Himss Europe

HIMSS Europe GmbH

Bertha-Benz-Straße 5 10557 Berlin Germany + 49 (0) 30 346 55 42 13 europe@himss.org

Himss Analytics

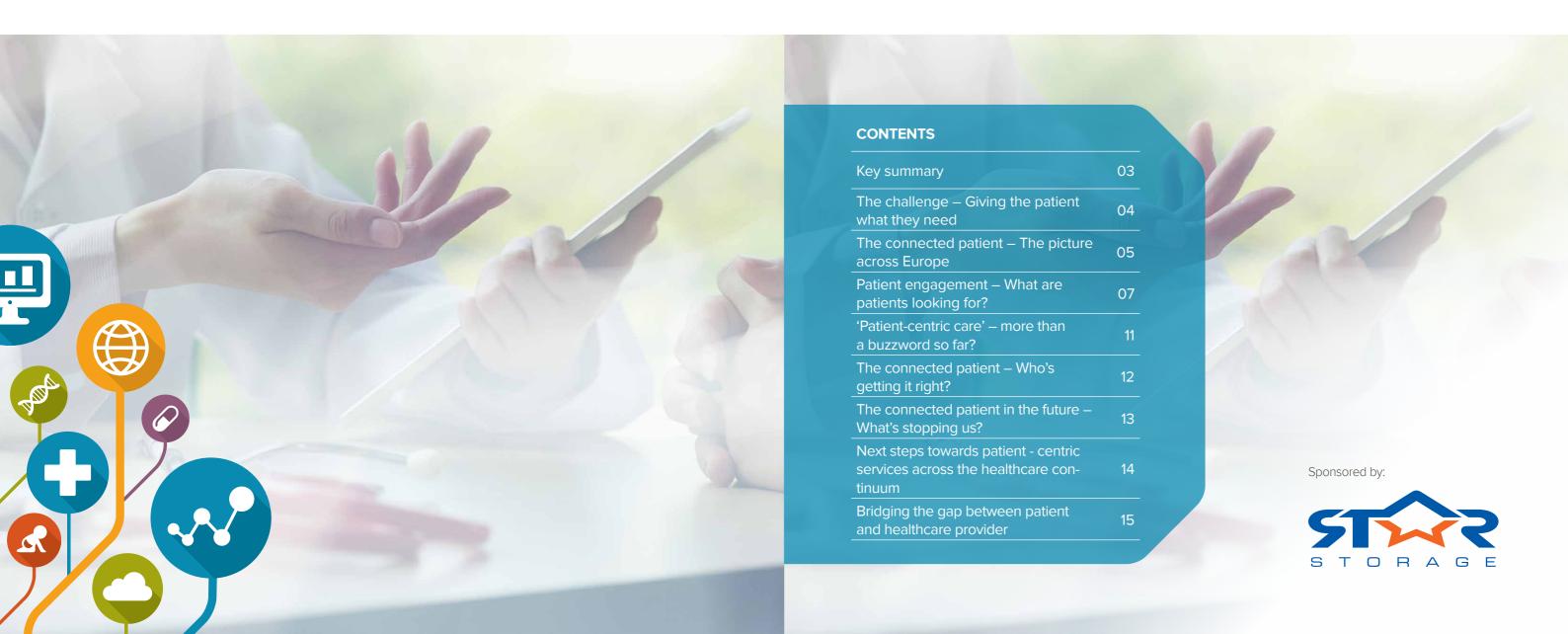
HIMSS Analytics Schwaegrichenstraße 9 04107 Leipzig Germany + 49 (0) 341 333 953 00 welcome@himssanalytics.eu

WWW.HIMSS.EU

Himss[®] Europe

THE JOURNEY TO VALUE-BASED HEALTHCARE

Redefining the way healthcare providers work, collaborate on medical records and connect with their patients





Key summary

Today's healthcare professional is severely stretched. Due to staff shortages and ever tighter healthcare budgets, the healthcare system is faced with the uneasy challenge of improving care outcomes while at the same time reducing costs. According to the World Health Organization¹ by 2030 we'll need to train and deploy 40-50 million new health and social care workers globally, unless we find supplementary ways to support patients, by which time health worker deficit could grow to 17.3 million. Data security, privacy and compliance have become especially critical to the healthcare industry (with ransomware attacks on healthcare organisations expected to double by 2018, increasing government regulations, sensitive patient records and mandatory security requirements).

This and a changing worldwide demographic – an ageing population coupled with a rise in chronic conditions and a consequent rise in demand for healthcare services – is creating the conditions for what some have referred to as a 'perfect storm' in the healthcare industry², forcing the need for change. It's widely believed that technology can be a key enabler of this change. The relationship between 'activated' patients and clinical outcomes has been demonstrated across a range of different populations and health conditions

The challenge – Giving the patient what they need

The digital era patient, accustomed to having information at their fingertips in the outside world – via smart phones and 'Doctor Google' – expects to be instantly connected to health information and to have a seamless, increasingly online, connection with their clinician, that will enable them to make empowered decisions about their health³. What they need is relevant, integrated information in order to become more engaged in their healthcare; the relationship between 'activated' patients and clinical outcomes has been demonstrated across a range of different populations and health conditions, including type 2 diabetes⁴.

Instead, because systems are siloed and information dispersed, their needs are not met. Consolidating, organising and managing data from different sources (medical equipment, systems support activity, etc.) to enable easy monitoring, data analysis and collaboration of healthcare providers, insurance companies and patients for better healthcare services is as such one of the greatest challenges of modern healthcare applications.

The connected patient – The picture across Europe

HIMSS Europe's Annual Survey 2016⁵ identifies health information exchange (HIE) – enabling the patient, clinicians, pharmacies and other healthcare providers to securely access a patient's medical information electronically – as the biggest priority in health IT across Europe. Within this arena, data exchange with external partners is seen as the most important aspect (29%), with data exchange within the organisation following closely behind (23%).

Figure 1: Priorities in Healthcare IT

What is the biggest PRIORITY in healthcare IT at the mo ORGANISATION?

Data exchange within the organisationData exchange with external partners

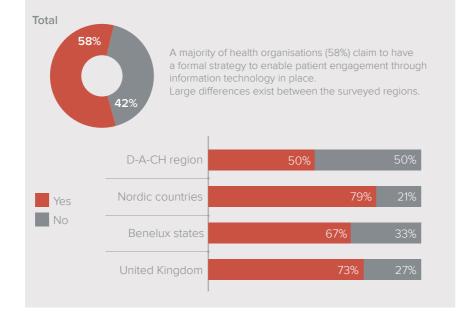
29		18%	D-A-CH region
45%	%	20%	Netherlands
22%	%	20%	Nordic countries
1	31%		Spain
	2%	22	United Kingdom
	3%	23	Total (Organisation type)
	31%		IT Department
29		19%	Org. and Corp. Governance
	29%		Physician
		1	

 Global strategy on human resources for health: Workforce 2030, World Health Organization, 2016
Digital Transformation of Industries: Healthcare Industry, World Economic Forum, 2016
Vox Pop: It's possible today for patients to truly contribute value (BJ-HC), 2015
Does Patient Activation Predict the Course of Type 2 Diabetes: A Longitudinal Study, US National Library of Medicine National Institutes of Health, 2017 Yet health information exchange is only happening to powerful effect in a handful of European countries. Patient engagement practices, meanwhile, are widespread, with 58% of health organisations across Europe claiming to have a formal strategy for it, according to a recent study by HIMSS Analytics⁶.

oment in your
,
9%
%
19%
39%
•
29%
24%
9%
28%

Figure 2: Formal Strategy

Does your organisation have a formal strategy to enable patient engagement through information technology?



"There's a big push across Europe towards enabling better continuity of care – effectively, enabling patient-centric care and health information exchange across different care settings – such that the patient or citizen is able to be treated by care practitioners from homecare, hospital and community centres without the need of missing data about his own patient records and history," says Jörg Studzinski, Director, Research & Advisory Services at HIMSS Analytics. "This is a real challenge when you're dealing with disparate information from different vendors and IT systems."

5: HIMSS Europe Annual Survey 2016, HIMSS Europe, 2016, (page 13)6: eHealth TrendBarometer 'Patient Engagement', HIMSS Analytics, 2016

Patient engagement – What

Patient portals

Patient portals are the most popular tools for patient engagement – and, interestingly, the tools patients are most likely to use to get involved in their personal healthcare⁶.

Yet patient portals, again, are not widespread yet across Europe – and where they are being used, their use is often localised. "If you are being treated, say, in a particular hospital, you will be able to use the patient portal there," says HIMSS Analytics' Studzinski. "If you are then referred to a different hospital for treatment, you will more often than not need to sign in to a separate patient portal – and, of course, the information in the latter is often not linked to the information in the former."

The Nordic countries are much better at providing patient portals, according to the same study⁶. One good example is Denmark's national portal sundhed. dk ('health' in English), which enables 1.4 million unique healthcare professional and patient visitors each month to access personal health data. Much of patients' information is also available through a central registry in the country, so it's relatively easy for patients and clinicians to access medical records of patients from a number of care providers.

The role of mHealth in delivering 'Zero-Distance healthcare'

When it comes to other methods, most participants in the same study deemed it 'quite unlikely' that patients/ consumers would use any profile in a social media network (e.g. a Facebook group on healthy eating, smoking cessation tweets or YouTube videos). It was seen as 'likely', meanwhile, for respondents to use smart phone applications and non-smart phone applications for wearables, Bluetooth body scales or other mHealth devices to take care of their individual healthcare, no matter whether those applications worked in combination with a smart phone or were only for standalone devices.

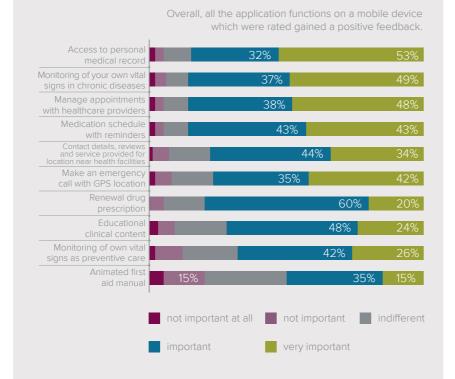


Patient portals are not widespread yet across Europe – and where they are being used, their use is often localised

Figure 3: Preferred APP Functions

Categorical

Mobile applications as a key factor for more patient engagement. How important are the following functions on a mobile device (e.g. for your smartphone or tablet)?



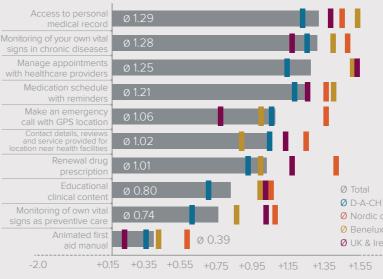
There is general consensus that patient engagement tools should offer several functions. Mobile applications are a key factor for more patient engagement, according to the survey (Figure 3), with having 'access to personal medical record' topping the list for most important application function, above 'monitoring of your own vital signs in chronic disease'. Interestingly, all application functions on a mobile device that were scored gained a positive rating (Figure 4).

Rainer Herzog, General Manager DACH, HIMSS Europe, comments: "mHealth will play a crucial role in patient-centric care. Without mHealth apps and solutions, it is impossible to realise new care paradigms such as personalised medicine and population health management. However, among the plethora of available apps, only those that make sense and which are connected to electronic

Figure 4: Preferred APP Functions

Mobile applications as a key factor for more patient engagement. How important are the following functions on a mobile device (e.g. for your smartphone or tablet)?

All app functions gained a positive average feedback from the several surveyed regions (Values scale reach from minimum "-2" to maximum "+2").



patient records will prevail - and thus to the whole patient care cycle. It is also crucial that regulators define clear and reliable regulations and guidelines for app developers with regards to certification, data security and reimbursement."

Available any time on any device, connected and mobile healthcare will leverage the Internet of Things (IoT) and empower patients to get lab results, medical images, visit records and prescription history from a growing list of health applications, imaging and labs devices and pharmacies apps.

At the same time, widespread use of 'Zero-Distance healthcare' – the capability to access a unified medical record anytime, anywhere, on any device – is right around the corner with video-enabled patient engagement, virtual health assistance and second medical opinion services provided through voice and video conference.

THE JOURNEY TO VALUE-BASED HEALTHCARE





'Patient-centric care' – more than a buzzword so far?

Organising information around the patient is a goal that many healthcare IT leaders strive for today – with 'patient-centric care' a common buzzword in the industry. But this kind of change doesn't happen overnight – one reason why it's happening only in isolated pockets around Europe to date and not for entire regional or national healthcare systems.

For truly effective care to take place in the future, however, most agree that information needs to be reorganised so that it follows the patient and not the healthcare organisation or professional.

"However, we must be wary of simply paying lip service to the concept of patient-centric care," says John Rayner, Regional Director, Europe and Latin America, HIMSS Analytics. "If we genuinely mean that we're going to organise services and information around the patient, then to do this properly we have to give the patient control over whom information is shared with: the information needs to be patient-controlled, not clinician-controlled." "If we genuinely mean that we're going to organise services and information around the patient, then to do this properly we have to give the patient control over whom information is shared with." In terms of health information exchange, most European countries seem to either have these kinds of exchanges or are trying to establish them.

The connected patient – Who's getting it right?

Not just with patient engagement and health information exchange, but with all sorts of eHealth deployment, the Nordic countries seem to be ahead of the game, with continental Europe – Germany, Italy, Switzerland in particular, trailing slightly behind. Much of this is to do with sharing information to protect the patient, says Studzinski.

In terms of health information exchange, most European countries seem to either have these kinds of exchanges or are trying to establish them. "The UK is progressing well with NHS 24 and health information exchange is happening in the Netherlands based in the regions and in Austria, the national system, ELGA, is enabling that sort of exchange," he comments. "The Netherlands are pretty good at health information exchange beyond the hospitals helping to exchange information either across a region or across the whole country."

Interestingly, all the Nordic countries – Denmark, Finland, Norway, Iceland and Sweden – have implemented or are in the process of implementing a national health information system, with Finland and Sweden also having developed regional repositories⁷.

With regards to patient-centric care, it's happening in pockets – in a GP's surgery or a hospital, for example – with the information siloed in that organisation and not available across the whole continuum of care. As suggested earlier in the report, it remains more of an ideal than a reality in most places, but projects are starting to germinate in regions of Spain, for example – in the Basque and Cataluña regions in particular and in parts of the UK.

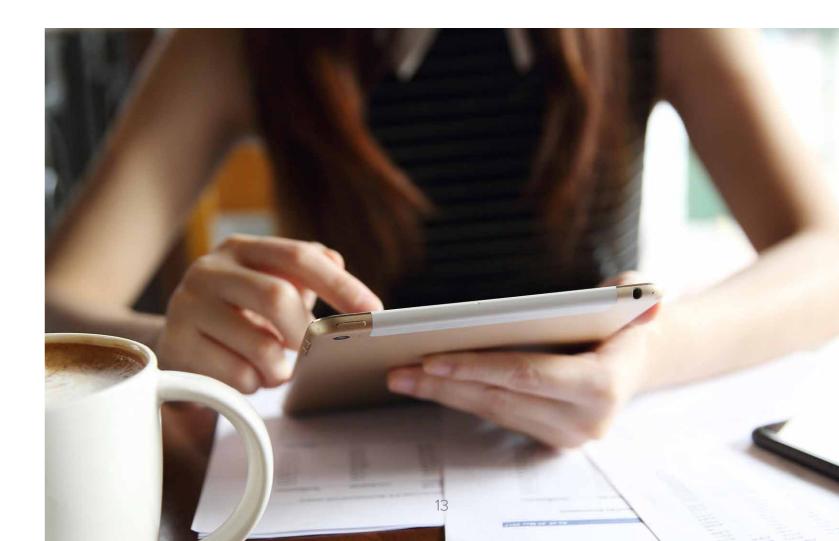
Health facilities in the Nordic countries are much better at providing IT tools for patient engagement, especially when it comes to the use of patient portals, according to the HIMSS Analytics study mentioned above⁶. Respondents from the DACH region and Benelux states stated, for the most part, that their organisations don't provide any patient engagement related IT tools at all.

6: eHealth TrendBarometer 'Patient Engagement', HIMSS Analytics, 2016 7: Nordic eHealth Benchmarking, Nordic Council of Ministers, 2014

The connected patient in the future – What's stopping us?

Several factors are needed to drive patient engagement in Europe. According to the HIMSS Analytics study above⁶, the majority of respondents claim that 'better products / offerings for patients' and 'financial incentives from health insurance / insurer' are needed to further involve people in their personal healthcare. And then, having the technology available to allow the information to flow freely from one organisation to another is also challenging.

One other factor that is influencing the ease with which patient engagement strategies are adopted across Europe is legislative and regulatory challenges – data privacy issues in some countries make moving ahead difficult. In some countries, including Germany, you're not allowed to create critical national registries for patients, such as for radiation dosage monitoring. So in many ways there's more of a regulatory push that's needed than a technology push in this area.



Data privacy issues in some countries make moving ahead difficult.

Himss Europe

Next steps towards patientcentric services across the healthcare continuum

Nordic countries have achieved a degree of interoperability and easy data-sharing and can now start to focus elsewhere. Enabling true continuity of care – through not only more effective health information exchange, but also by more efficient patient engagement strategies and organising information around the patient ('patient-centric care'), could potentially be key in navigating the 'perfect storm' situation mentioned in the Key summary. In this way, a patient or citizen could be treated by care providers in any setting and the healthcare practitioner involved could be confident that he or she had all the relevant information on the patient to make an intelligent treatment decision. Simultaneously, the patient would be connected to all the information that they needed to be fully engaged – and 'activated' – in their care.

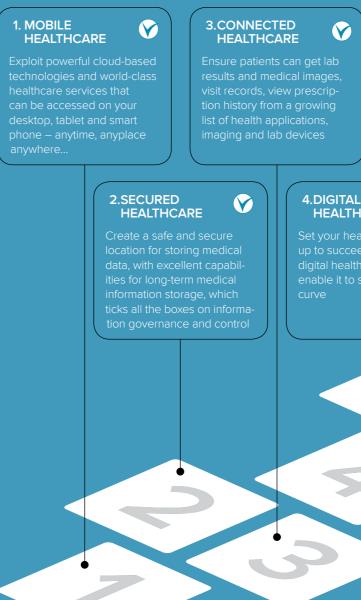
This is to some degree what is already happening in the Nordic countries. Now that they have their information relatively 'joined up', have achieved a degree of interoperability and easy data-sharing, these countries can now start to focus elsewhere. For Finland, says Kalevi Virta, leading expert from the country's Centre for Health and Technology, "this means we can start to place more emphasis on the secondary use of data, including making more personalised and individualised treatment and more preventive care". Also, once this information is arranged around the patient, putting the individual in control of their data – as HIMSS Analytics' Rayner suggests – could potentially simplify the data flow and open up new opportunities to develop innovative personal data-based services, while honouring privacy and consent issues. And that's what we're moving towards across Europe.

Bridging the gap between patient and healthcare provider

According to recent HIMSS research, a majority of today's health organisations across Europe claim to have a formal strategy for patient engagement through IT⁶. The ability to access personal medical records, monitor users' vital signs, manage appointments with healthcare providers and have a medication schedule with a reminder functionality on mobile apps were rated as among the most important of these, in the same research.

You're a hop, a skip and a jump away from bridging the gap between patient and healthcare provider. Do you have all six of these key elements in place?

Figure 5: Six steps to value-based healthcare



THE JOURNEY TO VALUE-BASED HEALTHCARE

5.COLLABORATIVE HEALTHCARE Create an information hub HEALTHCARE HEALTHCARE Ensure quick and user-friendly access to patients' medical files and history, for both