AMA and the Future of Medicine

JAMES L. MADARA, M.D. - CEO, AMERICAN MEDICAL ASSOCIATION

HIP SYMPOSIUM, EMORY UNIVERSITY, MARCH 25*, 2014
AMA Mission Statement

‘ To Promote The ART and SCIENCE of Medicine and the Betterment of PUBLIC HEALTH ’
The “AMA Equation”

House of Delegates + Members + Practice Tools + Research & Education + Advocacy = AMA

The AMA is the sum of multiple parts
INITIAL FOCUS FOR STRATEGIC PLANNING:  
OUR MISSION AREAS – OUR SOUL
AMA IN 2011: Had A Need To Renew FOCUS

A “DIVERGENCE/CONVERGENCE” CYCLE IN ORGANIZATIONS:

• COMPLEX ORGANIZATIONS WORK ON MANY NEW IDEAS. THIS CAN LEAD TO AN INVENTORY OF PROJECTS TOO LARGE FOR OPTIMAL FOCUS AND IMPACT.

• AFTER SUCH “DIVERGENCE,” ORGANIZATIONS NEED CAPTURE THE BEST IDEAS – FOCUS OPTIMIZES IMPACT.

THE AMA (2011 STATE): ~110 ACTIVE PROJECTS IN THE MISSION AREAS ALONE
AMA Prioritization for Focus: Application of Criteria

- **110 ACTIVE MISSION BASED PROJECTS COULD BE CONSOLIDATED INTO THE 27 PROGRAMS ABOVE**

Core strengths to build upon

Opportunities for reconfiguration

Unlikely prospects; consider exit

Desirability (Mission, Urgency, Alignment, Credit)

Feasibility (Impact, Leader, Capacity)

27 “PROGRAMS”
What Physicians Share: The Physician-Patient Relationship

THE BASIS OF OUR THREE AREAS OF FOCUS

IDEO: “THE MAGIC MOMENT”
AMA Long-Range Mission Strategic Plan
(FROM ~110, 3)

THREE HIGH-IMPACT FOCUS AREAS:
1) Improve health outcomes for patients
2) Accelerate change in medical education
3) Enhance physician work satisfaction by shaping delivery and payment models

• ORIENTATION SHIFTING FROM PROCESS TO OUTCOMES
• SHIFT FROM PURELY CONVENING TO PARTNERING/DOING
THREE HIGH-IMPACT FOCUS AREAS:
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Improving Health Outcomes: Creating Connections to Community

AMA TARGETS:

1) HYPERTENSION = #1 CAUSE OF DEATH AND DISABILITY WORLDWIDE
2) PRE-D/DIABETES = AN ACCELERATING EPIDEMIC
Role of the Urban Academic Medical Center in US Health Care

Laurence D. Hill, MA, MBA
James L. Madara, MD

Five years ago, the University of Chicago Medical Center launched an ambitious experiment to hold down costs while providing better health care to poor people. The medical center developed a network of 25 South Side clinics and hospitals to which its ER patients were treated before being referred.

Original Thought Platforms:
- Asset-Based View of Community
- Match Cost Structure to Need
- Think of a “System” not Silos

Added Thought Platforms:
- Can’t Wait for Increased PH Investment
- Natural History Now Occurs in Community
- Don’t “Medicalize” All Preventative/Chronic Care
- Identify and Incorporate NGO/Private Sector Participants with Sustainable Business Plans

(Chicago Sun Times, August 30, 2010)

U. of C. health clinic effort shows progress

August 30, 2010
26 million Americans have diabetes

79 million Americans have prediabetes

(AND…..1 in 3 will by 2050 if nothing is done)

Sources: (CDC; Boyle JP et al, Pop Health Metrics, 2010)
Prediabetes: Confounding Factors

- 89% of adults with prediabetes don’t know they have it
- Significant disparities in care exist
- There is a solid evidence base to prevent diabetes
- This is now a national priority – CDC National Diabetes Prevention Program
Lifestyle Intervention Better than Metformin

The New England Journal of Medicine

VOLUME 346  FEBRUARY 7, 2002  NUMBER 6

REDUCTION IN THE INCIDENCE OF TYPE 2 DIABETES WITH LIFESTYLE INTERVENTION OR METFORMIN

DIABETES PREVENTION PROGRAM RESEARCH GROUP*

ABSTRACT

Background Type 2 diabetes affects approximately 8 percent of adults in the United States. Some risk factors—elevated plasma glucose concentrations in the fasting state and after an oral glucose load, overweight, and a sedentary lifestyle—are potentially reversible. We hypothesized that modifying these factors with a lifestyle-intervention program or the administration of metformin would prevent or delay the development of diabetes.

Methods We randomly assigned 3234 nondiabetic persons with elevated fasting and post-load plasma glucose concentrations to placebo, metformin (850 mg twice daily), or a lifestyle-modification program with the goals of at least a 7 percent weight loss and at least 150 minutes of physical activity per week. The mean age of the participants was 51 years, and the mean body-mass index (the weight in kilograms divided by the square of the height in meters) was 34.0; 68 percent were women, and 45 percent were members of minority groups.

Results The average follow-up was 2.8 years. The incidence of diabetes was 11.0, 7.8, and 4.8 cases per

TYPE 2 diabetes mellitus, formerly called non-insulin-dependent diabetes mellitus, is a serious, costly disease affecting approximately 8 percent of adults in the United States. Treatment prevents some of its devastating complications but does not usually restore normoglycemia or eliminate all the adverse consequences. The diagnosis is often delayed until complications are present. Since current methods of treating diabetes remain inadequate, prevention is preferable. The hypothesis that type 2 diabetes is preventable is supported by observational studies and two clinical trials of diet, exercise, or both in persons at high risk for the disease but not by studies of drugs used to treat diabetes.

The validity of generalizing the results of previous prevention studies is uncertain. Interventions that work in some societies may not work in others, because social, economic, and cultural forces influence diet and exercise. This is a special concern in the United States, where there is great regional and ethnic diversity in lifestyle patterns and where diabetes is e-
Validation

• Q: Could a group-based adaptation of the DPP lifestyle intervention achieve the 5% weight loss of the DPP for a fraction of the cost?

• A: Yes

![Graph showing weight loss percentages over time (post program, 6 months, 12 months) for Intervention and Control groups.](slide after Dr. Matt Longjohn, YMCA)

Ackermann RT et al. AJPM; Oct 2008
YMCA: Community-Based, Large National Footprint

(AND.....A New Strategy: Health and Wellness)

After Dr. Matt Longjohn, YMCA

FACTS

YMCA's

2,700

YMCA's in communities where household income is below the national average 58%

Communities Served

10,000

States

50 plus District of Columbia and Puerto Rico
AMA IHO Collaborative Effort With YMCA of the USA: Prediabetes*

• AMA Enhancement of Community Program by Connecting Physicians (Innovation #1)
• Deploying Preventative Assets in Community Without “Medicalization” (Innovation #2)
• YMCA offers CDC Diabetes Prevention Program (DPP)
  – Largest provider of DPP: in 40 states
  – One-year lifestyle intervention, evidence-based and effective
  – Has CMMI grant to increase number of Medicare beneficiaries in the DPP
• AMA pilot practices in Delaware, Indianapolis and Minneapolis/St. Paul
• Think big—Start small—Learn fast—Spread

*(Funding Support By CMMI)
The Diabetes Prevention Program Makes Economic Sense – Legislation Emerging

- AMA-YMCA-ADA Sponsored “Scoring” Study (2/24/14 release)
- Avalere Health (CBO-like Scoring Company)
- Assumptions: Medicare Coverage for DPP, Literature Basis, 3-5% Participation Rate = 5 million enrolled by end of 10 year period with 37% reduction in cumulative incidence rate over 10 years = 1 million fewer diabetics among seniors by 2024.
- **Score (2015-2024): Savings = $1.3 Billion**
- Supports HR 962/S 452 (Medicare Diabetes Prevention Act)
- Diabetes Alert Day – **March 25, 2014.**
- AMA-CDC Coordinating Strategy in This Area
THREE HIGH-IMPACT FOCUS AREAS:

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* ROLLING 5 YEAR PLAN WITH YEAR TO YEAR GOALS SPECIFIED, 5 YEAR GOALS DESCRIBED, AND 10-20 VISION PROJECTED
Beyond Flexner: Fundamental Flaws Currently Widespread in UME

- “TIME” RATHER THAN COMPETENCE
- NOT INDIVIDUALIZED
- OUTDATED EDUCATIONAL METHODS
- LIMITED USE OF TECHNOLOGY
- RESTRICTIONS DERIVITIVE OF SEPARATE GROUPS OF CONTENT EXPERTS (i.e FACULTIES)
- PHYSICAL PLANT AS A RESTRICTIVE FORCE
- PLAYING TO PAST SITES-OF-CARE
- PLAYING TO PAST POOR STRUCTURAL DECISIONS
  (SPLIT BETWEEN HEALTHCARE AND PUBLIC HEALTH: INATTENTION TO MATCHING DISEASE NEED TO COST PLATFORM; WRONG MATH; OUTDATED SCIENCE DOMAINS)
Competence vs Time-in-Chair
As a Medical School Dean, One Fears the Most Fundamental Questions Asked by Business or Political Leaders

...what will he ask? .....how does Jim know these graduates are competent?

AND IF THE ABOVE QUESTION IS ASKED........
UH OH

..hummina-hummina-hummina....

....worse than I expected......

(competency based education is increasingly the norm: why not in medicine)
Individual vs Group
We Aspire To Produce All Types of Physicians In All Types of Settings. Yet Curricular Structure Is Largely Oriented To the Group.
Outdated Educational Approaches
Let’s Rethink This
(Outdated Models and Limited Tech)

$X \times 141 = WHY?$

THIS DOESN’T FIT WITH EDUCATIONAL THEORY

ELECTRONIC SIMULATION: WHY NOT MORE?
Relatively Immiscible Faculties
Medical Education Incorporates Both Basic and Clinical Science

Yet These Two Skill/Knowledge Sets Are Largely Embedded Into Two Different Faculties

Shaking the Vinaigrette: Emulsions Take Continuous Energy
Electronic Platforms Allow Education in Multiple Forms: “Traditional” MOOC’s, Virtual Platforms, Adaptive Digital Approaches.

(i.e. Restrictions Formerly Imposed By Immiscible Groupsof Content Experts Can Be Overcome)

INTRODUCTION TO BIOLOGY – THE SECRET OF LIFE (edX)
EXAMPLE OF EFFICIENT INTRO TO BIOCHEMICAL PRINCIPLES

FACULTY “TYPES” NOW READILY MIXED

Eric Lander, MIT
Shifting Sites of Care
Projected Trends In Site of Care

Timeline

1965  2035

INPATIENT

OUTPATIENT

Of which:

HOME
AMA Medical School Consortium

Indiana
Mayo
NYU
Oregon
Penn State
Brody – East Carolina*
Brown*
UC Davis*
UCSF
Michigan
Vanderbilt

* (Sub-consortium for underserved populations/disparities)
In the “Near Long Term” (Say, 2025-2030), correction of basic flaws in UME need occur in parallel to addressing pragmatic systemic requirements.

Drivers of such?

“Largely Economic Imperatives”
MICHEAL O. LEAVITT, FORMER SECRETARY HHS

Examples: Correctable flaws now widespread in UME
- Competence
- Individualized
- Use of old educational methods
- Limited use of technology
- Restrictions imposed by separate groups of content experts
- Physical plant as prison
- Playing to past sites-of-care
- Playing to past poor structural decisions
  (Split between healthcare and public health: inattention to matching disease need to cost platform)
AMA Long-Range Mission Strategic Plan

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A Scholarship of Happiness

Action may not always bring happiness; but there is no happiness without action - Disraeli

Happiness is when what you think, what you say, and what you do are in harmony - Gandhi

Satisfaction is a surrogate for happiness

Daniel Kahnemann
2002 Nobel, Economics

- Anchoring
- Optimism
- Loss aversion
- Income-happiness plateau
- Known knowns, unknown unknowns…. 

Derek Bok, President, Harvard University, 1971-1991
AMA-RAND Study of Physician Satisfaction
(6 States, >30 Practices, >50 Sites)

- Major Findings:
  - **Satisfier(s):** Primarily a sense of providing high quality care
  - **Dissatisfier(s):** Anything that gets in the way of above*
    - Currently, EHR’s are major
      - No wish to return to paper
      - But not structured for efficient entry and extraction of clinically critical information

*Physician dissatisfaction a possible indication of a quality issue

http://www.rand.org/pubs/research_reports/RR439.html
AMA-RAND Findings: Major Contributors to Higher Professional Satisfaction

- Providing high-quality patient care
- Autonomy and control over own day-to-day work
- Sharing values with practice leadership
  - Including opportunities to engage with practice leaders
- Collegiality with other physicians
- Predictable/stable income that is perceived as fair
- Greater job sustainability (e.g., PCPs’ use of hospitalists)
AMA-RAND Findings: Major Contributors to Lower Professional Satisfaction

• Perceived barriers to high-quality care
• Electronic health records (for many but not all physicians)…More on next slide
• Lack of collegiality
• Lack of faith in practice leadership
• Worries about practice sustainability as a business
• Work volume: too little or too much
  – Income preservation challenging when pay rates decline
• Regulatory burden: many small things adding up
EHR Effects on Professional Satisfaction

• Mixed, but predominantly negative for many physicians:
  – Burden of data entry on physicians
    • Slow, interferes with patient care
    • Some practices allow multiple data entry methods, including human transcriptionists and scribes
  – Problems with general usability
    • Poorly designed user interfaces
  – Lack of health information exchange
  – Templated notes may degrade the accuracy and usefulness of the medical record
  – Hard on practice finances
  – MU criteria not well-matched to specialty practices
Adjusted Associations Between Physicians’ Ratings of Their EHRs and Overall Professional Satisfaction
EHR Clinical Inefficiencies Widely Noted

“Dustin”........Copyright 2014 Steve Kelley & Jeff Parker
Another Example of a Dissatisfier
(Interacting with Health Plans - a Type of “Admini-triva”)

**TIME:**
- 3 MD hours per week = 2.7 MD work-weeks per year
- 23 RN/MA weeks per MD per year

**COST:**

<table>
<thead>
<tr>
<th></th>
<th>United States</th>
<th>Canada (at U.S. salaries)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physicians</td>
<td>$17,775</td>
<td>$6,191</td>
</tr>
<tr>
<td>Nurses/MAs</td>
<td>$23,478</td>
<td>$2,675</td>
</tr>
<tr>
<td>Clerical staff</td>
<td>$37,010</td>
<td>$10,766</td>
</tr>
<tr>
<td>Senior administrators</td>
<td>$4,712</td>
<td>$779</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$82,975</strong></td>
<td><strong>$20,410</strong></td>
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AMA Activation Approaches

“Externalities” Linked with Dissatisfaction:
- Approaching Vendor Community
- Interacting with Regulators

“Dissatisfiers” Internal to Practice:
- 12 Areas Identified
- Tools Being Developed by Prototyping

Next Frontier:
- Scaling
AMA Three Strategic Focus Areas Create A Virtuous Cycle with AMA Advocacy Efforts*

THREE FOCUS AREAS OF MISSION STRATEGIC PLAN
(这些 touch all elements of AMA Equation)

1) ADVOCACY TO MEMORIALIZE STRATEGIC ADVANCES
   (EXAMPLE: POLICY AND REGULATION PROMOTING PHYSICIAN
   SATISFACTION AND PRACTICE SUSTAINABILITY)
2) STRATEGIC ADVANCES IN PATIENT CARE AND EDUCATION
   STRENGTHEN AMA ADVOCACY POSITIONING

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Comment on HealthCare Future
The Three Strategic Focus Areas Represent:
1) Shifts in Management/Prevention of Chronic Disease,
2) UME Reform,
3) Practice and Delivery Site Improvement.

SO:
What Do Such Activities Portend For the Future of Healthcare?

- What Might We Be Moving Toward?

- What Are Implications For Physicians?
One Element: Consider Private Sector Activity
(Innovation Here Will Dramatically Change HC)

……and ACA had unappreciated effect
Healthcare Spend – a Proxy For Clinical Activity In Private/Public Sectors

$2.8 Trillion

PUBLIC SPEND
(Federal + State + Local)

CONCLUSION: PRIVATE SECTOR ACTIVITY IS VERY IMPORTANT

Health Sector View of Innovation Needed To Restructure Toward Value

KNOW STATUS QUO UNSUSTAINABLE:
(BUT DISLIKE THE UNCERTAINTY THAT COMES WITH CHANGE)

TEMPTATION TO HOLD ON

DRAMATIC CHANGE, KNOWN TO BE NEEDED
(BUT UNCOMFORTABLE*)

* So: 1) Don’t overwhelm capacity for change; 2) Don’t frequently reverse field
Non Health Sector View of Innovation That Would Allow Private Sector Elements Entry Into HC Sector

(THAT’S HISTORY)

POSSIBILITY OF ENTRY INTO RAPIDLY RESTRUCTURING $2.8 TRILLION INDUSTRY (CAN’T WAIT, LET’S GO!)
Private Sector Activity Can Transform Healthcare as Institutional and Public Policy Catch Up

Outside World
Example:
Digital sensors, actuators and wireless technologies commonly used in smartphones and laptops provide a highly personalized experience for the end-user.

156 M
Number of people in the U.S. who own smartphones (Source: comScore)

Healthcare World
- Patient or caregiver can monitor vitals via mobile app
- Reduces physician and medical staff burden
- Potentially avoids costly ICU or ER stays
- Physician can remotely track at-risk patients between visits

“The digital world has been in a separate orbit from our medical cocoon, and it’s time the boundaries be taken down.” – E. Topol, (Source: Wall Street Journal, Feb 14, 2013)
Private Sector Activity Can Transform Healthcare as Institutional and Public Policy Catch Up

Outside World
Example:
Video game systems like Nintendo Wii and Sony PlayStation remain immensely popular with children and adults.

Financial and other sectors begin using “gamification” to shape consumer behaviors.

Healthcare World
“Gamification” aids consumers in disease management and recovery with potential to lower health costs.

Study Results
There was no significant difference between Wii Fit and conventional group in terms of isokinetic knee strength at 12th week...
Economic Imperative - Responses

COST: DELIVERY OF VALUE; INCREASE NO MORE THAN CPI

BUSINESS MODEL: TOTAL COST/TOTAL VALUE
(FFS, VBP, Risk Share – one to two way, Episodic, Full Capitation….but always a bit of a mixed model with gradation)

EHR: INTEROPERABILITY; STANDARDS; ORGANIZED FOR EFFICIENT CLINICAL USE (NOW LARGELY FOR BILLING AND RISK MITIGATION)

SITE: INPATIENT-TO-OUTPATIENT-TO-HOME CARE

MISSION: HEALTHCARE TO HEALTH AND CARE
## A Model View of Health + Care: 2030

### 3 Levels of Care

<table>
<thead>
<tr>
<th>Level Types</th>
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<tbody>
<tr>
<td><strong>Health/Wellness:</strong></td>
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<tr>
<td>Nutrition/Exercise/Behaviors/ Vaccines/Screening/&quot;-Omics&quot;/ Risk Counseling/etc</td>
</tr>
<tr>
<td><strong>Chronic Disease Management:</strong></td>
</tr>
<tr>
<td>Ongoing Therapeutic Management</td>
</tr>
<tr>
<td>&quot;Medical Home&quot; Care; but Pt Centered</td>
</tr>
<tr>
<td><strong>Primary Diagnosis/Acute Intervention:</strong></td>
</tr>
<tr>
<td>A “Solution Shop” (Complex/Newest Tech)</td>
</tr>
<tr>
<td>Multispecialty; Inpatient/Outpatient</td>
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### Role/Type of Physician

<table>
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<tr>
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<tbody>
<tr>
<td><strong>Current Physician</strong></td>
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<tr>
<td>Multispecialty Group</td>
</tr>
<tr>
<td>But from updated curricular structure</td>
</tr>
<tr>
<td><strong>&quot;Medical Home&quot; Focused</strong></td>
</tr>
<tr>
<td>On Chronicity/Outpatient</td>
</tr>
<tr>
<td>(Many “Specialists” included; many other professionals too)</td>
</tr>
<tr>
<td><strong>Oversight of Large Groups</strong></td>
</tr>
<tr>
<td>Populated by many other professionals; skill in management and public health</td>
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One Model of US Healthcare ~2030

MANAGEMENT OF CHRONIC CONDITIONS

HEALTH/WELLNESS

CONNECTED VIA INFORMATION FLOW

SOLUTIONS (PRIMARY DIAGNOSIS; ACUTE COMPLEX INTERVENTIONS; COMPLEX CRITICAL CARE)

PATIENTS MOVE BETWEEN DOMAINS AS NECESSARY