First…

...understanding your role...
Change is Inevitable

We have accomplished miracles, but it is time for change
Why Change?

If food prices had risen at medical inflation rates since the 1930s

*Source: American Institute for Preventive Medicine

<table>
<thead>
<tr>
<th>Item</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 dozen eggs</td>
<td>$85.08</td>
</tr>
<tr>
<td>1 pound apples</td>
<td>$12.97</td>
</tr>
<tr>
<td>1 pound sugar</td>
<td>$14.53</td>
</tr>
<tr>
<td>1 roll toilet paper</td>
<td>$25.67</td>
</tr>
<tr>
<td>1 dozen oranges</td>
<td>$114.47</td>
</tr>
<tr>
<td>1 pound butter</td>
<td>$108.29</td>
</tr>
<tr>
<td>1 pound bananas</td>
<td>$17.02</td>
</tr>
<tr>
<td>1 pound bacon</td>
<td>$129.94</td>
</tr>
<tr>
<td>1 pound beef shoulder</td>
<td>$46.22</td>
</tr>
<tr>
<td>1 pound coffee</td>
<td>$68.08</td>
</tr>
<tr>
<td><strong>10 Item Total</strong></td>
<td><strong>$622.27</strong></td>
</tr>
</tbody>
</table>
“A revolutionary moment in the world's history is a time for revolutions, not for patching.”

Lord William Beveridge
Adapting to Change is Optional

“It is not necessary to change. Survival is not mandatory.”

W. Edwards Deming
It’s Time to Engage

It is time to engage…

…let’s criticize less and dare greatly more.
Imagine for a moment...

... where the right thing to do is the easy thing to do...

Minimize complexity  Most up-to-date evidence  Ignore the mundane

Focus on an individual patient’s needs and desires  Efficient care  Drive out waste
Reduced Heart Failure Readmissions

- 14% reduction in 90-day readmits
- 21% reduction in 30-day readmits
- 2X increase in phone calls 48 hours
- 63% increase in med reconciliation
Improved Surgical Outcomes

36% reduction in post operative LOS

19% reduction in average variable direct costs

19% decrease from diagnosis to surgery

36% increase in order set adoption

53% increase in percentage of patients receiving recommended antibiotic
Reduced Unnecessary Elective Deliveries

75% reduction in elective deliveries

Six Figure payer-partner bonus
All About Creating Value…

Value = Good / Cost

“Quality improvement is the most powerful driver of cost containment.”

- Michael Porter, PhD

Economics

Harvard Business School

Underutilization, overuse, and lack of coordination
What We Pay For...

Now

- Preventable Complications
- Unnecessary Treatments
- Inefficiency
- Errors

40% Waste

60% Value

Future

- All Services Add Value

100% Value
Care delivery is all about the execution of process
A Goal Without a Plan is Just a Wish

Scalable and sustainable outcomes

Analytic system

Deployment system

Content system
If you cannot measure it, you cannot improve it...

“In God we trust; all others must bring data.”

W. Edwards Deming
Enterprise Data Warehouse in 90 days

90 days to implement

10 years of clinical data

14 billion rows of data

“IU Health had previously struggled to create a data warehouse that would serve as the organization’s source of truth.”

Bill McConnel, SVP and CIO, Indiana University Health
Rating IT Priorities

Rated as “extremely important”

- Analytics (54%)
- Population Health (42%)
- ICD-10 (30%)
- Accountable care/Shared risk (29%)
- Mergers/acquisitions/consolidations (11%)

CHIME survey, 2014
Deployment system components

- Organize teams for scalable improvement
- Apply Agile
- Combine Lean and analytics
- Analytic system
- Content system
Why is a deployment system necessary?

To spread best practice...

...to sustain improvements..

...and to support continuous learning and continuous improvement.
Content system components

Define clinically driven cohorts

Use evidence to identify and eliminate waste

Standardize delivery through shared baselines

Analytic system

Deployment system
Knowledge Management

Why is it important?

- Facilitates decision-making
- Builds learning organizations by making learning routine part of clinical care
  - “To move ahead, one must look behind.”
- Stimulates cultural change and innovation
The Practice of Medicine

Every clinician commits...

...to track the treatments they give to their patients...

...and the outcomes they achieve...

...with the aim to improve treatments and outcomes for future patients...

That is what it means to “practice” medicine
Why Use Practice Protocols?

Practice protocols help address *clinical uncertainty*

...based on best available evidence...

...allows clinicians to ignore the routine and focus on what is most important...

...produces a *shared common baseline*...

...and helps eliminate *waste*.
Protocols are about...

...making it easy to do it right...
Without data, you are just another person with an opinion.
Levels of Evidence

Level I: Evidence from one or more RCTs

Level II-1: Evidence from controlled trials without randomization

Level II-2: Evidence from cohort or case-control analytic studies

Level II-3: Evidence from multiple time series (observational studies)

Level III: Opinions of respected authorities, based on clinical experience, descriptive studies or reports of expert committees (ideally using formal consensus methods)

Level IV: "Evidence" based on personal anecdote ("in my experience...")

Shared common baselines
Two final points...

We are never **too old** or **too young**...

...we achieve the most when we get **together** and figure out **best practice**.
Questions, discussion, comments...

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