2005 Organisation For Economic
Co-Operation and Development (OECD)



Barack Obama, President, United States of America

An Individuals' Revolution Leads to New Expectations in Care

Fitness Programs

Personal online health services

Fitness Gadgets & Logging Apps



BABY BOOT CAMP'S MOTHER LOVE FITN

myNYP.org YOUR PERSONAL HEALTH CONNECTION TO **NewYork-Presbyterian** [SIGN IN](#)

Welcome
This web site is a free service that lets you safely:
Store all of your health information online.
Share it with trusted family members and clinicians.
Learn about important health issues that affect you and your family.

[REGISTER NOW](#) | Already have an account? [Sign in](#)

Learn about cardiac health
Find out more about the tests, treatments, and instructions that affect you and your cardiac health. [Read more](#)

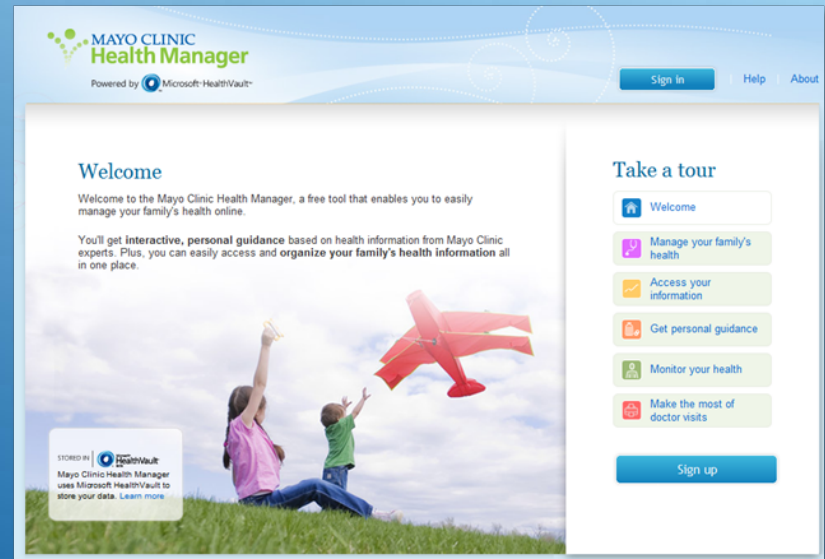
Access medical records
See your medical visit details from NewYork-Presbyterian, stored in security-enhanced HealthVault. [Register now](#)

Plan for recovery
Learn how to get better and stay better with detailed recovery guides designed to keep you informed and healthy. [View recovery guide](#)

POWERED BY **HealthVault** myNYP.org uses Microsoft® HealthVault™ to store your data. [Learn more](#)

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Columbia University College of Physicians and Surgeons | Weill Cornell Medical College



MAYO CLINIC Health Manager
Powered by **Microsoft HealthVault** [Sign in](#) | [Help](#) | [About](#)

Welcome
Welcome to the Mayo Clinic Health Manager, a free tool that enables you to easily manage your family's health online.

You'll get **interactive, personal guidance** based on health information from Mayo Clinic experts. Plus, you can easily access and **organize your family's health information** all in one place.

Take a tour

- Welcome
- Manage your family's health
- Access your information
- Get personal guidance
- Monitor your health
- Make the most of doctor visits

[Sign up](#)

POWERED BY **HealthVault** Mayo Clinic Health Manager uses Microsoft HealthVault to store your data. [Learn more](#)



A Fundamental Change is Underway

Reactive



Decrease Number of Incidents & Severity

Greater Control of Costs

Happier, Healthier Patients

Increased Employee & Clinician Satisfaction



Proactive

“Moving towards health for all requires that health systems respond to the challenges of a changing world and growing expectations for better performance.”

The World Health Report, 2008, “Primary Health Care - Now More Than Ever”



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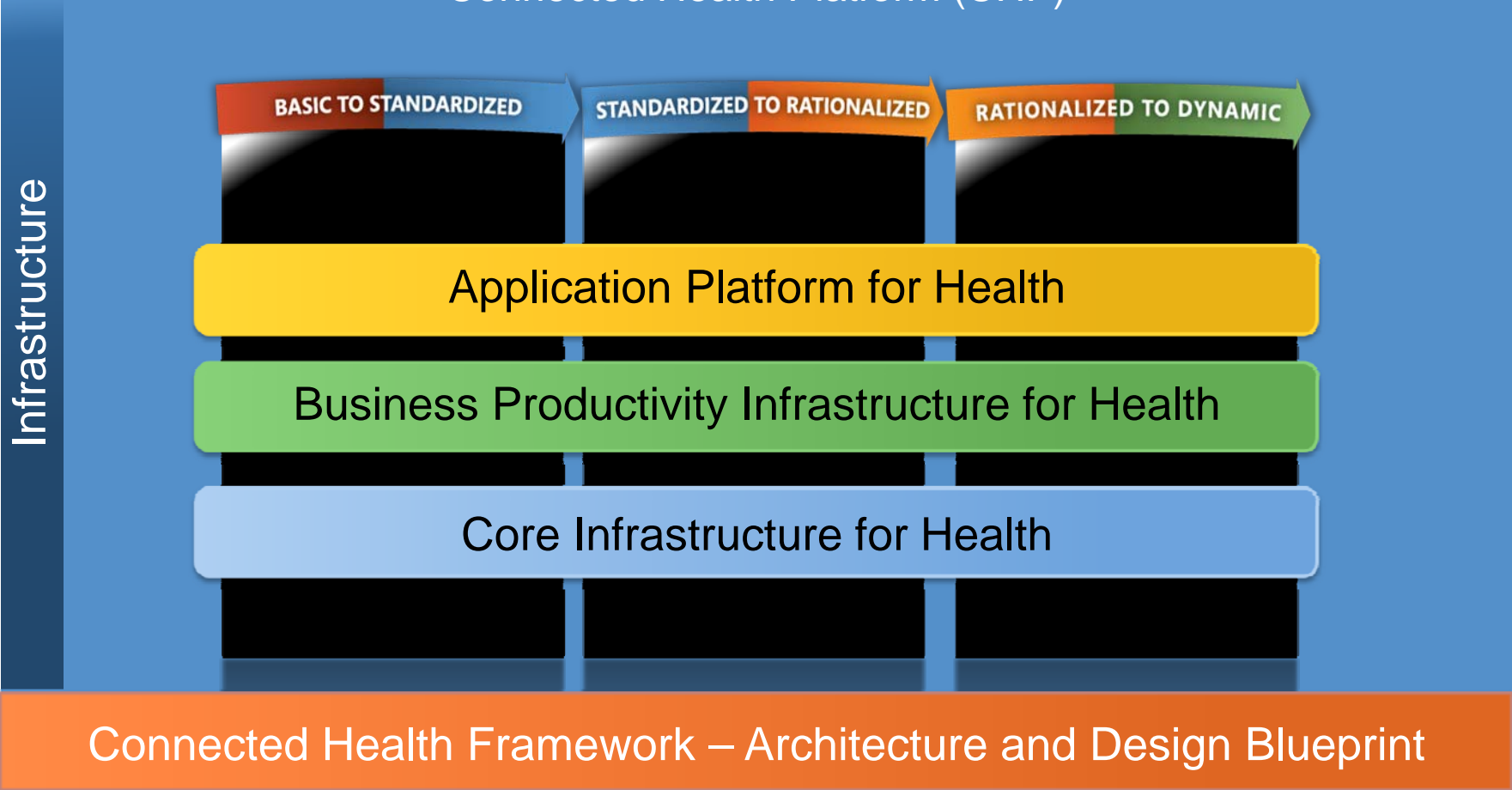
Microsoft Health & Wellness Solutions

A Complete Solution for Proactive Care

The Foundation

Microsoft Connected Health Platform

Connected Health Platform (CHP)



CHP provides prescriptive guidance, tools and solution accelerators

Microsoft

Microsoft Health & Wellness Solutions

A Step-by-Step Approach to Proactive Care

Personal Health & Wellness

Condition Management

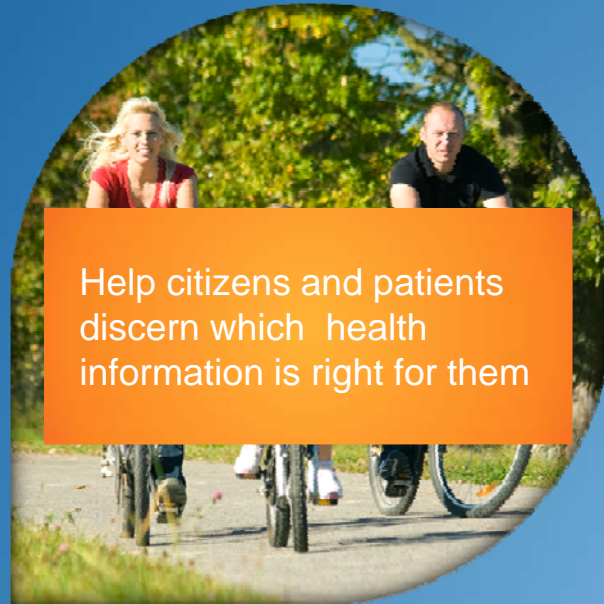
Population Health Intelligence

- Identify high risk populations to provide targeted programs
- Shift from reactive healthcare to proactive health & wellness
- Reduce incidence & severity of illness to improve health & lower costs
- Gain happier Patients & Clinicians

Personal Health & Wellness

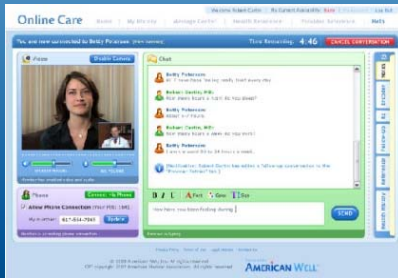


What is on your mind?



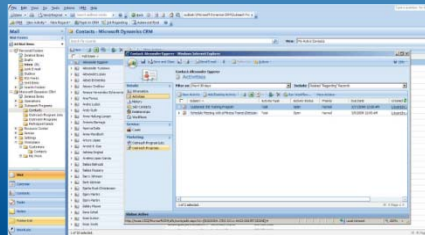
Help citizens and patients discern which health information is right for them

Personal Health & Wellness



Patient and Client Portals

Provide patients/clients consolidated access to accurate, preventive health information through a single, unified view



Health Outreach Solutions

Enhance market perception & increase satisfaction, by delivering tailored health information to patients & citizens



Personal Health Solutions

Allow individuals to collect, store, and share health information critical to their family's well being

Personal Health & Wellness



Patient and Client Portal Solutions



A single location where users can find, collect and share needed, relevant information:

- Vetted health information, convenient tools and services
- Medical records, lab results, care plans, medical images



Personal Health & Wellness



Personal Health Solutions



Consumers can:

- Store health information from many sources
- Access a range of health and fitness apps
- Upload data from health and fitness devices
- Share health information with those they trust.



Personal Health & Wellness



New Portal Gives New Zealand Healthcare a Booster Shot



Profile

New Zealand Health IT Cluster is an industry grouping of New Zealand-based health software vendors, government agencies, consultants, and healthcare providers.

Situation

The exchange of patient health information between patient's healthcare providers is not optimal with a disparate collection of information and limited application interoperability. Patients need the right tools to self-manage their medical conditions.

Solution

The Health IT Cluster worked with Microsoft to implement a Consumer Health Portal designed to empower people to take control of their health using a collaborative online environment.

Benefits

- Reduced Costs
- Better Patient Care
- Increased Access to Information
- Improved Collaboration

“I think it is safe to say that a new day in the use of technology in the healthcare sector has finally arrived.”

Andrea Pettett, CEO, New Zealand Health IT Cluster

Personal Health & Wellness



Doctors Make Web Calls in Hawaii



Profile

The Hawaii Medical Service Association, HMSA, is an independent licensee of the Blue Cross and Blue Shield Association and the largest provider of health care coverage in the state of Hawaii.

Situation

HMSA wanted to improve access to care and provide convenient and quality care for all residents of Hawaii, especially those in remote locations.

Solution

HMSA deployed Online Care, powered by American Well™ technology and enhanced by Microsoft® HealthVault™. Online Care allows patients to see physicians immediately, through live consultations via Web or phone.

Benefits

- Improved access to care
- Reduced costs
- Improve quality of care
- Enhanced response
- Boost in productivity

“Having a tool like HealthVault that will enable our members and particularly our non-members to get their medical history and other medical information in front of a consulting physician is so very important.”

- Michael Stollar, VP Marketing and Communications Hawaii Medical Service Association

Microsoft

Condition Management



What is on your mind?



Condition Management



Case Management

Provide connected care and services to efficiently improve the management of citizens' conditions using easy-to-use, flexible technology tools



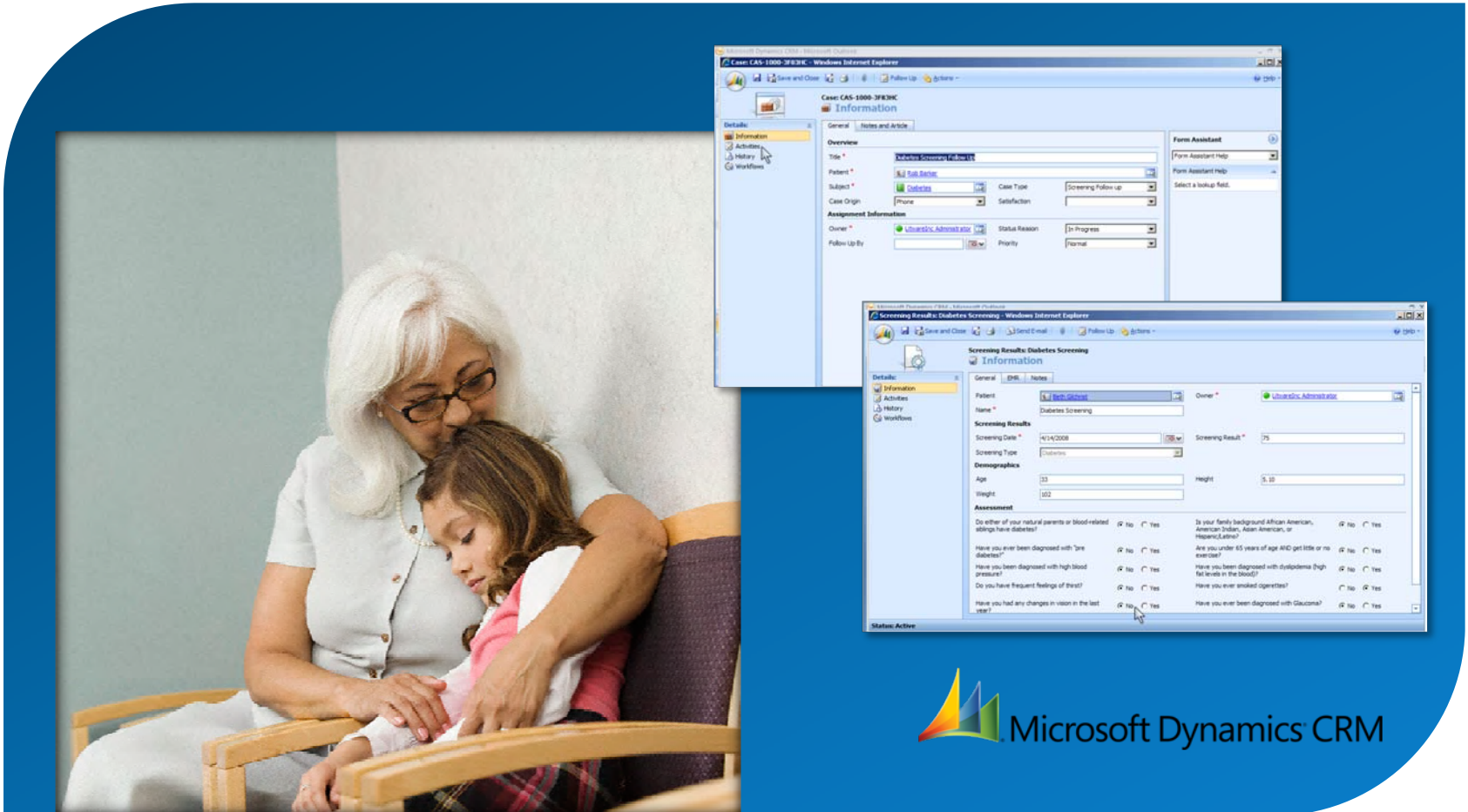
Caregiver Collaboration

Work faster and easier with other care team members and patients to improve the diagnoses, treatment and management of chronic conditions

Condition Management



Case Management



 Microsoft Dynamics CRM

Condition Management



Caregiver Collaboration



Collaborate
Anytime, Anywhere

Microsoft
Unified
Communications

Condition Management



TietoEnator Laps Care improves condition management



Profile

The city of Stockholm, Sweden, has implemented TietoEnator's home care planning system Laps Care in 1,000 units with 15,000 staff members serving 40,000 clients daily.

Situation

An essential part of quality in social care is home care workers having enough time to carry out their activities with dignity and respect.

Solution

Laps Care optimizes staff planning in home health care and eliminates the need to plan manually around the needs of individual workers, and the elderly and disabled receive care in their home. Now the right person is in the right place at the right time.

Benefits

- 20% increase in time spent on visits and other work
- Short term sick-leave has decreased by up to 70 %
- Overall cost of home care activities has reduced by 10 to 15 %.

Condition Management



Asklepios Future Hospital Program



Asklepios
Kliniken

Profile

Largest private hospital group in Germany with 111 institutions and annual revenue of €2.3 billion (U.S.\$3.5 billion)

Situation

Need to enhance medical competence and availability by implementing a knowledge management solution coupled with unified communication among health professionals in order to avoid duplication of examinations and lengthy travels for the patients.

Solution

Implemented a full program including standardized infrastructure, knowledge management, Unified communication solutions coupled with visualization solutions (dashboards, availability, case management).

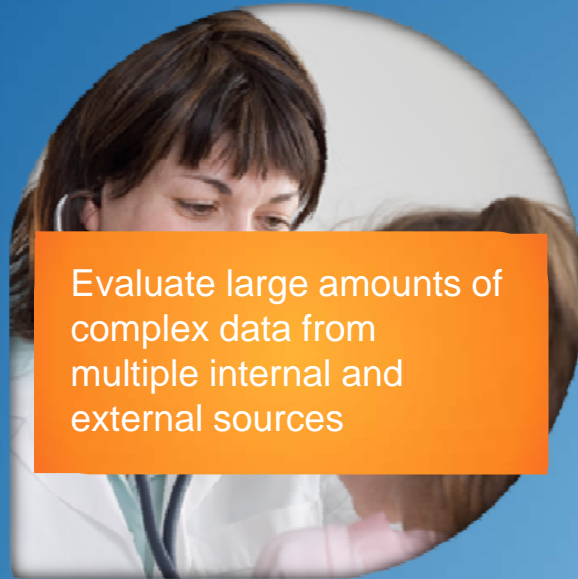
Benefits

- 36.7% reduction of annual costs per client
- Faster data availability—
 - Lab data available 75% faster
 - Radiology results available 89% faster
 - 18% reduction in day-to-day overhead
 - Patient data can be accessed swiftly everywhere
- Improved quality of medical care, including better consultations at patients' bedsides

Population Health Intelligence

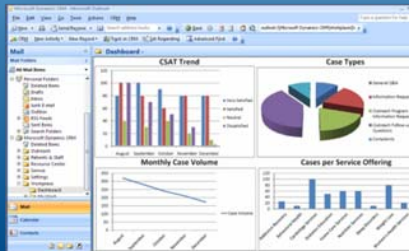


What is on your mind?



Evaluate large amounts of complex data from multiple internal and external sources

Population Health Intelligence



Business Intelligence in Health

Easily monitor & analyze data, see trends and make well informed decisions via dashboards and Key Performance Indicators

Service Name	Site	Site	Site	Site	Site	Site
TechSupport	Right					
Triples Lumen	Right	Right	Right	Right	Right	Right
Diagnose	Right	Right	Right	Right	Right	Right
Arthritis Care	Right	Right	Right	Right	Right	Right
Diagnose Lumen	Right	Right	Right	Right	Right	Right
Microsoft Double Lumen	Right	Right	Right	Right	Right	Right
Flowmeter 30	Right	Right	Right	Right	Right	Right
Flow	Right	Right	Right	Right	Right	Right

Microsoft Amalga Unified Intelligence System 2009

Free the data locked in disparate systems across your health enterprise to fuel discovery and drive real-time continuous improvement



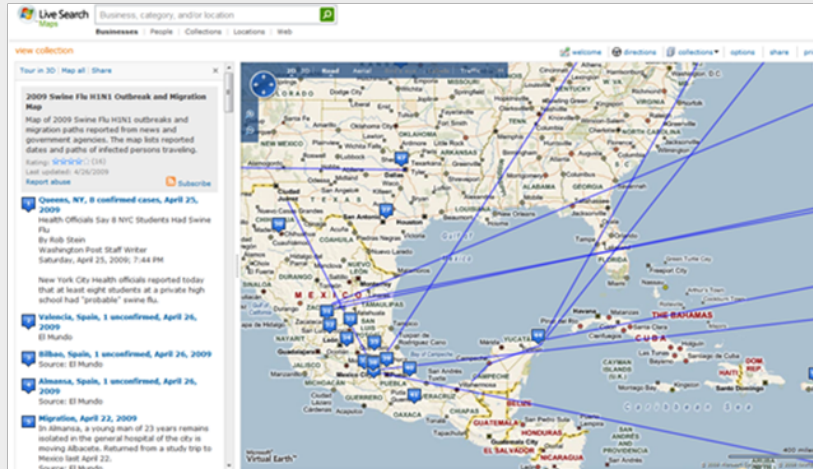
Population Health Intelligence

Measuring & Monitoring Population Health

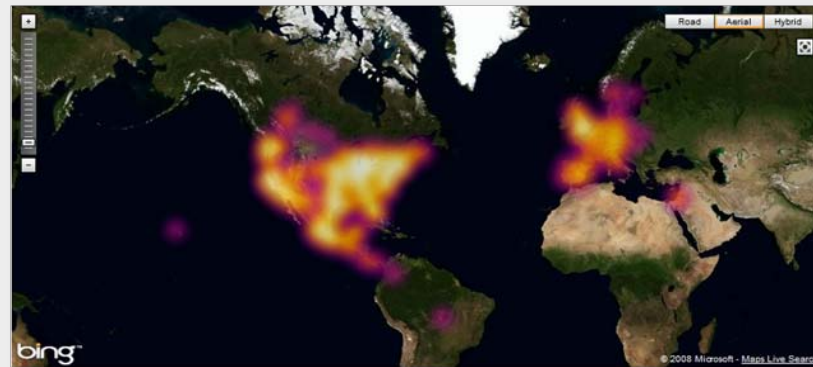
Disease Preparation & Response

Managing Quality & Health Outcome

Extending Intelligence Visually



Live Search



Virtual Earth



Business Intelligence in Health

Measuring & Monitoring Population Health

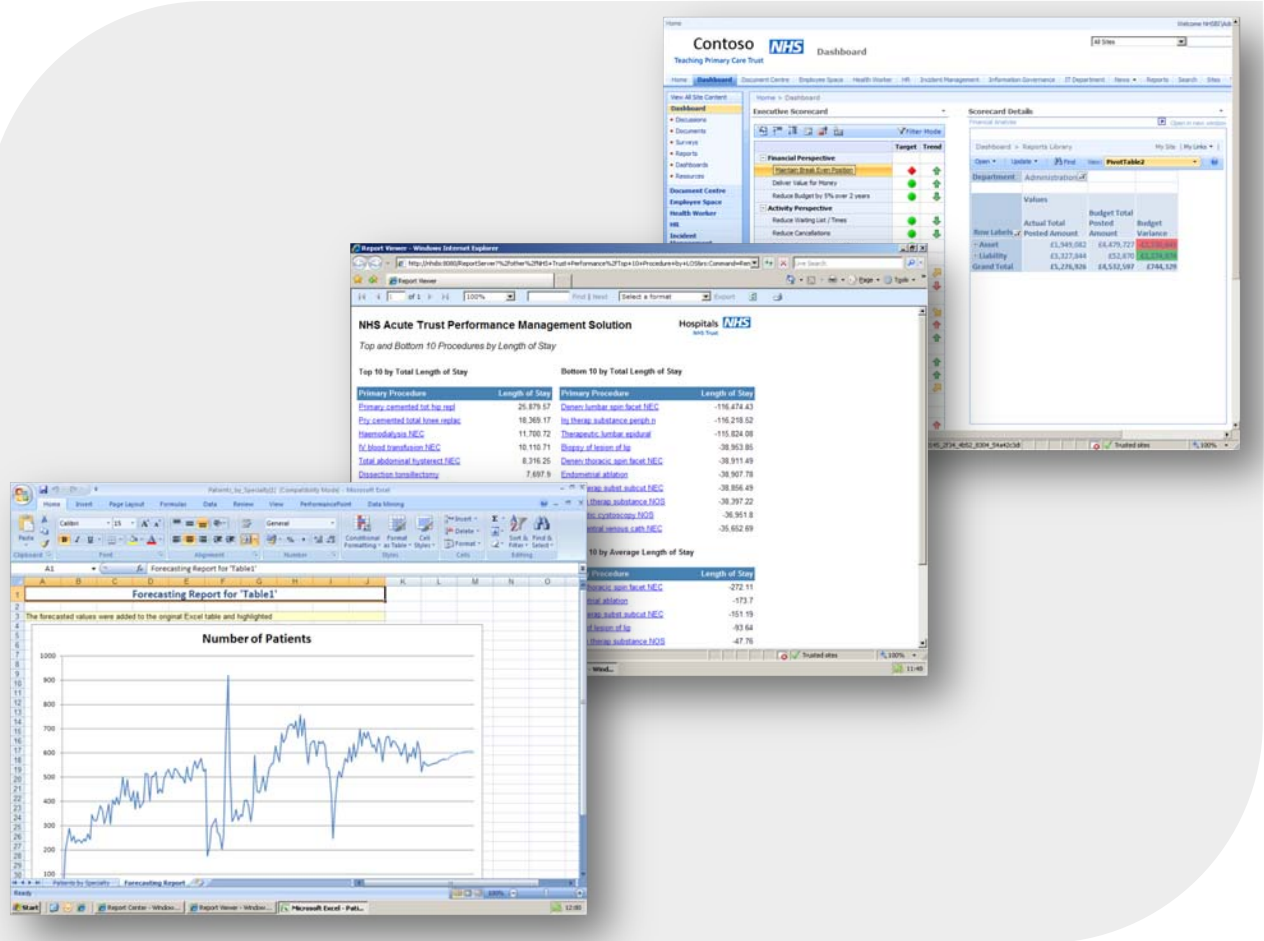


Population
Health
Intelligence

Measuring
& Monitoring
Population Health

Disease Preparation
& Response

Managing Quality
& Health Outcome





Population
Health
Intelligence

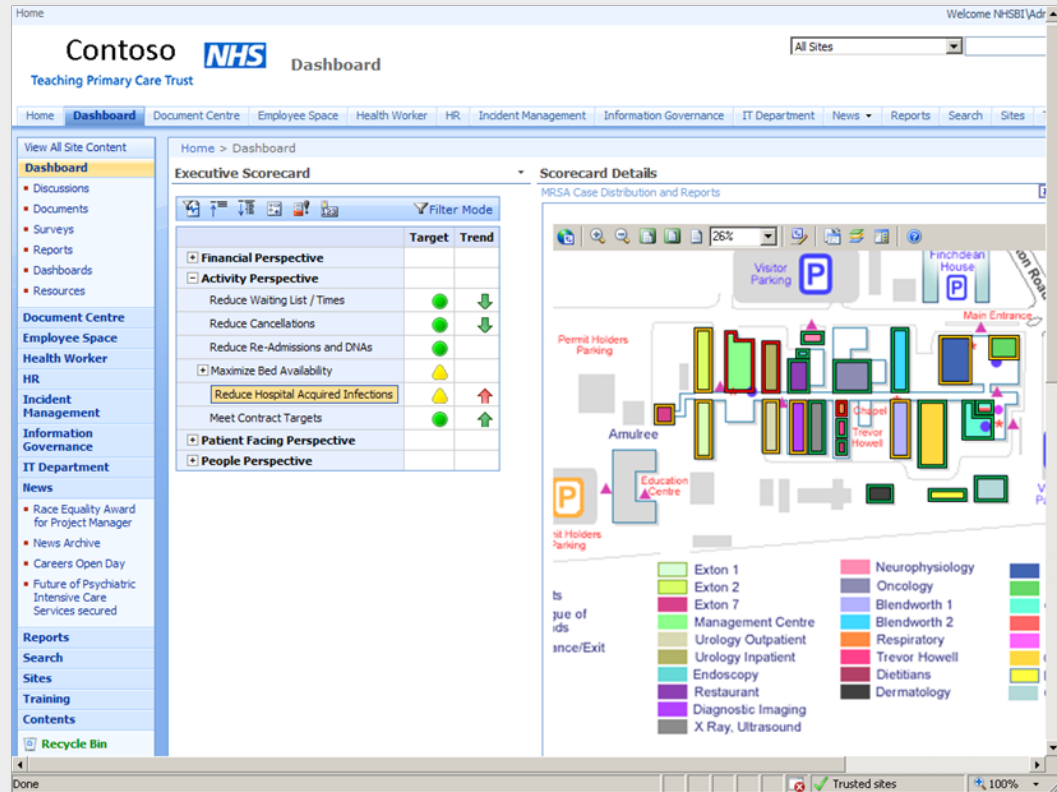
Measuring
& Monitoring
Population Health

Disease
Preparation
& Response

Managing Quality
& Health Outcome

Business Intelligence in Health

Disease Preparation & Response





Population
Health
Intelligence

Measuring
& Monitoring
Population Health

Disease Prevention
& Response

Managing
Quality & Health
Outcome

Business Intelligence in Health

Managing Quality & Health Outcomes

Microsoft
Amalga
Unified Intelligence
System 2009

Account	MRN	Admit Date	Discharge Date	Physician	ICU Stay	ICU Days	ICU Charge	ICU Cost	ICU Length of Stay	ICU Complications	ICU Mortality	ICU Readmission
488	4876188	07/12/08 17:08	07/12/08 17:08									
754	4837817	08/04/08 03:28	07/03/08 17:52									
574	4893712	07/12/08 03:24	07/12/08 04:24	jeff	48							
574	4893723	08/19/08 03:19	07/04/08 20:14	jeff	48							
574	4893724	08/19/08 03:19	07/04/08 08:20	jeff	48							
574	4893719	08/12/08 03:17	07/02/08 11:08	jeff	48							
748	4862712	08/12/08 03:28	08/11/08 16:59									
574	4893724	07/14/08 04:48	07/02/08 17:48	jeff	28							
754	4876187	07/14/08 03:28	07/14/08 17:48									
574	4893723	07/14/08 04:48	07/14/08 17:48	jeff	48							
574	4893717	07/12/08 04:21	07/12/08 17:48	jeff	28							

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Population Health Intelligence

Measuring
& Monitoring
Population Health

Disease Preparation
& Response

**Managing
Quality & Health
Outcome**

Microsoft Amalga UIS

- Get data in real time from across the enterprise
- See any view of data, sort, or filter by any criteria or data element
- Create new customized views of data
- Work with data easily, using a simple, user-friendly interface.





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Personal Health
& Wellness

Patient & Client
Portals

Health Outreach

Personal Health
Solutions



Condition
Management

Case Management

Caregiver
Collaboration



Population
Health Intelligence

Business
Intelligence

Amalga UIS

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