The Healthcare Pivot: Strategies for the Transformation of Healthcare

October, 2017

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From Thought Leadership to Clinical Practice

$75,062

https://www.census.gov/newsroom/press-releases/2017/income-povery.html

$18,764

http://www.kff.org/report-section/ehbs-2017-section-1-cost-of-health-insurance/#figure11

Business Architecture

A business model/business architecture is a fixed characteristic of an organization that is resilient and resistant to incremental change

Richman, Barak D., Mitchell, Will and Schulman, Kevin A.,2013 "Organizational Innovation in Health Care. HMPI, 1(3): 36-44

Strategy: UNC-Carolina's Health

"In an interview at The News & Observer's offices on Wednesday, executives of the two companies said **the partnership would give them the leverage to negotiate better deals with insurance companies and vendors**, saving the hospitals millions of dollars."

http://www.newsobserver.com/news/business/article170437247.html

Market Power

Table 2. Total Annual Cost of Care per Patient in Physician Organizations in California, 2009-2012

	Physician Organizations, **Mean** (Median [Range]) $$		
Year	**Physician-Owned**	**Local Hospital-Owned**	**Multihospital System-Owned**
2009	**2718** (2638 [1181-5809])	**3683** (3627 [2763-4657])	**4083** (4098 [2704-5838])
2010	**2845** (2757 [1370-5342])	**4081** (4199 [2890-5284])	**4362** (4153 [2874-6490])
2011	**3006** (2915 [1363-5626])	**4251** (4403 [2722-5501])	**4719** (4715 [3563-6939])
2012	**3066** (3003 [1283-5784])	**4312** (4400 [2940-7649])	**4776** (4845 [3347-6881])

Physician Salary, Physician Satisfaction?

Robinson, 2014. "Total Expenditures per Patient in Hospital-Owned and Physician Owned-Organizations in California." JAMA, 2014.

ACO Perspective

A Cautious Path Forward on Accountable Care Organizations

Barak D. Richman, JD, PhD
Kevin A. Schulman, MD

SPURRING THE CREATION OF ACCOUNTABLE CARE ORganizations (ACOs) was a signature initiative in the Patient Protection and Affordable Care Act of 2010 (PPACA). To achieve potential efficiencies by having health care delivery coordinated by multiple health care entities (eg, hospitals, physician groups, clinics, health care systems), the act invites such entities to integrate in ACOs and instructs the Medicare program to share with an ACO any cost savings it can demonstrate.[1] Observers are expressing concern, however, that newly established ACOs are joining health care organizations that otherwise would compete with each other, thus creating networks with dangerous market power.[2] It appears that the main purpose of health care entities in forming ACOs may not be to achieve cost savings to be shared with Medicare but to strengthen negotiating power over purchasers in the private sector.

This may be the latest chapter in the steady accumulation of market power by hospitals, health care systems, and

For legal, regulatory, and other reasons, health insurers in the United States cannot refuse to pay the high prices imposed by health care organizations, even when the price exceeds the likely value of the service to the patient. Instead, insurers are expected to cover any desired service deemed "medically necessary" by professional standards, whatever the cost. Health insurance, therefore, enables monopolists of health services to charge more than the textbook "monopoly price," earn more than the typical "monopoly profit," and capture more consumer dollars than monopolists in other industries.

Policy makers have been slow to recognize the dangers of market power in health care. In what has properly been called a failure of a
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ACOs in T

VIEWPOINT

Reassessing ACOs and Health Care Reform

Kevin A. Schulman, MD
Duke University School of Medicine, Durham, North Carolina; and Harvard Business School, Boston, Massachusetts.

Barak D. Richman, JD, PhD
Duke University School of Law, Durham, North Carolina.

Viewpoint page 1

Has the accountable care organization experiment been successful?—No.

Accountable care organizations (ACOs) were the cornerstone of the novel payment strategies for Medicare reform under the Affordable Care Act (ACA). In an effort to move from fee-for-service medicine, the Centers for Medicare & Medicaid Services (CMS) aimed to encourage hospitals and physicians to collaborate by offering a bonus if they improved the quality and efficiency of care. The ACO concept appeared in 2 different initiatives under the ACA—the Pioneer ACO program and the ACO program under the Centers for Medicare & Medicaid Innovation (CMMI)—and was intended as an experiment in health policy.

Based on 3 published evaluations of the ACO program, the experiment so far has failed to produce needed efficiencies. First, a comprehensive evaluation[1] of the performance of Pioneer ACOs showed savings in the cost

pothesis. In interpreting studies with null findings, there generally are at least 2 potential explanations: (1) the experiment was not implemented appropriately, or (2) the hypothesis was incorrect.

There is little evidence of the former explanation because CMS has had the opportunity to implement ACOs broadly. The Medicare Pioneer ACO program had 32 organizations participating originally, and the MSSP model had 220 participating organizations. Moreover, several different payment and incentive models were considered in these implementations. In addition to these more recent evaluations, the Medicare Group Practice Demonstration Project implemented a preliminary evaluation of the ACO concept in 2005 with 10 group practices and 220 000 beneficiaries. The project achieved savings in the cost of care of $134 million, but net savings after bonuses were only $27.3 million (on a base of approximately $2.6 billion in 2011 spending).[4]

JAMA. 2011;305(6):602-603; JAMA 2016 316 (7).

Market Leverage: Charges

POLICY

Battling the Chargemaster: A Simple Remedy to Balance Billing for Unavoidable Out-of-Network Care

Barak D. Richman, JD, PhD; Nick Kitzman, JD; Arnold Milstein, MD, MPH; and Kevin A. Schulman, MD

AJMC 2017:23(4):e100-e105

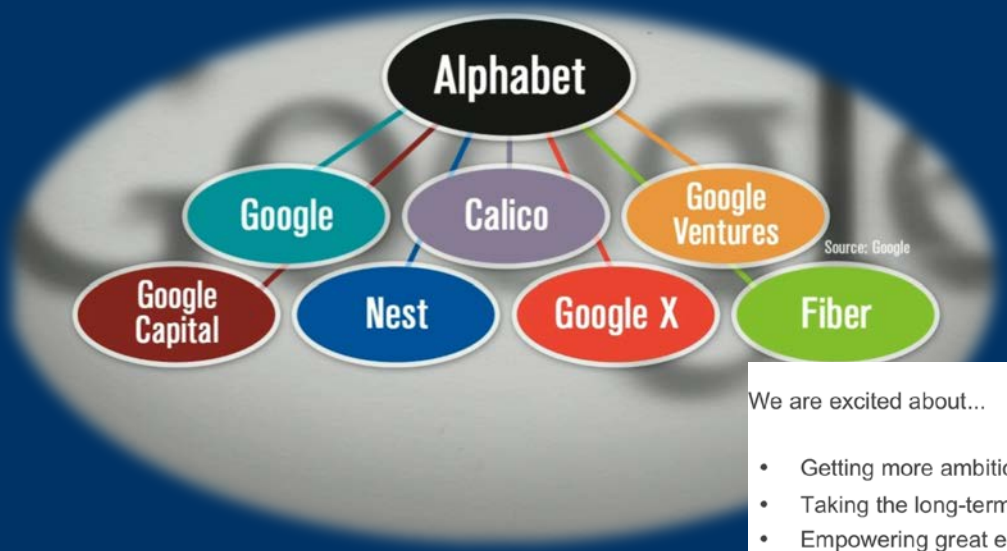
How Do We Transform the Health Care System?

https://jmichaelrios.wordpress.com/2014/04/17/resurrection-butterflies/

Organizational Innovation Vs. Disruptive Innovation

http://continuumgames.com/shop/rock-em-sock-em-robots/

Google Alphabet: Organizational Innovation



We are excited about...

- Getting more ambitious things done.
- Taking the long-term view.
- Empowering great entrepreneurs and companies to flourish.
- Investing at the scale of the opportunities and resources we see.
- Improving the transparency and oversight of what we're doing.
- Making Google even better through greater focus.
- And hopefully... as a result of all this, improving the lives of as many people as we can.

What could be better? No wonder we are excited to get to work with everyone in the Alphabet family. Don't worry, we're still getting used to the name too!

Larry Page

Larry Page
CEO, Alphabet

http://investor.google.com/releases/2015/0810.html

Organizational Innovation

Production Engine

Innovation Agenda

The Other Side of Innovation: Solving the Execution Challenge. Harvard Business Review. Govindarajan and Trimble.

Organizational Innovation

Harvard Business Review

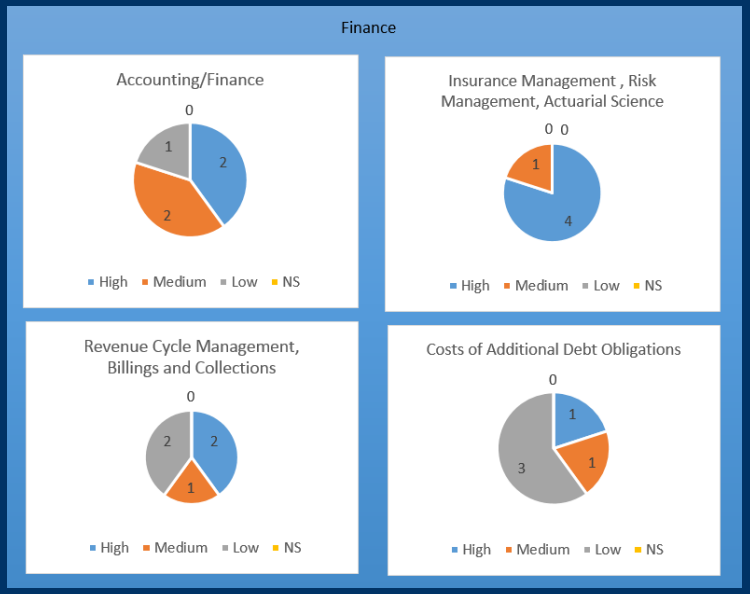
CHANGE MANAGEMENT

We Interviewed Health Care Leaders About Their Industry, and They're Worried

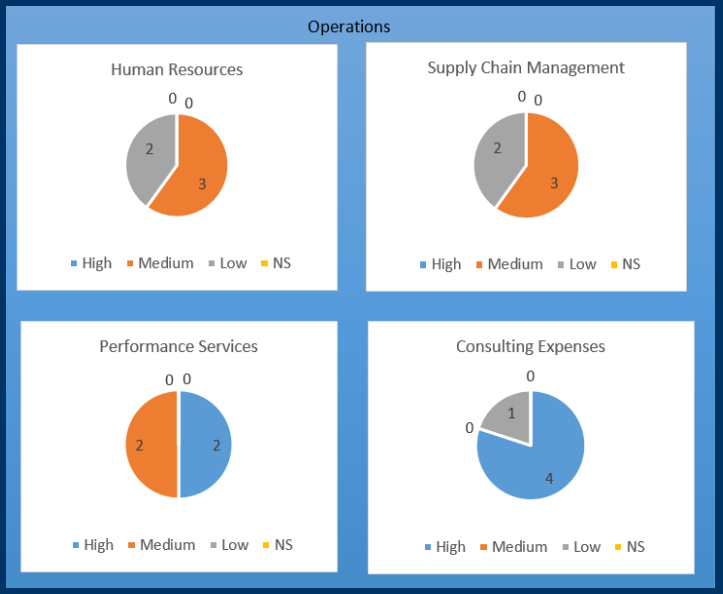
by Michael Poku and Kevin A. Schulman

DECEMBER 14, 2016

Finance



Operations



Duke Clinical Research Institute

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Poku M. et al. Journal of Healthcare Finance. Forthcoming; Harvard Business Review. December 14, 2016.

Organizational Innovation

Table 1. Characteristics of Chief Innovation Officers by Primary Function

Characteristic	Strategic (n = 13)	Operational (n = 6)	Financial (n = 6)	Total (N =25)
Reporting directly to chief executive officer, %	54	0	33	36
Business unit outside existing structures, %	8	0	67	20
Budget (in millions), median, $[a]	3.0	2.0	35.0	3.5
Headcount, median, No.[b]	17.0	6.5	30.0	9.5

[a] Budget data were provided by 9 of 13 chief innovations officers in the strategic function, 5 of 6 in the operational function, and 6 of 6 in the financial function.

[b] Headcount data were provided by 13 of 13 chief innovation officers in the strategic function, 6 of 6 in the operational function, and 5 of 6 in the financial function.

Shah S, Leading Change—A National Survey of Chief Innovation Officers in Health Systems. Forthcoming.

Organizational Innovation

Source: Dossary, K

Disruptive Innovation

AMDAHL

DEC

COMPAQ

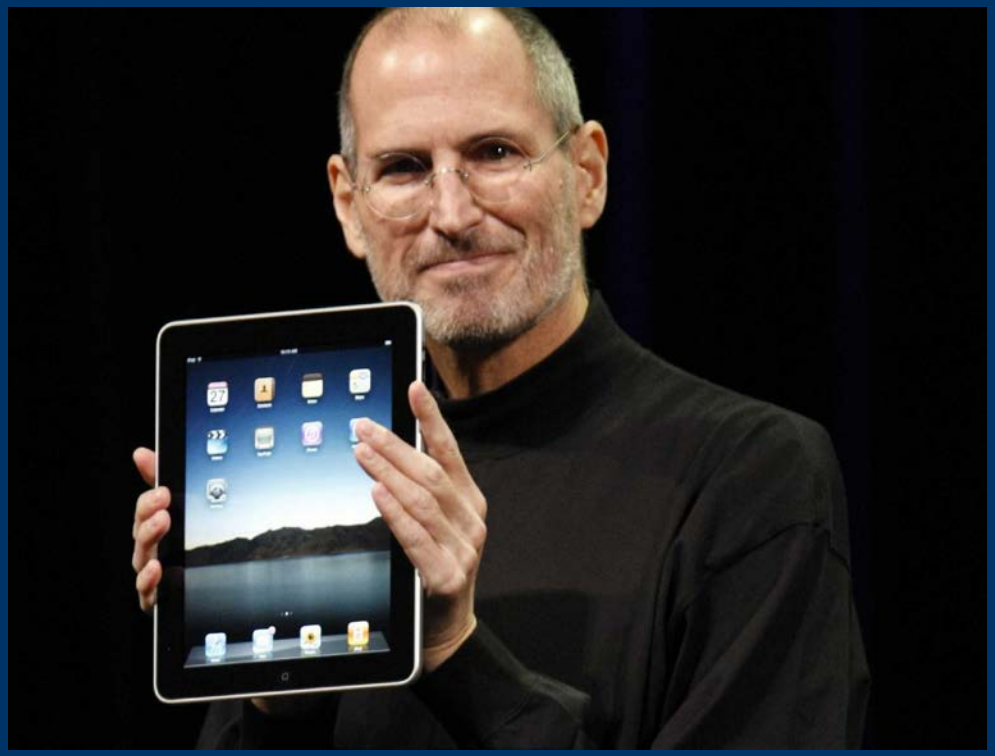
iPhone

BlackBerry™

Clay Christensen

IBM

Business Model Innovation



What if 50% of health care was delivered via mHealth technology by 2025?

Connectivity

NEHR
National Electronic Health Record
Singapore

One Patient,
One Health Record

Wouldn't it be helpful and assuring if, each time you see your doctor, he has your past medical record? You wouldn't have to try to remember past episodes of illnesses or test results. Your doctor would see your record even if you had visited different public hospitals or clinics using the National Electronic Health Record (NEHR) system.

The NEHR is a data exchange system that stores the medical record of every person in Singapore who has seen a doctor in the public healthcare system since February 2011.

Through the NEHR, doctors have access to the medical history of patients to support them in decision-making. The goal of the NEHR is to ensure a seamless healthcare experience for each patient.

Why NEHR?

The NEHR is a key enabler of Singapore's strategic vision, "One Patient, One Health Record", a vision that focuses on providing customised and convenient care to patients. By providing a consolidated view of a patient's medical history, the NEHR ensures that healthcare professionals have the necessary information to help them make the best care decisions for the patient.

What medical information is in the NEHR?

Information in the NEHR includes:

1. Admission and visit history
2. Hospital inpatient discharge summaries
3. Laboratory results
4. Radiology results
5. Medication history
6. History of past operations
7. Allergies and adverse drug reactions
8. Immunisations

Is your medical record safe?

Your medical record is safe. The confidentiality of your medical record, whether manual or online, is governed by law and only authorised users of the NEHR can access it. Neither can the information be forwarded to a third party. All access to the records are logged and reviewed periodically.

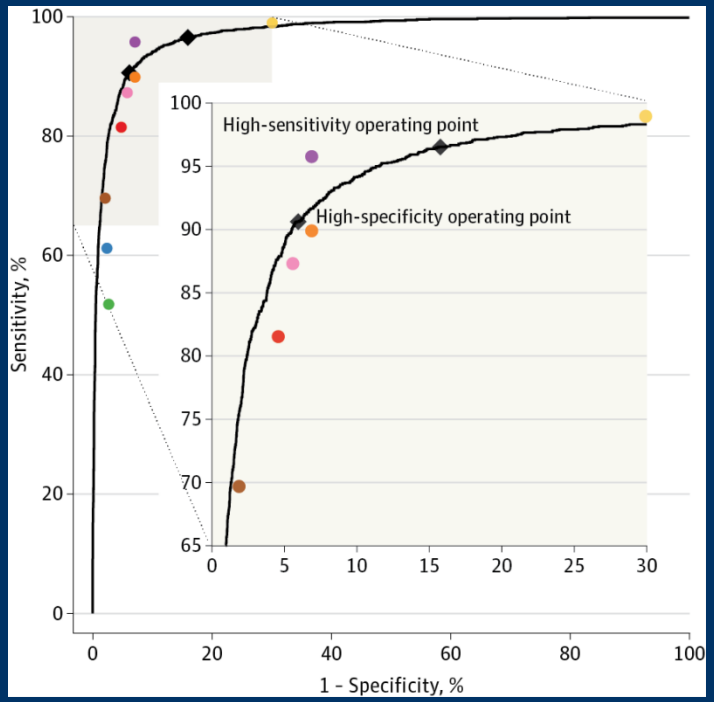
MINISTRY OF HEALTH
SINGAPORE

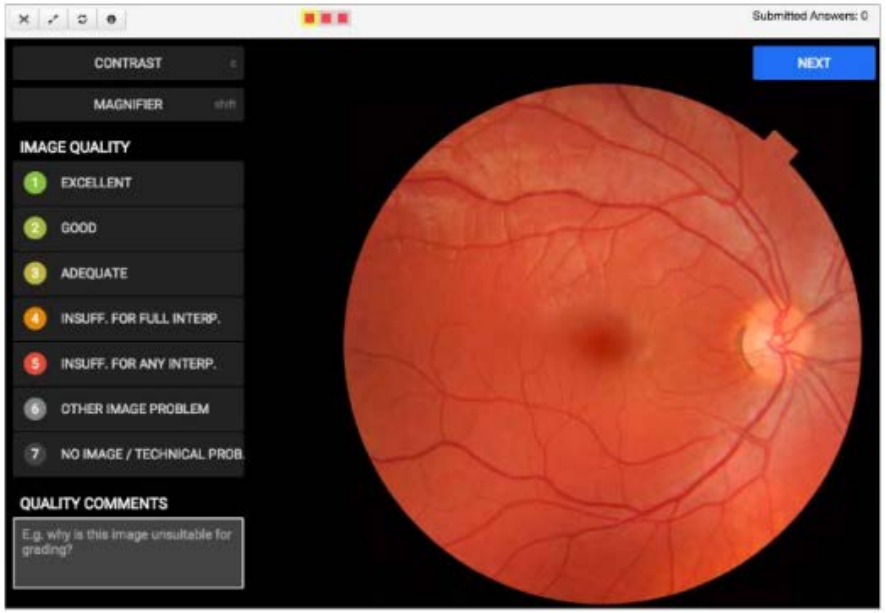
Patients are automatically included in the NEHR to enjoy the benefits that it brings. For more information, including your opt-out option, please speak to the staff at your healthcare institution. You can also contact the MOH Quality Service hotline at 1800 225 4122.

https://www.moh.gov.sg/content/dam/moh_web/Publications/Information%20Papers/2014/NEHR/English%20Brochure%20(Final).jpg

Substitution: Capital for Labor

Development and Validation of a Deep Learning Algorithm for Detection of Diabetic Retinopathy in Retinal Fundus Photographs

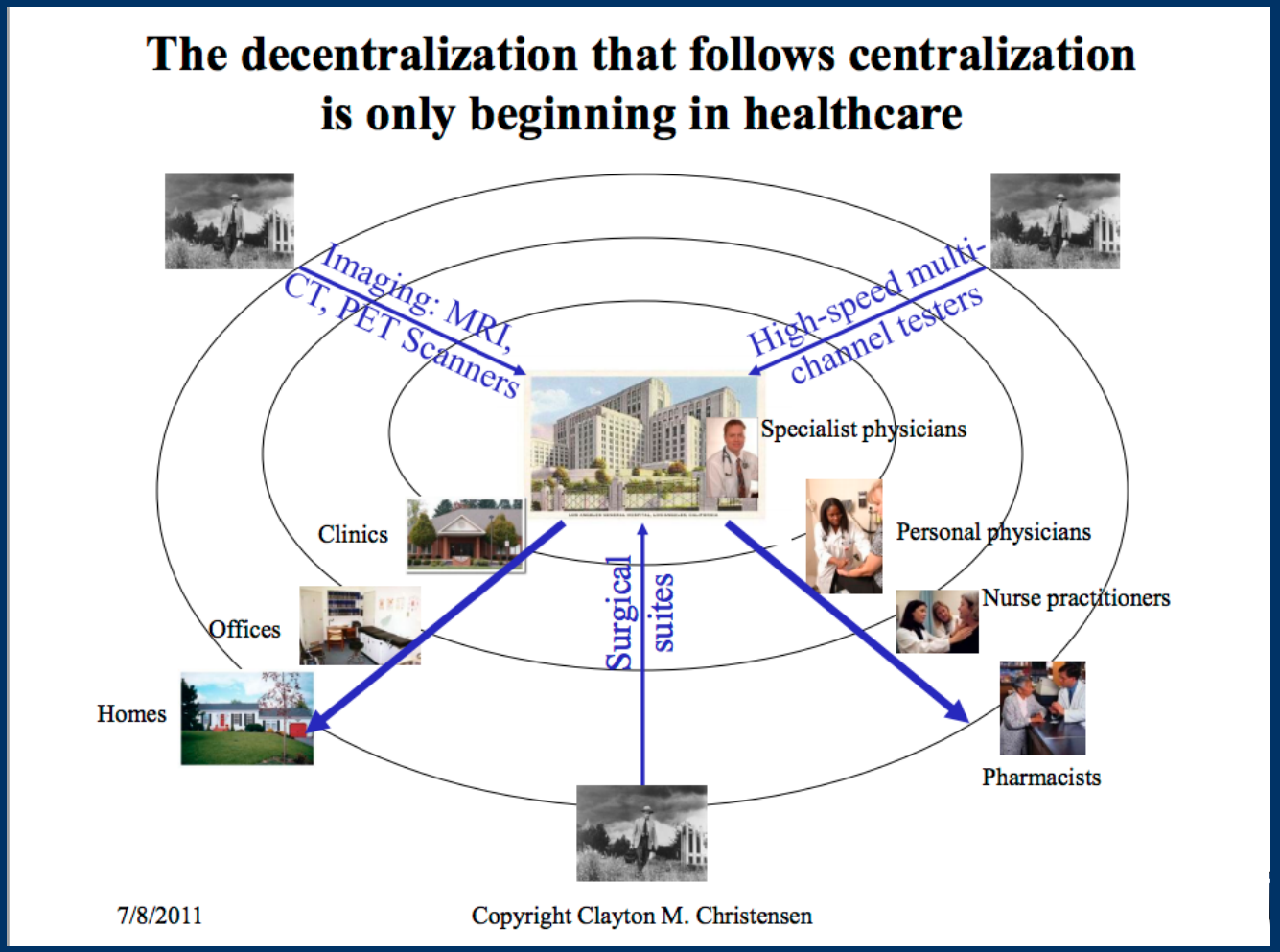




Validation Set Performance for All-Cause Referable Diabetic Retinopathy in the EyePACS-1 Data Set (9946 Images)Performance of the algorithm (black curve) and ophthalmologists (colored circles) for all-cause referable diabetic retinopathy, defined as moderate or worse diabetic retinopathy, diabetic macular edema, or ungradable image. The black diamonds highlight the performance of the algorithm at the high-sensitivity and high-specificity operating points. For the high-sensitivity operating point, specificity was 84.0% (95% CI, 83.1%-85.0%) and sensitivity was 96.7% (95% CI, 95.7%-97.5%). For the high-specificity operating point, specificity was 93.8% (95% CI, 93.2%-94.4%) and sensitivity was 90.7% (95% CI, 89.2%-92.1%). There were 8 ophthalmologists who graded EyePACS-1. The area under the receiver operating characteristic curve was 97.4% (95% CI, 97.1%-97.8%).

JAMA. 2016;316(22):2402-2410. doi:10.1001/jama.2016.17216

Centralization and Decentralization

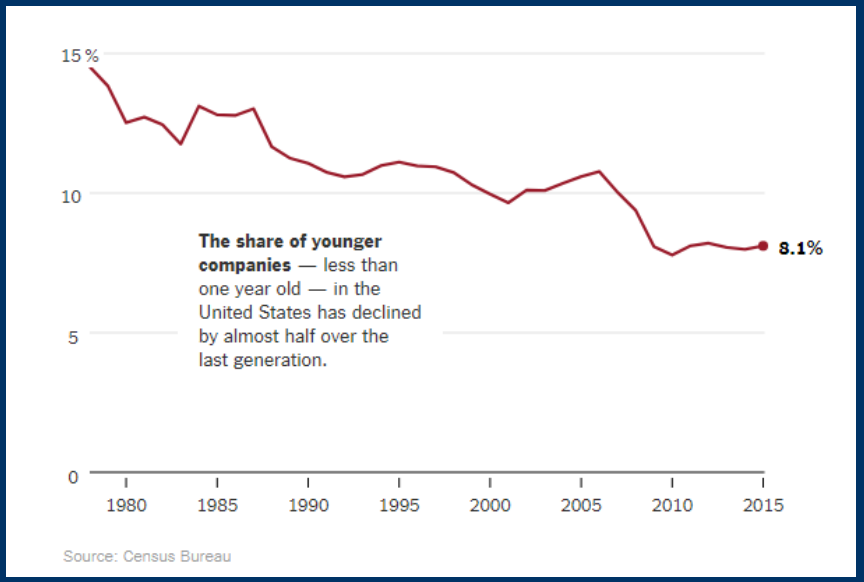


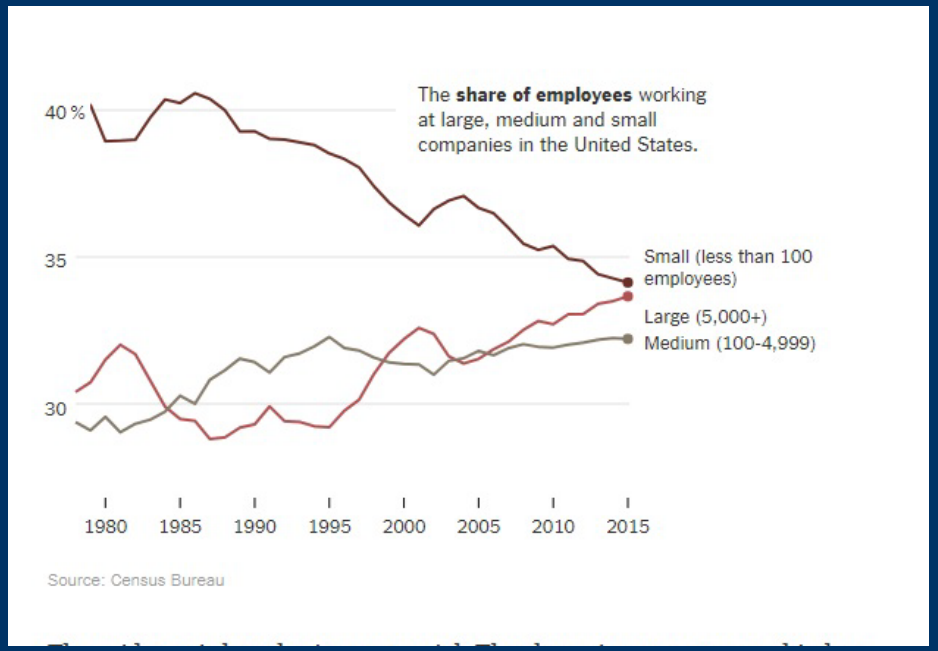
Market Impacts?

ECONOMY

A Start-Up Slump Is a Drag on the Economy. Big Business May Be to Blame.

By BEN CASSELMAN SEPT. 20, 2017





https://www.nytimes.com/2017/09/20/business/economy/startup-business.html

Discussion