The Healthcare Pivot: Strategies for the Transformation of Healthcare

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From Thought Leadership to Clinical Practice

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Business Architecture

A business model/business architecture is a fixed characteristic of an organization that is resilient and resistant to incremental change.
“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.”
### Table 2. Total Annual Cost of Care per Patient in Physician Organizations in California, 2009-2012

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

Physician Salary, Physician Satisfaction?
A Cautious Path Forward on Accountable Care Organizations

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

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. 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. 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 insurance companies.

Reassessing ACOs and Health Care Reform

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 of the performance of Pioneer ACOs showed savings in the cost pothosis. 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).
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, M.D., M.P.H.; and Kevin A. Schulman, M.D
How Do We Transform the Health Care System?

https://jmichaelrios.wordpress.com/2014/04/17/resurrection-butterflies/
Organizational Innovation Vs. Disruptive 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
CEO, Alphabet
Organizational Innovation

Innovation Agenda

Production Engine

Organizational Innovation

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

by Michael Poku and Kevin A. Schulman

DECEMBER 14, 2016
## Table 1. Characteristics of Chief Innovation Officers by Primary Function

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

$^a$ 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.
Organizational Innovation
Disruptive Innovation

AMDAHL → DEC → COMPAQ

iPhone ← BlackBerry™ ← IBM

Clay Christensen
What if 50% of healthcare was delivered via mHealth technology by 2025?
Connectivity

One Patient, One Health Record

Woudn’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.

You may avoid duplicate tests or referrals

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 4722.

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%).
The decentralization that follows centralization is only beginning in healthcare.
Market Impacts?

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

By BEN CASSELMAN  SEPT. 20, 2017

The share of younger companies — less than one year old — in the United States has declined by almost half over the last generation.

Source: Census Bureau

The share of employees working at large, medium and small companies in the United States.

Source: Census Bureau

Discussion