

# MARKETWATCH

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## In this issue...

April 18, 2018 NewScientist.com

### More education is what makes people live longer, not more money

When countries develop economically, people live longer lives. Development experts have long believed this is because having more money expands lifespan, but a massive new study suggests that education may play a bigger role. The finding has huge implications for public health spending.

Back in 1975, economists plotted rising life expectancies against countries' wealth, and concluded that wealth itself increases longevity. It seemed self-evident: everything people need to be healthy – from food to medical care – costs money. But soon it emerged that the data didn't always fit that theory. Economic upturns didn't always mean longer lives. In addition, for reasons that weren't clear, a given gain in gross domestic product (GDP) caused increasingly higher gains in life expectancy over time, as though it was becoming cheaper to add years of life. Moreover, in the 1980s researchers found gains in literacy were associated with greater increases in life expectancy than gains in wealth were. Finally, the more educated people in any country tend to live longer than their less educated compatriots. But such people also tend to be wealthier, so it has been difficult to untangle which factor is increasing lifespan.



#### Permanent change

Detailed surveys of mothers suggest that the children of those with more education, rather than more wealth, are more likely to survive. But the data were not available to similarly untangle whether education or wealth drove greater lifespans in adults. Wolfgang Lutz of the International Institute for Applied Systems Analysis in Vienna and colleagues have now done that by compiling average data on GDP per person, lifespans, and years of education from 174 countries, dating from 1970 to 2010. They found that, just as in 1975, wealth correlated with longevity. But the correlation between longevity and years of schooling was closer, with a direct relationship that did not change over time, the way wealth does.

When the team put both these factors into the same mathematical model, they found that differences in education closely predicted differences in life expectancy, while changes in wealth barely mattered. Lutz argues that because schooling happens many years before a person has attained their life expectancy, this correlation reflects cause: better education drives longer life. It also tends to lead to more wealth, which is why wealth and longevity are also correlated. But what is important, says Lutz, is that wealth does not seem to be driving longevity, as experts thought – in fact, education is driving both of them. He thinks this is because education permanently improves a person's cognitive abilities, allowing better planning and self-control throughout the rest of their life. This idea is supported by the fact that people who are more intelligent, as measured by IQ, appear to live longer.

**In this issue...**

# medgadget

## LivaNova's SenTiva Vagus Nerve Stimulation for Epilepsy Cleared in Europe

LivaNova won European CE Mark clearance for its SenTiva generator and accompanying Programming System for treatment of epilepsy in patients that don't respond well to drugs. It is able to detect the onset of certain seizures and deliver extra stimulation to help to avoid or lessen the impact of the seizure. The same system received FDA approval last year.

The device measures the person's heart rate and body position, logging the data so that it can be accessed by a physician following seizures to better understand what happened. It comes with a programming wand and a tablet computer to wirelessly program the implant and download the data gathered within it.



## Siemens Gets FDA Cleared for Two New Budget Friendly Yet Powerful CTs

Siemens Healthineers is on an FDA clearing streak of its newest CT scanners. The latest news, following up clearances of the SOMATOM Force and SOMATOM Edge Plus, is that SOMATOM go.All and SOMATOM go.Top can also now be marketed in America. The SOMATOM go.All and SOMATOM go.Top are more budget friendly scanners, yet offer tablet control, a remote, and imaging capabilities that are frequently found only in more expensive devices.



## Researchers Develop Smartphone App to Measure Arterial Stiffness

The stiffness of arteries is an important indicator of cardiovascular health, but this parameter is somewhat difficult to evaluate and requires a specialist to do it. And yet regular monitoring of arterial stiffness can help to monitor a variety of diseases or help in their diagnoses. Now researchers at University of Southern California (USC) have developed an app that uses only a smartphone's camera to measure arterial stiffness. Tonometry, which is a combination of blood pressure measurement and electrocardiography (ECG), is the standard method for measuring arterial stiffness. The researchers have now formed a company called Avicena that will be further developing and commercializing the technology.



## HEALTHCARE AT BALTIC COMPANIES

At a Baltic policy dialogue held end of 2017 for senior-level delegates from the 3 Baltic countries (**Estonia, Latvia and Lithuania**), including the health ministers of Lithuania and Latvia, representatives from all 3 health ministries met in Vilnius to exchange experiences in improving quality of care and ensuring patient safety.

In addition to the challenge of guaranteeing access to health care that is provided in the right place and at the right time, ensuring that these services are of high quality is also critical. Focus on quality in health care goes back to the signing of the Declaration of Alma-Ata (incorporated in WHO European Health for All Target 31). Strategies to manage and improve quality are a frequently cited principle and justification for health policy reform, and yet these strategies are quite diverse and fragmented. This is partly because this process requires engaging so many different dimensions of the health system: not only regulating and organizing the inputs of the health system (providers, technologies and financial resources) but also managing people-centred health services delivery and monitoring the outcomes.

Although the understanding of the term quality varies not only between countries but also between stakeholders, at least 3 dimensions have been agreed on:

- effectiveness,
- patient safety and
- people-centredness.

At the Baltic policy dialogue, delegates from the health ministries, insurers and health services presented their specific experience in regulating and certifying health-care providers, using indicators to monitor and measure quality and promoting quality through incentives. Supported by international experts from Belgium, Denmark, WHO, OECD and the European Observatory on Health Systems and Policies, the policy dialogue also explored the potential for more collaboration within and between countries as well as international support that could help further build capacity for high-quality governance. All national stakeholders acknowledged the need to develop an integrated national approach to quality in health care that can integrate these efforts coherently. Creating a strong and shared culture of quality and safety among all stakeholders (patients, providers, payers and government) is considered a key to success.

Estonia's health expenditure per person highest in Baltics. Many people in the Baltics die due to injuries or other external reasons. "The number of suicides and traffic deaths has significantly decreased in the past 15-20 years," said NIHD Health Statistics Department analyst Riina Tilk. "Nevertheless, alongside circulatory system diseases and malignant tumors, deaths caused by injuries or other external reasons still remain the third main cause of death." Lithuania employs 38 doctors per 10,000 people, while Estonia and Latvia followed with respectively 31 and 30 doctors per 10,000 people. Doctors in Estonia, Latvia and Lithuania averaged respectively 53, 54 and 49 years in age. The shares of the three Baltics' GDPs dedicated to health expenditures are among the lowest in Europe: the share is 6.5 percent in Estonia and Lithuania and 5.5 percent in Latvia. The average health expenditure per person is the highest in Estonia — €1,004, compared to Lithuania's €837 and Latvia's €650. The majority of this expenditure is spent on curative care, which in Estonia accounted for 56 percent, Lithuania 49 percent and Latvia 48 percent of all healthcare-related costs.

### "Major medical equipment/device distributors"

1. ELPIS SIA Riga, Latvia Phone: +371-67381170 \$35M annual sales-
2. INTERLUX UAB Vilnius, Lithuania Phone: +370-52786850 contact: Audrius Matuzevicius director- \$16M annual sales
3. Arbor Medical Korporacija SIA Kekavas Novads, Latvia +371-67620126 \$14.8M annual sales
4. SIROWA RIGA AS Riga, Latvia +371-67098210 Horst Juergen Warzecha \$11.74 annual sales
5. MEDILINK SIA Riga, Latvia +371-67840380 \$ 11.16M annual sales
6. OneMed SIA Marupes Novads, Latvia contact Anda Pudane and Janis Kulants \$8M annual sales
7. MEDIBRIDGE SIA Riga, Latvia +371-67221457 \$6.8 M annual sales
8. TRADINTEK SIA Riga, Latvia +371-67325943 \$8.50M annual sales

Coming up at  
MedTech Inno-  
vation Expo

Europe 2018

## ViVitro Labs presents cardiovascular devices at Medtec Europe

The company highlights its ViVitro Endovascular Simulator, SuperPump, and Pulse Duplicator with Model Left Heart for cardiovascular device testing and research in booth 10H47, Hall 10.



Visitors to the company's booth can find out about the Endovascular Simulator, which is designed for simulated-use testing and endovascular simulation training of endovascular devices. They can also learn about the Pulse Duplicator which simulates the function of the heart (left or right) by generating pulsatile flow through prosthetic heart valves placed in the Model Left Heart. Lastly, the ViVitro SuperPump is a digitally controlled hydraulic piston pulsatile pump that creates physiological cardiac flows.

## A digital world: Healthcare's move towards digital health

We can split up the digital health market into four segments – telehealth; mhealth; health analytics and digitised health systems. Of these, mhealth is the only segment that caters to consumers, consisting of wearables, medical and fitness apps and digital applications. One of the many discussions surrounding digital health is its ability to provide new models of care to patients; this is highlighted by companies such as Apple and Amazon entering the market, predicating a change is on its way. The latest news of Apple's AC Wellness centre - which will treat its staff and test its growing portfolio of health services and products – is one such example of the changing health landscape.



In 2018, we will be able to see just how close we are to a connected world of health. Digital health has huge potential for both medical device and pharmaceutical clinical trials. But interoperability – the way that data is exchanged between connected devices and platforms — remains a hurdle. We're seeing signs that clinical trials are becoming more virtual as new mobile applications are created to recruit, enroll, engage and receive data from patients with less burden on their everyday life. We have seen virtual clinical trials pave the way for a future that is quickly evolving.

## Foba gives exclusive look at latest software at Medtec Europe

The product is part of a new software release and enables the precise alignment of laser marks without fixtures. The software accurately marks products even if they're out of alignment, making the need for custom accurate fixtures in many instances unnecessary.



Foba is exhibiting its laser marking stations M2000 and M1000 at Medtec Europe as well as a UV-laser marking system. Visitors can experience live presentations of how components automatically get UDI-marked with high positioning and marking quality.

The company's medical market manager Christian Soehner is giving a presentation at the VDMA-exhibitor forum about the capabilities of laser marking in the context of cost efficient and UDI-compliant code

## A good Lesson from- (Harvard Business Review 14 April, 2018)

### *Technical Experts Need to Get Better at Telling Stories*

*“If only we could tell our stories better,” is a refrain I hear often from people I work with in the science and technology community. And I understand why. In my experience, startup and technical business leaders don’t tell their innovation stories well. This is a huge missed opportunity. When you’re doing good work, you want people to know about it. So whether you’re drafting website copy, a marketing brochure, an online article, or a press release, consider hiring professional storytellers to make the world-changing things you do mean something to regular people.*

What are technical innovators doing wrong – and how can they fix it?

Don’t hire PhDs to write your stories.

I’ve been approached many times by recruiters asking me to refer them to communications talent, but frequently the folks I offer up are rejected because they don’t have a master’s degree or PhD in a scientific or technical field. The problem is that many institutes are hiring “experts” in the science, not practitioners in the craft of storytelling. My suggestion: *A good communications expert can help you translate your work so it relates to the world outside your lab, office, or facility.*

If you are looking for a PhD in brain science to communicate brain science, then you’re not looking in the right place. Instead, seek out writers who have crafted op-eds or articles for a variety of publications and show dexterity in messaging. If a writer can write effectively for different publications, then chances are they can write for you.

Jargon clutters your message and confuses the reader. That’s why tech leaders need to understand their target audience. The language you use in white papers and research papers, which are crafted for peers or senior stakeholders, cannot be easily transferred to other marketing documents.

It’s not easy to tell straightforward stories about complicated topics. But the solution isn’t to cram all the ideas into one story or release. In fact, given that readers’ attention spans are getting shorter, it’s essential to follow this rule: Keep it simple. Build your narrative from the foundation up – one idea at a time.

The purpose of starting with long-form articles is not just about creating branded content: it’s about crafting our organization’s unified approach to messaging. I recently reached out to a colleague who is also a former journalist to ask him why his company’s messaging wasn’t as plain as I knew his writing to be. His response was that the technical experts who reported to the C-suite insisted on rewriting his copy. The company’s leaders were unintentionally doing themselves a disservice by complicating – and watering down – their messages highlighting the organization’s competitive advantages and technical expertise. No surprise, the organization remains frustrated that it’s not getting recognized for its amazing work. The main reason: complex stories require different marketing approaches. If your traditional communications strategy isn’t working, try hiring professional storytellers.

#### Contact Us

If you have any specific area that you need information on, please contact Corporate Marketing so we can focus on the specific areas to research to speed up your efforts.

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Corporate Marketing

