



Life Science Talks

Outcomes in Healthcare: Fad or Future?

Exploring Innovative Initiatives to Improve Healthcare in Europe

Life Science Talks

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Sébastien Stoitzner,
CEO - Gensearch

When I created Gensearch, in early 2010, I was determined to place strong life science expertise at the core of our organisation so that our role would go beyond that traditionally allocated to headhunters, to bring a broader and strategic “People and Organisations” approach to the executives and clients we provide support to.

Gensearch is today 100% dedicated to this sector, with over 400 successful executive search assignments achieved in six years. We have worked with a broad range of international players in the life sciences who, over this period of time, have enriched our deep understanding of this industry.

Beyond the accumulation of knowledge through these assignments, I have felt it a priority for the Gensearch team to develop an ongoing awareness of the challenges, innovations and trends pertaining to the world of healthcare.

This is the reason for our presence at numerous conferences and international events and why we are engaging in continuous discussions with thought leaders and stakeholders in patient care: industry players, public and private insurers, payers, health professionals, clinics and hospitals and other newcomers beyond the traditional actors, whose role will naturally grow in importance as the deep transformation of the industry takes shape in the years to come.

The emergence of new business models is leading to the need for essential new competencies.

Because we feel that we are also active and committed members of this sector whose continued evolution is close to our heart, we have decided to share our expertise by creating our own events - such as Life Science Talks - an international forum for information exchange, debate and networking.

After the success of the 2014 edition of this event whose theme was “Healthcare , from products to solutions “, the 2015 event focussed on “Health Outcomes” and gathered, again, about 100 executives and a panel of key international speakers who shared with us their concrete approaches to Health Outcomes.

What clearly emerges from these debates, is that the profound transformation of patient care currently taking place in Europe and beyond, is more deep-rooted and fast paced than what might appear at first glance. This is leading to the emergence of different business models for which the development of new competencies is becoming essential. Just as in Darwin’s theory of evolution, it is becoming apparent that the industry will need to instigate the necessary adaptations which will allow organisations to thrive in this new ecosystem. In this context, the talent acquisition and talent management strategy in organisations will become all the more relevant.

I wish to thank Silvia Ondategui-Parra (EY) again, for accepting for the second year running, to bring her unfailing support and clear thinking as a facilitator of this event; My gratitude also goes to Uwe Diegel (iHealthLabs), Fiona Driscoll (NHS), Pablo Gallart (Ribera Salud Group), Thomas Kelley (ICHOM), Matic Meglic (Medtronic), Cyril Schiever (MSD), Cyril Titeux (Janssen), for their generous contribution to the Life Science Talks of the 10th of June 2015 and for the quality of their presentations, which was very much appreciated by the audience. In this white paper you will find the summary of the different presentations and exchanges.

Good reading!



The Speakers

« The life sciences industry has been undergoing a tectonic shift over the last years, as an increasing number of drugs are affected by the patent cliff and the focus by payers on cost-containment continues to grow steadily.

In this rapidly evolving and increasingly challenging landscape, health outcomes are becoming the new standard for demonstrating and adding value. Only the companies that are able to deliver them and communicate their value will thrive in this environment, and those who rely on old, sales-focused business models will have a hard time achieving reimbursement.

To be able to generate and measure the right outcomes, a data-driven, patient-centric vision must be incorporated into the company culture. More specifically, into the different divisions that play a role in the company's pharmaceutical and medical devices strategy: R&D, IT, commercial strategy, market access and so on. This is why leading experts from different fields in the industry were invited to partake in the Life Science Talks, to share their recognized expertise and insightful points of view on this vital subject.

This is what the industry in the 21st century will require to succeed, and sector companies must adapt before it is too late. »

Silvia Ondategui-Parra, *facilitator of the event*



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Executive Summary

An executive search firm dedicated to the Life Sciences, Gensearch regularly holds in-depth discussions with healthcare executives who are leaders in their field. Today, we have decided to make some of this information available to the wider professional community provided it is non-confidential, of public interest and likely to lead to interesting partnerships in the future.

During the Life Science Talks event in June 2015, the speakers outlined their strategies by illustrating them with examples of successful projects and partnerships. These highlight a recognition among providers, payers, suppliers and other stakeholders that collaboration is key to overcoming challenges that healthcare systems are facing today.

These challenges include a growing financial burden, depleted resources, increased expectations from patients and ageing populations. In addition, device makers are facing competition from the availability of free apps and from connected wellness products, e.g. activity trackers. The pharmaceutical industry too realises it can no longer rely on an outdated business model of just selling drugs.

A shift is taking place towards products which add value by generating and measuring health outcomes. These include solutions for schizophrenia which do not just treat patients but also ensure they adhere to their medication regime. Or telemonitoring solutions which give diabetic patients feedback on how well they are managing their blood sugar levels.

This is only possible though through companies allowing others to access their platforms. It can only happen if the pharmaceutical industry realises that alone it cannot provide all the answers. Instead, companies must partner with those that can provide the add-on benefits to deliver the right outcome.

Data management is also key. Quality is vital in order to identify best practices. This empowers patients so they genuinely have the ability to make the right choices over their healthcare. They deserve a vision for care which is fit for the 21st Century.



Outcomes in Healthcare: developing and measuring standards

Introduction

The definition of health outcomes can be defined as results of care which matter most to patients, e.g. quality of life. These outcomes should be organised around value. By value, we mean outcomes divided by cost. The goal is to achieve the best outcomes for the lowest cost which should apply worldwide.

However, huge variation occurs globally in clinical outcomes both within and between countries, e.g. in hospital performance and in mortality rates, as does the cost of delivering services with similar outcomes.

The variation among countries on mortality

VARIATION IN OUTCOMES IS A WORLDWIDE CHALLENGE

2X VARIATION IN 30-DAY MORTALITY RATE FROM HEART ATTACK IN US HOSPITALS



4X VARIATION IN BYPASS SURGERY MORTALITY IN THE UK HOSPITALS



5X VARIATION OF MAJOR OBSTETRICAL COMPLICATIONS AMONG US HOSPITALS



9X VARIATION IN COMPLICATION RATES FROM RADICAL PROSTATECTOMIES IN THE DUTCH HOSPITALS



18X VARIATION IN REOPERATION RATES AFTER HIP SURGERY IN GERMAN HOSPITALS



20X VARIATION IN MORTALITY AFTER COLON CANCER SURGERY IN SWEDISH HOSPITALS



36X VARIATION IN CAPSULE COMPLICATIONS AFTER CATARACT SURGERY IN SWEDISH HOSPITALS



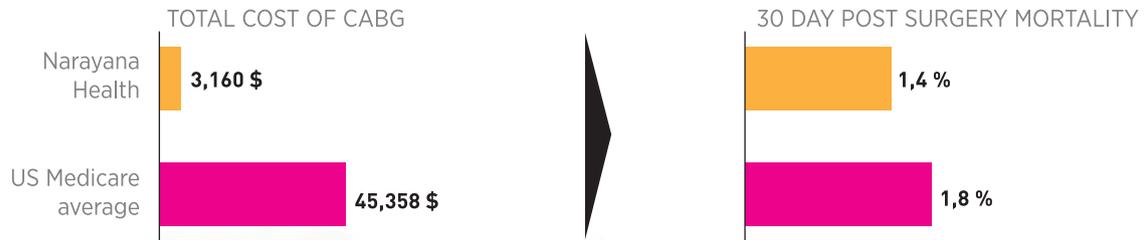
- US- factor of 2 variation between the best/worst performing hospitals for myocardial infarction (MI).
- UK- four times variation between best/worst for coronary artery bypass grafting.

SOURCE : ICHOM



The cost variation between countries (CABG, coronary artery bypass graft)

LARGE VARIATIONS IN THE COST OF CARE



SOURCE : ICHOM

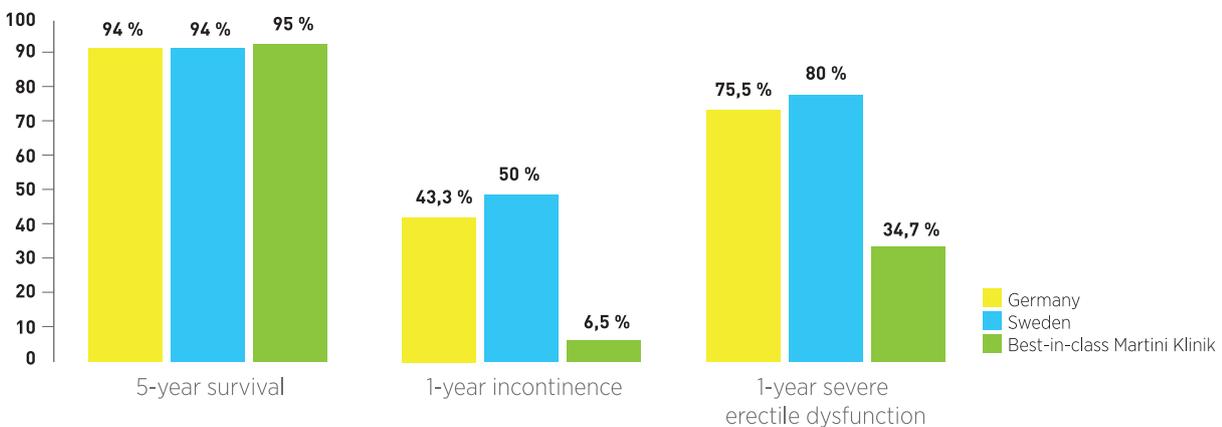
- India- 3000 dollars average cost per patient (Narayana Health)
- US- 45,000 dollars average cost (public health system)

Impact of the patient/doctor relationship

Healthcare has historically taken a 'paternalistic' approach, i.e. doctors make decisions on behalf of patients, not in partnership with them. A more balanced doctor/patient relationship is emerging but doctors can still overlook what matters most to the patient. For example, a surgeon who removes a prostate gland is concerned with saving the patient's life. However, a patient's long-term concerns include:

- incontinence
- severe erectile dysfunction

VARIATION WHEN MEANINGFUL OUTCOMES ARE MEASURED



SOURCE : ICHOM



The need for a common global standard

Often outcomes are not at all measured in healthcare. When they are measured, it can be difficult to compare them especially within Europe. Different countries measure similar elements in slightly different ways and at different time points. This makes it extremely difficult to learn and improve.

In addition, there is a very strong focus on 'process measurement'; defining process, then measuring whether or not it has been achieved. Healthcare lags behind consumer-driven industries which have advanced with the help of the internet.

Measuring outcomes is crucial. It enables us to determine which clinics have the best outcomes and why. We can only try and learn from them once we have this data. Quality data can be used by patients to modify their behaviour, to prevent or to manage their disease.

COLLECTING OUTCOMES DATA- STANFORD UNIVERSITY

This US institute has succeeded in integrating the collection of clinical data and patient reported data into the clinic. This is with no increased length in the time it takes the patient to go through the clinic, no cost, and no increased burden on patient or on system.



Case Study

THE INTERNATIONAL CONSORTIUM FOR HEALTH OUTCOMES MEASUREMENT (ICHOM)

“We have to measure outcomes, we have to relate that to cost and we have to be able to identify those highest value providers.”

Thomas Kelley, Europe Director at ICHOM

ICHOM is an independent and non-profit organisation whose goal is to achieve the outcomes that matter most to patients. This is achieved through developing and then implementing standards worldwide.

ICHOM uses working groups made up of participants including patients and carers, as stated by Thomas Kelley. The views of patient advocates are also important and are used to inform outcome standards.

Working groups are the route to:

- developing sets of outcomes with global consensus
- implementing and benchmarking them around the concept of value

The aim is not to identify a core set of outcomes of everything that can be measured. Instead, Kelley says outcomes should:

- reflect what matters most to patients
- guarantee complete transparency for patients/clinical teams
- be implemented in different health systems around the world.

This enables the healthcare sector to learn and improve from those clinics and hospitals which achieve the best results.

ICHOM hopes to advance along this agenda by supporting:

- implementation
- learning
- development of contracts around value

Global outcome standards: the organisations making this happen

ICHOM has the financial support of leading stakeholders worldwide including governments, patient advocacy groups, payers and providers. They also include the Karolinska Institute in Sweden and Great Ormond Street Children's Charity in the UK.

What should be measured and how?

- How can this be prioritised?
- When do we collect this data?

This process is achieved via tele and video conferences which take place over a timescale of up to eight months. ICHOM repeats this process for case-mix adjustment variables so that its experts can perform reliable comparisons over time. They can determine which of these variables should be measured and then define those variables at a later point.



It is key that ICHOM is confident the outcomes identified truly reflect what matters most to patients. In addition to the working groups, they recruit patient advocates to participate in focus groups. The focus groups take place via international video conferencing and the participants are asked what matters most for patients diagnosed with the health condition being measured. Their answers then feed into the conclusions from the main working group.

The Final Product

The final product is shared with networks of patient advocacy groups. It goes out to hundreds of patients via a survey which asks if they approve of the end result. This gives them an opportunity, according to Kelley, to say what they would change.

Anyone including patients and carers can comment on this last stage where ICHOM is developing case-mix adjustment variables. These comments are published along with a free reference guide for everyone to access.

At the end of the process, ICHOM has a core set of both outcomes and case-mix variables which should reflect what matters most to patients. Standardisation is at the provider level, e.g. hospitals. However, Kelley says it should also apply to and align with other stakeholders including payers, medical technology companies, research institutes and pharmaceutical companies.

This applies to coronary artery disease for example. Kelley points out that there are outcomes relating to a coronary artery bypass graft but also to long-term management of the disease. So the outcomes apply across the entire disease spectrum and not just a few discrete segments. This fits with payers, who are funding the management of a particular condition across this disease cycle, and with other stakeholders.



Case Study

IMPLEMENTATION: THE CHALLENGES AND CURRENT PROGRESS

“This isn’t rocket science but hopefully a well-managed process to get a good quality end result.”

Thomas Kelley, Europe Director at ICHOM

Fears over cost and competing priorities are the biggest barriers to people implementing these standards. The solution is:

- low cost implementation via partnerships

So ICHOM is working to bring together groups of hospitals worldwide across the world, this includes the Mayo Clinic and also smaller players in the healthcare sector. The aim is that they motivate each other and share information on how they have tackled common challenges.

ICHOM’s progress so far:

- **Standards:** these have been developed for 35 % of global disease burden including major conditions such as cardiovascular disease, cancer and eye conditions. Standards for heart failure and dementia are in development.
- **Benchmarking:** the goal is to introduce these standards in 2015 and have them nationally accredited. ICHOM will then pool the data, risk adjust it and then produce individual anonymised hospital reports. These reports act as a comparison and learning tool.



Outcomes in Healthcare: the supplier/pharma perspective

Introduction

“Outcome isn’t new. No one woke up one day and said by the way wouldn’t it be great if we got a better result for the patient..”

Cyril Titeux Vice President, EMEA Strategy Organisation at Janssen

“We know well about medicine and drugs. We didn’t know so well about healthcare and healthcare systems. So we need to bring on board people in our organisations who do understand.”

Cyril Schiever, MSD Senior Vice President and Managing Director France

The pharmaceutical industry is one of the largest suppliers of healthcare systems and solutions. A global industry, its core business is discovering, developing and selling commercialised drugs. However, drugs are only one part of treatment and there is recognition within companies of a need for change including:

- Discussing outcomes at every stage of the product lifecycle from drug discovery to patent expiry.
- Stopping programmes early which cannot demonstrate positive outcomes for patients.
- Reconfiguring workforces to improve efficiency and add value.

Old ways of working persist

For many companies, the operating model is still focused on a business model of revenue generated by selling drugs. Huge inertia also acts as a barrier to creating variability. To overcome these obstacles, pharma needs a new way of working for the 21st Century which is:

- innovative
- ambitious
- connected

Reform means no longer inventing concepts which last a couple of years but delivering improved care so the patient is on a better overall treatment and follow-up regimen.



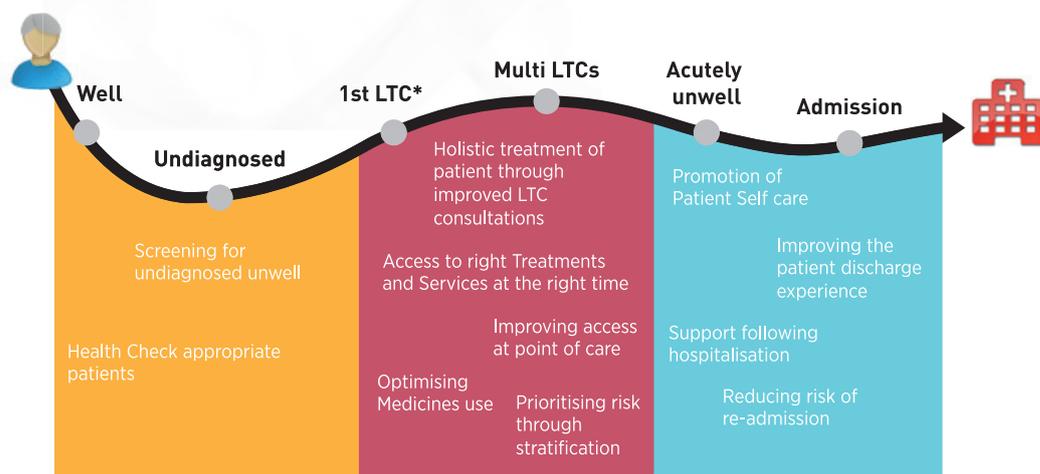
Delivering innovation through the treatment pathway

Innovation needs to be at the heart of the entire treatment pathway, and not just in delivering a new molecule. It also means partnering with the healthcare sector to understand patient pathways and flows, identifying efficiencies, adapting to stakeholder needs with solutions that combine with the product to improve outcomes for patients.

Change will also require a major shift in approach by introducing new capabilities - even a new workforce. In addition, it means embedding outcome in a company's strategy so the focus is patient-centred and embraces solution development through disease management programmes.

MSD and Janssen are among those major pharmaceutical industry suppliers placing outcomes at the centre of their core strategies. Aspire is Janssen's strategic roadmap for change aimed at: generating better outcome for patients, regaining credibility and trust, and adapting the operating model to fulfil the first two goals.

MSD CAN PROVIDE SOLUTIONS FOR LONG-TERM CONDITIONS ACROSS THE PATIENT JOURNEY



LTC* - Long-term Care

SOURCE : MSD

MSD's new approach towards treatment pathways is Evidence into Practice (EiP), a structured clinical management programme aimed at ensuring people receive optimal care for long-term conditions such as diabetes.



Case Study

ALCOHOL MANAGEMENT IN RUSSIA (JANSSEN)

“You don’t come with average data you’ve done on paper and say that’s fine enough”

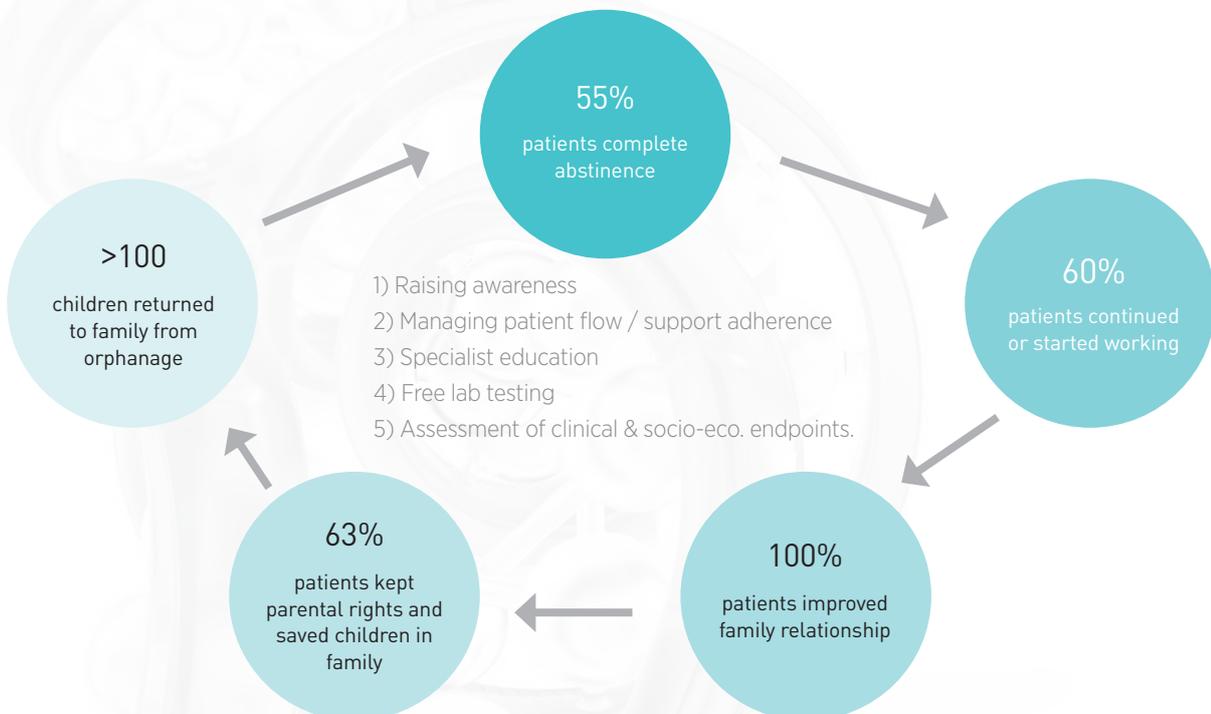
Cyril Titeux

Vivitrol helps block the effects of alcohol and is administered through injection. Initially, Janssen faced a huge challenge to obtain funding and market access for this anti-addiction drug. Instead of just a product, healthcare providers wanted a comprehensive programme to:

- educate specialists
- raise awareness among patients and manage them
- test patients to check if alcohol-free
- assess the social impact of alcohol addiction.

The Janssen team worked to deliver the ideal programme providers wanted. Funding was granted as a result of placing the patient at the heart of the programme, and the product is now selling well in Russia.

JANSSEN SOLUTIONS - ALCOHOL & OPIOID DEPENDENCE IN RUSSIA



SOURCE : JANSSEN



Case Study

SCHIZOPHRENIA MANAGEMENT IN HUNGARY (JANSSEN)

“Outcome isn't an idea that is sitting somewhere. We want to make it reality.”

Cyril Titeux

This project is an example of how outcome can be improved by identifying gaps in the patient pathway. A major issue in schizophrenia management is that patients have poor medication adherence, they relapse and each time their disease worsens.

Janssen has a long established presence in the healthcare market in Hungary, especially in the field of schizophrenia treatment. The company developed a whole patient management programme to ensure patients remained on treatment. This is based on the theory that a patient will experience less relapses if they are kept on treatment.

Many countries have patient management programmes. But Janssen went one step further - they defined the outcome upfront from the patient disease management programme and then measured this outcome (discontinuation rates) with real world evidence data:

- Existing drug without disease management versus new drug with disease management programme.

Outcome

- Significant drop in the the long acting discontinuation rates for patients on this programme. This is backed up with published research data and demonstrates how outcomes can be improved by putting in place solutions that are combined with the product.

“We didn't invent anything sophisticated- it's about thinking about what solution you can put in place to improve the patient pathway combined with a product.”

Cyril Titeux



Case Study

CARE4TODAY (JANSSEN)

CARE4TODAY® SOLUTIONS – MOBILE ADHERENCE PLATFORMS, COMMUNITY CARE,
PRE & POST OPERATIVE CARE



80%
Increase in
Adherence to Med



58%
Reduction in
Inpatient Days



50%
Increase in Enrolment
& Completion



40%
Reduction in
Length of Stay

AWARDS AND RECOGNITIONS



SOURCE : I JANSSEN

Care4Today enables patients to manage their disease. It's a healthcare brand developed by Janssen Healthcare Innovation, an independent team created away from the core business to pilot new solutions, implement them and test efficacy. The brand includes a mobility health management app which has been downloaded 300,000 and has more than 100,000 registered users in the UK, US and Canada. Care4Today has already been successful in increasing adherence to medications, improving quality of life and reducing hospital stays. It includes:

- **Mental Health Solution:** a disease management programme for schizophrenia similar to the Hungarian programme. Its focus is on reducing patient hospitalisation which is costly for society and impacts on patient recovery.
- **Heart Health Solution:** a UK rehabilitation programme following cardiac failure with 1,600 patients enrolled. Evidence shows that patients who are compliant with/complete the programme have a better quality of life and prognosis.
- **Orthopaedic Solution:** a programme that trains patients and physicians to reduce hospital stay after hip and knee replacement. Has demonstrated a 40% reduction in length of hospital stay.



Case Study

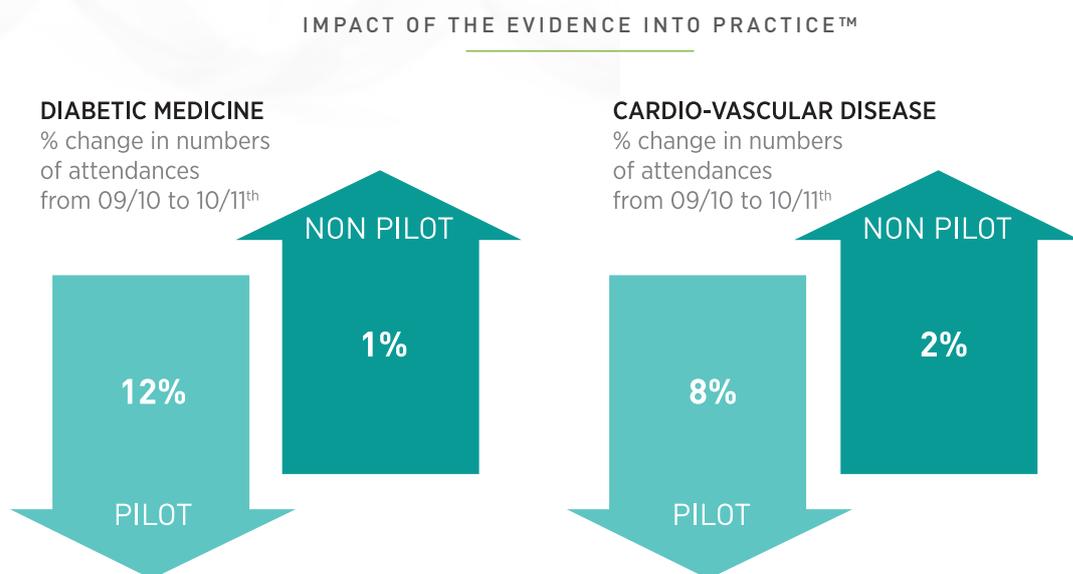
EVIDENCE INTO PRACTICE (EIP) IN THE UK (MSD)

This structured clinical management programme aims to ensure that people receive optimal care for long-term conditions such as diabetes. Currently more than 350 NHS clinics run by doctors are registered with EIP across 40 primary care organisations (PCTs, Primary Care Trusts) in the UK. This covers more than 2 million NHS registered patients and more than 1300 healthcare professionals.

Run on a 'fee for service' basis, the programme provides tools such as informatics or education to analyse risk in a particular patient population then measure outcomes. Greenwich PCT in South East London was one of the first to pilot EIP for diabetes with excellent results:

Outcomes

- More than £200,000 in efficiency savings in the first year
- Reduction in hospital and outpatient admissions



Programme on Diabetic 25 Medicine Outpatient attendances and CVD (Cardio-Vascular Disease) admissions in NHS Greenwich pilot sites (14) compared to non pilot sites (32). Figures standardised per 1000 patients with diabetes



Case Study

STAKEHOLDER PROGRAMME TO ANALYSE DELAY IN HEPATITIS C PATIENTS STARTING TREATMENT IN FRANCE (MSD)

“When we look at delivering outcome, we need to look at the patient experience if we want to be true to what our industry is.”

Cyril Schiever

Hepatitis C patients can wait more than 12 months to start treatment following diagnosis. MSD has brought stakeholders together including the regional health agency to analyse the treatment pathway for these patients. This is a good example of how suppliers can add value by devising healthcare solutions which can be replicated elsewhere.

MSD is now working on a similar approach to analyse outpatient surgery, something that is not performed as often in France as it is in Northern Europe. The process has been to identify the issues from a clinician perspective and within an organisation then define goals and implement them.

New ways of working: the benefits

- **Better understanding of the patient pathway:** essential in developing meaningful solutions with impact.
- **Common goals for healthcare:** partnership is essential.
- **More competitive:** pharma companies are used to making a profit- they are not in the business of losing money and know how to sell products. This gives them a competitive advantage.
- **Value:** the supplier must maintain the value of the product it brings to market by delivering on the promises made in clinical trials. Value is maximised by bringing solutions with the drug to enhance efficacy and effectiveness for the patient.

New ways of working: the challenges

“You don’t always have the right skills to develop the solutions, the right evidence plan.”

Cyril Titeux

- **Resistance:** not everyone in healthcare is ready/waiting for pharmaceutical companies to engage in improving outcomes for patients, according to Titeux. Some countries are more welcoming than others but essentially there is resistance to working collaboratively with the pharma industry. ‘We even have to earn the right to operate in this field,’ points out Titeux.
- **Expectation management:** finding the right solution to improve an outcome is comparable to developing a new drug. It’s an iterative process so, it takes time. You need to develop a pilot, have proof of concept, scale up, demonstrate benefit on a larger scale and implement. But top management is notoriously impatient as are teams who are used to short-term benefits from what they do.
- **Real world evidence and independence:** it’s pointless developing solutions to improve outcomes without strong evidence. Instead, outcomes can only be developed with good science. Real world evidence is crucial to success because it allows measurement of outcomes and then these measures can be coordinated with payers and providers. Industry must also ensure the independence of research to be able to show the outcome.



“There is no outcome in our business if there is no good science..”

Cyril Schiever, MSD Senior Vice President and Managing Director France

- **Skills:** pharma companies don't always have the necessary skills to develop new solutions. They know about medicines but not about healthcare. A major shift is, therefore, required away from a system which currently, focuses on hospital clinicians to one around patients. It is a mistake to give existing staff new functions in addition to their job description- the work will never get done. So the dilemma is how to train people internally and bring in new capabilities from outside.

“Our teams today they look at us and say ‘Nice but how do I do that?’

I’ve never done it before so help me..”

Cyril Titeux, Vice President, EMEA Strategy Organisation at Janssen

- **Monetisation:** turning ideas into profit and generating investment is a major challenge. Other industries and business-to-business provide not only innovative products but also the solution that goes with that product, help the user to achieve the best use and don't always charge for that service. There are 20,000 health apps on the market which represents competition. Therefore, charging the healthcare system will be a challenge given the economic climate.

“People are ready to pay 5 euros for a game but not for a 10 euro good evidence based app.”

Cyril Schiever, MSD Senior Vice President and Managing Director France

- **Treatment pathway:** drugs play a vital role in treatment pathways. However, discovering a new molecule is no good in itself. Innovation must benefit and improve the entire treatment pathway for the course of any disease.

New ways of working: the solutions

“There are other industries which are more advanced than us to understand the patient pathway, imagine and develop the new solutions.”

Cyril Titeux, Vice President, EMEA Strategy Organisation at Janssen

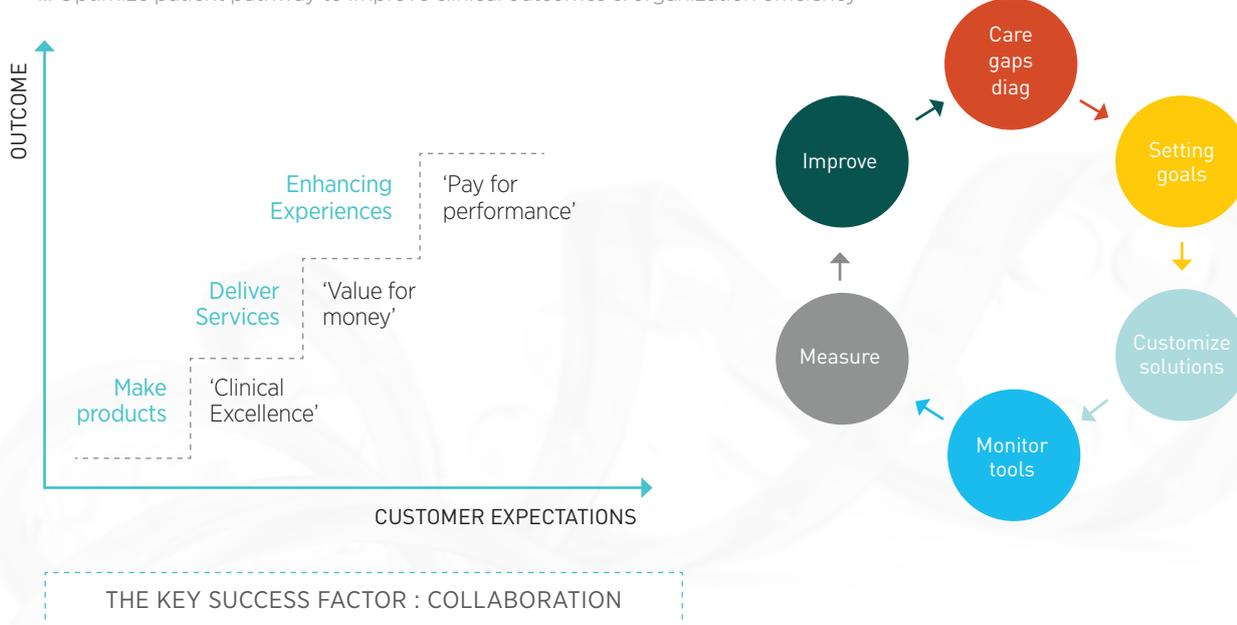
Real world evidence and independence: The same high quality standards for clinical trials must apply to healthcare systems which means data has to be good enough to be published. The more reliable the data, the less it will be questioned. Partnerships with big institutions is a way of ensuring this, for example Janssen partners with the Karolinska Institute in Stockholm.



Skills: Finding partners with the right skills is crucial, not just healthcare provider partners but those who can help design solutions, who know about technology and data. Titeux's advice is for companies to be resilient and relentless in achieving their goal as well as patient. He says: 'It's worth it and the patient will see a difference.'

IMPROVING PATIENT EXPERIENCE IS KEY TO ACHIEVING OUTCOME

... Optimize patient pathway to improve clinical outcomes & organization efficiency



Treatment pathway: Companies must focus on the bigger picture, according to Cyril Schiever, which means providing solutions to prevent disease as well as treating patients with the right drugs and ensuring they are adherent to treatment which is a major challenge. Again, partnership with other stakeholders is necessary to best manage the treatment pathway, to devise solutions and measure them whether it be programmes, therapeutic education or digital applications.

The patient experience: clinical excellence will always be fundamental to health services. However, pharma must also enhance the experience of the patient to achieve the best outcome and deliver on performance. Pharmacists and physicians are increasingly being paid for not only providing drugs to patients but also for offering other healthcare support and coaching. Pharma too must realise they must deliver add-on benefits for patients.

INCENTIVISING PATIENTS TO ACHIEVE SUCCESSFUL OUTCOMES

Compliance is around only 55% for cancer patients taking oral drugs proven to prolong life. This will become even more of an issue as cancer treatment moves out of hospital into the community. The pharma industry has a responsibility, therefore, to help patients understand the importance of starting treatment.

Collaboration and partnerships: successful outcomes are achieved through teamwork according to Schiever. Pharma must act as an integrator by inviting the right people to discuss challenges around specific projects. MSD has signed more than 20 collaborations with competitors on cancer care.



Outcomes in Healthcare: the provider perspective (Spain)

Introduction

State healthcare systems are founded on three principles:

- free
- universal
- equal for all patients

In Europe, healthcare provision is mainly public although some countries combine public with private provision.

Ageing populations and an increase in chronic health problems such as diabetes are just some of the pressures state healthcare providers are facing. Health expenditure is growing more than GDP in many developed countries which has raised concerns about sustainability of systems.

The situation in Spain

Spanish healthcare health indicators are among the best in the world. However, the system has many weaknesses:

- increasing budget deficit- more than 80% expenditure growth from 2003 to 2009.
- bureaucratic- 17 autonomous regions each with a different healthcare policy/strategy.
- high structural costs.

The dilemma is how to address these costs and make the system more flexible to embrace future challenges.

Administrative concessions in Spain

Several models of administrative health concessions are emerging in Spain. They include an administrative concession for full management of public healthcare services (Prospective Payment System). The PPS model- or the Alzira model- has been a pioneer across Europe in its comprehensive management of the public health service.



Case Study

THE ALZIRA MODEL

Background

“It’s important to take control of the primary care services. It’s the only way to control and monitor all the prevention activity.”

Pablo Gallart, Finance Director Ribera Salud

In 1997, the town of Alzira in Eastern Spain had around 250,000 inhabitants. The nearest hospital was 50km away in Valencia.

A change in Spanish law enabled the private sector to provide public services in particular healthcare settings. Therefore, the local government in Valencia decided to implement this model and built La Ribera Hospital in Alzira in 1999. This was in partnership with private provider the Ribera Salud Group.

Initially, the concession was for the Group to run the hospital and provide the healthcare assistance services to the catchment area, not for the provision of primary care. However, Ribera Salud eventually convinced the local government to include primary care. It meant they could ‘control and monitor all the prevention activity,’ according to the company’s finance director Pablo Gallart.

The Alzira model is already being implemented elsewhere in Spain and globally:

- five (PPP, public private partnership) additional hospitals in the Valencia region set to adopt model
- four in the Madrid area
- four in Portugal
- two in Lima, Peru.

The Alzira model: how it works

“We’re interested in providing a high quality service to retain our population.”

Pablo Gallart

In summary, the state transfers risk to the private sector although it is still a private/public partnership. Collaboration exists not only at provider level but also in the financing system. For the provider, the focus is on health promotion, on keeping its patient population healthy and out of hospital, and on providing a good quality service.

The reason behind this model is that ‘money follows the patient’ i.e., Ribera Salud is paid a fixed fee per patient, not for the services they provide. In addition, it must reimburse the government for each of its patients who attends a public hospital. However, the government reimburses the provider for every non-resident who visits a Ribera Salud hospital.

- **Public financing:** the public sector finances the project under a capitation payment model of a fixed annual payment per person/inhabitant rather than per service provided. The fee covers all expenses and rises year on year in line with the public health budget increase.



- **Public property:** the private sector invests in building and equipping the hospital, in managing the hospital and providing services for patients. But the building is state-owned after completion.
- **Public control:** Ribera Salud signs a contract (usually 15 to 20 years) with the government outlining all their responsibilities. The contract is fully audited and the government monitors its performance.
- **Private provision:** the concessionaire provides both clinical and non-clinical services. It must provide universal access to all patients.
- **Partnership working:** the Alzira model is integrated. Clinical management, human resources and IT teams work together to achieve objectives and maximum value.

MODEL BASIS

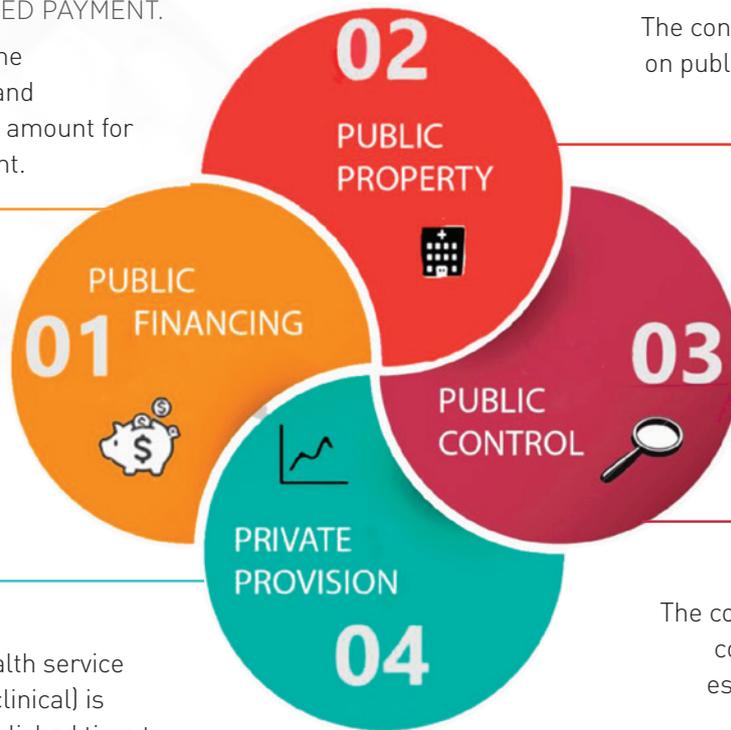
01

BASED ON A CAPITATED PAYMENT.

The government pays the concessionaire a fixed and pre-established annual amount for each assigned inhabitant.

02

The contracted-out center is built on public land and belongs to the public hospital network.



04

The provision of the health service (both clinical and non-clinical) is awarded for a pre-established time to a concessionaire.

03

The concessionaire is subject to complying with the clauses established in the contract.

SOURCE : RIBERA SALUD



How the Alzira model adds value: outcomes measurement in care delivery

“Hopefully we will see Alzira models in many other countries.”

Pablo Gallart

- **Budget control:** the only cost for the public is the capitative payment. The local government stakeholder knows in advance how much money they will invest in each patient. This gives them budget control.
- **Savings to the payer:** the private sector can offer just to build a hospital. However, the savings cannot match those made from a concessionary deal like the Alzira model.
- **Job security:** more than 85% of employee contracts are permanent which fosters the retention of talented staff. Staff can also take advantage of flexible working, e.g. teleworking.
- **Patient satisfaction:** the satisfaction rate is more than 90% for healthcare provided in Ribera Salud hospitals according to surveys.

The coordination of three strategies is essential in this process of change:

1. IT allows us to measure indicators, communicate between professionals, and set clinical guidelines.
2. Clinical management allows us to develop proactive management of the health of the citizen.
3. HR management coordinates professionals, gives them training and performance incentives.

“The development of this three sided strategy is essential. If any of them fails, it could result in not reaching the objectives.”

Pablo Gallart

THE ALZIRA MODEL IN SCHOOLS

Ribera Salud is also engaged in encouraging children and young people to make healthy lifestyle choices. The provider goes to schools in the areas where they have hospitals to give health advice, e.g. on healthy eating. There is a strong business motive for this- a healthy population equals increased profitability for the company.



Outcomes in Healthcare: the payer perspective (UK)

Introduction

“It’s (the NHS) the super tanker built for bureaucracy and slow to turn.”

Fiona Driscoll, chair of Wessex Academic Health Science Network and Governor of Nuffield Health

The UK national health service (NHS) is held in high regard by the public. Yet it is also overly bureaucratic, costs the taxpayer billions and is heading towards bankruptcy as a result of increasing demand and decreasing money. The NHS is facing the same pressures as any other state health service provider such as:

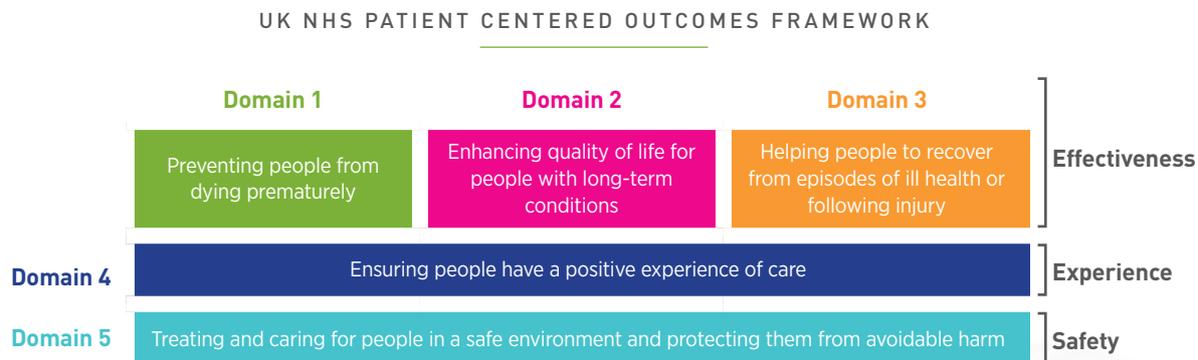
- an increase in lifestyle-related conditions such as heart disease
- increasing public expectations
- the impact of social inequality
- people living longer
- huge variations in standards of care which impacts patient outcomes

To survive, the NHS must change in order to keep people well, out of hospital and back to work. Driving through change means working with the private sector, something that is already happening in the form of public/private partnerships. The majority of private hospital groups now perform between a quarter and 80% NHS work.

Change also means measuring meaningful outcomes. Like most of the public sector, the NHS manages only what it is measured on, e.g. hospital waiting times. They should instead be focusing on other matters such as making patients feel good, according to Fiona Driscoll. A need exists for different measurements driven by outcomes.



A new outcomes framework



In response, the NHS has launched a five year plan, a new outcomes framework drawn up by people in the industry, not solely by ministers. The NHS aims to do things 'faster and better' by:

- stimulating the economy as well as transforming patient care
- partnering with, e.g. entrepreneurs, drug companies, app and device developers

Academic health science networks (AHSN)

"We've been trying to pull off the brake- we've now got an accelerator we can push."
Fiona Driscoll

Academic Health Science Networks (AHSNs) are key to the NHS vision of improved care outcomes, economic growth and reduced cost.

Launched in 2013, AHSNs do not commission but instead act as agents for change. Fifteen AHSNs have been set up across England with a five year mandate to pull together the adoption and spread of innovation with clinical research and trials, informatics, education, and healthcare delivery.

They have no formal powers so have to rely on persuasion by building strong relationships with their regional scientific and academic communities and industry.

These links enable them to develop solutions to healthcare problems, not just focus on targets. Using investment funding, AHSNs can back products from small businesses then get care providers to implement these ideas across the NHS and to change pathways.



Case study

WESSEX AHSN

“You can’t just fund marvellous ideas. They have to drive efficiencies and change fundamentally the way we do it.”

Fiona Driscoll

The Wessex AHSN aims to deliver life-long benefits for everyone. Retirees represent a high proportion of the patient population and their needs include orthopaedic procedures for hip and knee fractures.

The AHSN has selected 60 programmes including those involving the pharmaceutical industry such as medicines optimisation. Selection follows a needs analysis with input from partners and has to meet seven measures. Programmes also have to:

- Cover the AHSN’s critical areas
- Relate to health and economic growth, and change working patterns
- Free up GP hours or demonstrate innovative working for nurses
- Deliver products in time that can be codified and rolled out to make a difference.

“If we wait to solve the funding issue we are just going to miss a decade again.”

Fiona Driscoll

Money is then provided, the programme is managed and funding raised. A challenge for the AHSN is persuading members with conflicting approaches that they need to change the system and that ‘together we will drive it forward.’ The AHSN does not have time to invent ideas itself, instead, it has developed the Centre for Implementation Science (CIS) to deliver:

- Analytical services to identify future area wide needs
- Change process models which have a proven track record
- The development of effective vehicles for knowledge transfer
- Comprehensive evaluation of AHSN programmes

AHSN project teams also co-ordinate new ways of working, codify them and roll them out. Embedding innovative ideas and making people adopt them is a major challenge, not just finding ‘the magic bullet.’ Sixteen years is the average timeframe for the NHS to embed a new idea. However, the AHSN is identifying:

- **Test bed sites:** these working NHS sites are aimed at trialling new ways of improving care for patients such as new technologies and digital services. Wessex is to select from 250 life science small or medium enterprises (SMEs) to drive innovation.
- **Vanguard sites:** these are driving new models of care across systems. Social care and patient safety are also its responsibilities.



Successful projects include:

- **Dementia-friendly surgeries:** this small and inexpensive qualitative project will run in 150 surgeries within a year, half the total number in the area. The project has proved popular with patients, staff, carers and doctors, and demonstrates that small changes can make a big difference.
- **Respiratory care:** the aim is to diagnose in community pharmacies as well as in hospital and GP surgeries. The focus is on treating patients as 'human beings and grown-ups', e.g. recognising they can manage inhalers at home. Patients can now see a doctor in one place instead of facing a long wait. This speeds up diagnosis and drives better care.

The benefits

The patient-centric model of AHSNs has resulted in:

- Fewer hospital admissions and greater patient satisfaction.
- Patients being helped to manage and control their own lives.
- Hundreds of hours of GP time freed up by pushing down work in surgeries and out to pharmacies instead.

Incentivising the patient to achieve successful outcomes

"We have a very patriarchal relationship with our patients yet we rely on them to do everything."
Fiona Driscoll

Prevention is key in overcoming global healthcare challenges. There are different approaches that payers like the NHS can employ to encourage patients to take responsibility for good health outcomes. Effective incentives can change lifestyle behaviours or increase medicine compliance.

The NHS is shifting towards withholding treatment from patients in certain circumstances. People with poor lifestyle habits are encouraged to take steps towards health improvement, for example losing weight.

However, the NHS still relies on people understanding risk and wanting to live, not on tough messages such as 'You're fat. Go away' or on costly incentives such as free cinema tickets. Other countries though are taking a more forceful approach.

Medication adherence rates can be poor though when the payer relies on patients to act on advice. Wasted medicines cost the NHS billions because patients are not asked if they are going to take their medication. Compliance for diabetes treatment is around 55% for example.



The role of connected Healthcare in outcomes

Introduction

“Soon we are not going to be aware anymore we’ve got a medical device inside our body as it is going to be so smart and unobtrusive.”

Matic Meglic, Strategy and Business Model Innovation Director for Integrated Health Solutions EMEA at Medtronic

Imagine medical devices so intelligent they can run themselves. For example, a flying defibrillator embedded in a drone which saves lives by reaching cardiac patients within minutes of their rhythm monitoring device registering something is wrong – before an actual cardiac event.

In the past, the devices had to be manually adjusted by clinicians to respond to patients’ needs. Currently, communication which functions in two directions already enables remote changes of device settings. Soon devices even smarter which adjust to physiological changes themselves are expected to be commercially available.

The rise of smart technology

The prediction is that devices will become so unobtrusive - or ‘forgettable’ - that the patient will forget they have them. An example is a bionic pancreas which continuously measures blood sugar levels in diabetes patients and automatically makes adjustments to insulin delivery.

The rapid evolution of devices also means they are becoming ‘just part of the value they bring,’ according to Matic Meglic from Medtronic. Supported by the internet and a range of solutions to enhance the devices, this is transforming the market. Companies will no longer be just selling devices but services and solutions as complete packages.



The challenges facing the medical device industry

“Current regulation is not made for the speed of technology innovation that is happening today.”
Matic Meglic

- A surgeon might be the key decision maker in a traditional device sales model. In contrast, connected devices and services and innovative business models bring value to a broader range of stakeholders. The medical technology industry needs to improve communication of value to all stakeholders and support clients in procurement of complex services as compared to purchasing of individual devices.
- **Competition:** the market is about to undergo a significant change. Consumer device players are aggressively entering the market with smart connected devices for lifestyle and risk factor management. Data management and new knowledge creation becomes increasingly important with global consumer IT companies developing healthcare offerings specific to healthcare.
- **Patients:** certain users are growing impatient for a service or technology to become commercially available once the technology is there. There have been examples recently of patients hacking smartphones connected to a closed diabetes system. They have written their own apps to solve usability issues that have not yet received regulatory approval.
- **Regulation:** as outlined above, consumer activity is going beyond what is regulated. Regulation is not keeping up with the speed at which technology is advancing.
- **Outcomes:** the industry is facing challenges over developing business models which rely on actual value created over time versus an upfront payment for device. This is down to a relative lack of methodologies for outcomes measurement.



Case study

MEDTRONIC

"It is part of our core values to deliver value – better outcomes for patients in a more cost-efficient way."

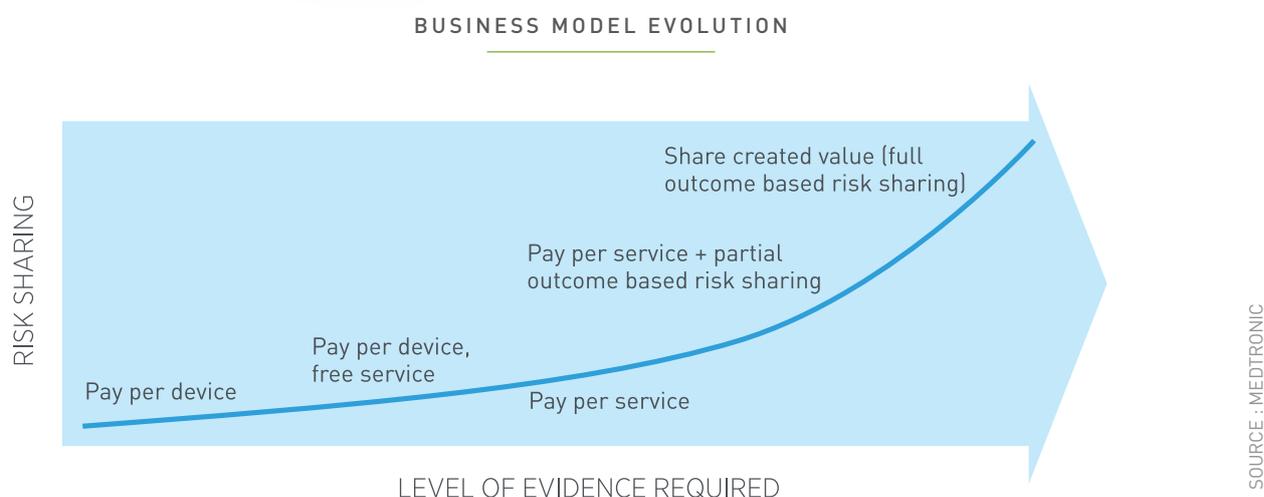
Matic Meglic

Most devices deliver value over time. So far, most medical technology companies have not provided models to charge for delivery of value over time. However, they would charge for a device upfront. Medtronic takes a value-based healthcare approach which includes committing to business models which measure ongoing value creation and share both the value created as well as the associated risks.

The first step is to shift from:

Charging everything up front for the device to charging on a constant basis for the perceived value delivered by the service (including a device) over time.

This device-plus-services model is currently offered by Medtronic as they believe it brings more added value to all stakeholders.



The next step is to go beyond perceived value into actual value. This would enable Medtronic to connect the cost of service they charge to the actual value created. This way they could take on more of the risk of actual value creation but also share more of the value.

The new value-based business model represents many opportunities. However, there remain obstacles to be addressed including developing robust value measurement methodologies and business models. In addition, payers must be supported in a transformation of reimbursement models. Patients and healthcare professionals too need support to embrace new technologies.



Case study

iHEALTH LABS EUROPE

Background

“Little decisions every day work much better than that big stupid decision that everybody takes on the 31st December because New Year’s resolutions never work.”

Uwe Diegel, President of iHealthLabs Europe.

Founded in 2010, iHealth was inspired by the smartphone revolution- President Uwe Diegel bought his first iPhone in 2008. He has been making medical devices for 20 years and saw smartphones as a solution for patient management and better outcomes.

The vision was to link all devices for chronic diseases to single platform and synchronise data via a secure Cloud. The aim was to enable health micro-management- taking small decisions on a daily basis to transform outcomes. For example, a patient could see their glucose levels and blood pressure drop and activity go up when they lost 200g in weight.

An open approach

iHealth’s open application programme interface (API) enables anyone to use its devices including third party telemedicine programmes and pharmaceutical companies. iHealth is compatible with Apple, Android and Windows and partners with most international telemedicine programmes. So its platform can both take the measurement and discover how people are using it.

The platform has been successfully monetised. However, iHealth and other companies are facing intrinsic issues over creating better outcomes solutions.

THIS IS iHEALTH

iHealth



SOURCE : iHEALTH LABS



Challenges

"It's pointless telling someone who is fat he's fat- he knows that already."

Uwe Diegel

- **Management:** More than ninety percent of obesity-related diabetes is down to bad lifestyle such as overeating. Yet device makers have focused on managing patients who instead need the right tools to change behaviours.

"I've realised now we should not be managing diseases we should be managing patients."

Uwe Diegel

- **Benefit:** Chronic disease represents the greatest cost to society. Therefore telemanagement programmes should make it easier for chronic disease patients to manage their lifestyles. Instead, they have made it more complicated, e.g. many patients give up after a few weeks. Programmes must work on 100% of the people, not the six percent who currently benefit.

"I wish I could snap my fingers and say we have the cure for all evil."

Uwe Diegel

GLOBAL BURDEN OF DISEASE SPEND: THE TOP FIVE

- 1 DIABETES
- 2 CARDIOVASCULAR DISEASE
- 3 CANCER
- 4 COPD
- 5 OBESITY

- **Scalability and Affordability:** Telemedicine pilot programmes using \$50 devices cannot be scaled up to 500,000 patients- it is not economically viable. So future technology has to be inexpensive for consumers/patients.
- **Competition and Compatibility:** There are now nearly 1.2 million apps on the market, e.g. 150,000 for healthcare. Competition means device makers have to convince patients to pay monthly for an app when they can get other apps for free. In addition, there are thousands of different operating systems available so it's virtually impossible to make an app compatible with all phones.
- **Data:** Safety of The Cloud is a major concern- each European country has its own protocols for data safety. Any skilled hacker can bypass security and access the health Cloud just as they can with a MasterCard site. Also, The Cloud opens doors but currently companies are just storing data, not counting it.

"I strongly believe all the answers are in The Cloud, the problem is right now we're not using The Cloud."

Uwe Diegel

iHealth and a team of students uploaded the digitised medical files of 18,000 women with breast cancer onto a Cloud. They discovered that smokers have less change of developing breast cancer. However, this illustrates how data must be properly validated, not just reproduced. It could be that female smokers are childless which reduces their breast cancer risk.



- **State support:** In France, the state pays for everything and insurers pay out blindly. There is no incentive then for preventative healthcare or to offer patients a better service, argues Diegel. Yet in Germany, insurers provide healthcare solutions which reduce cost to patient and provider.
- **Technology:** young healthy people use smartphones, not older patients with hypertension. One in five of all phones sold in Europe within the next five years will never go on to the internet. There is a risk in creating devices for patients who won't use them, e.g. connected blood pressure monitors.

Connected health: the future

"We need to move away from just selling pieces of plastic the plastic is not important."

Uwe Diegel

- **Technology embedded in value chain:** Devices must be real tools for health management and tackling disease, not just for marketing, and the industry must move away from just selling devices. The US is selling more connected than unconnected devices currently- this allows data to be chosen and shared.
- **Sharing communication protocols:** the future of healthcare is about collaboration so everyone in healthcare must share data and communication protocols. New technologies will make it easier for data to communicate, e.g. open protocols with APIs and Clouds that talk to each another with patient permission.
- **Connectivity and communication:** a data protection model that benefits everyone is needed along with new technologies, e.g. ultra narrowband to help data communicate. Currently, countries operate differently, so misuse and abuse will persist until a new model is found. Eventually everything will be connected- all devices will have the Cloud just as all computers have internet capability.
- **Connected health versus connected wellness:** Chronic health should focus not on connected wellness but on real patient management where technology is integrated 'invisibly' into the patient's daily life. Connected wellness products are not currently regulated, e.g. activity trackers are not currently regulated whereas connected health devices are, e.g. pacemakers. In an increasingly 'gadgetised' industry, anyone can launch a connected wellness product online. However, systems are emerging to regulate all devices/products.

AMERICAN HEART ASSOCIATION

Since Sept 2013, iHealth has run the world's largest epidemiology study on hypertension together with the American Heart Association (AHA). This is an example of 'data for good' which benefits industry. Patients are asked via an app to share their blood pressure data anonymously for medical research. More than 1 million patients daily now send this personal data to the AHA.

DISCOVERY LIFE (SOUTH AFRICA)

"We have to touch the hearts of people so they want to do something rather than have to do something." Uwe Diewel

This healthcare incentive plan gives a 50% discount to a health and racket club, and to the gym. In addition, members receive points for healthy living such as reduced cardiovascular risk. It's an example of incentivising people to want to change their lifestyles and health outcomes.



Conclusions

“There is no way we are going to deliver on the right science, the right outcome if we don't work together”

Cyril Schiever

The clear message from the speakers is that there is no future for improved healthcare outcomes without partnership work. Therefore it is vital that all healthcare stakeholders including payers, providers and suppliers work together, not in silos. There is still a way to go to achieve this.

Everyone is a stakeholder in delivering outcomes. Our white paper Healthcare, from Products to Solutions published in January 2015 showed how successful partnerships are possible.

This latest report has highlighted examples of partnership working such as big pharmaceutical companies collaborating with competitors on health solutions and the private sector partnering with state healthcare providers to improve patient outcomes.

Patients are at the heart of a new way of thinking on healthcare management and increasingly taking charge of their health.

This has created a new focus for healthcare, based not only on achieving cures but also on preventing illness in the first place. Pharma and medtech companies are moving towards greater innovation in drug and device development and providing services to sell their products. This is in order to provide value added healthcare that meets demands from patients, and from payers who are looking at health outcomes being delivered.

The move towards value-based, rather than volume-based healthcare, which achieves the best outcomes for patients raises several issues. There is the issue of how data on outcomes is collected, who manages it and who benefits from it. Value-added healthcare also creates the possibility of questioning how healthcare is financed and structured. It means that a complete rethink of the healthcare economy and of the principles upon which it is based today may be necessary.



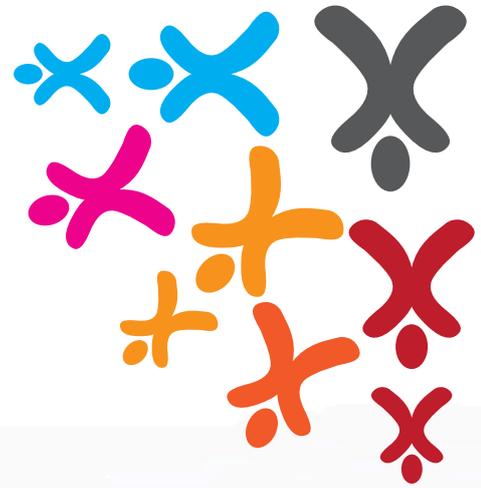
Future Discussions

The industry agrees that future discussions should address these issues:

- How will value-added healthcare be priced?
- Do we need a different economic and business model for healthcare provision?
- What will this model look like?
- How do we integrate healthcare platforms so that they meet everyone's needs?
- How do we get everyone to talk together in a competitive environment?
- What about the views and role of the patient in all this?

The above questions will be discussed at our next event on the 8th June 2016, in Paris.

You are welcome to join us!



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