The Brucker Lecture

Insights from Four “Worlds”
Our Journey Back, and into the Future

Thomas J. Nasca, MD MACP
Chief Executive Officer
ACGME
ACGME International
Disclosure

- Professor of Medicine and Physiology
- Full Time Salaried by ACGME
- No conflicts of interest to report
- Presentation will be made available to you
Traditions Contributing to the American Concept of Professionalism and the Moral and Ethical Practice of Medicine

Justice Based Equitable Distribution of the “Good” of Health Care in Society

Evolution from Guild to Profession

Voluntary Oath To Society

The Virtuous Physician: Character Based Driven by Principles:
- Beneficence
- Autonomy
- Justice
- Non-Malificence

Guiding Virtue: Phronesis

Virtue Based Ethics as the Basis of Medical Practice

Hippocratic Tradition

Medicine as a Moral Enterprise

“Physician as Moral Agent”

Aristotle
Aquinas
Maimonides
Pellegrino
Thomasma

Justice Based “System”

John Rawls
Powers and Fadden

Evolution from Guild to Profession

Social Justice

Social Contracts

Commercial Contract

Professionalism Commitment to:
- Competency
- Altruism
- Public Trust
- Self-Replicate

Patient Public “Customer”

“Professional Behavior,” not Character

Governed By Rules and Regulations, Normative Behaviors

The Virtuous Physician

“Physician as Moral Agent”

Percival
Gregory
Bacon
Hume

Phronesis

Social Contracts

Social Justice

© 2010 Accreditation Council for Graduate Medical Education (ACGME)
Sit Back
Relax
Suspend Disbelief
There is no test!

Let’s Start in 1999
The Journey to NAS Started in 1999

- ACGME - ABMS Competencies
- “Outcomes Project”
- Experimentation in Outcomes Measurement
- Experimentation in Accreditation
A New Model for Accreditation of Residency Programs in Internal Medicine

Medical education is experiencing a back-to-basics movement, with increased emphasis on mastery of core clinical competencies (1–5). Debates over curricular time, clinical rotations, and conferences are being replaced by discussions about clinical competence and its assessment (4–8). The change is driven largely by evolving societal accreditation strategy for residency training programs in internal medicine. It shifts residency program accreditation from external audit of educational process to continuous assessment and improvement of trainee clinical competence.

AIP Initiated by H. Schultz, R. Bush, T.J. Nasca, and RRC-IM
2001-2002


© 2012 Accreditation Council for Graduate Medical Education (ACGME)
The 2005 ACGME Strategic Plan\textsuperscript{1}:
Emergence of “The New Accreditation Model”

“At its November 2005 retreat, the ACGME Executive Committee endorsed four strategic priorities \textit{designed to enable emergence of the new accreditation model}:

- Foster innovation and improvement in the learning environment
- Increase the accreditation emphasis on educational outcomes
- Increase efficiency and reduce burden in accreditation
- Improve communication and collaboration with key internal and external stakeholders “

\textsuperscript{1} ACGME 2005 Strategic Plan. (\textit{Emphasis Added, TJN})
In July 2003 the Accreditation Council for Graduate Medical Education (ACGME) enacted resident duty-hour standards for all accredited programs that sought to integrate limits on resident hours within the larger set of ACGME standards. The aim of these standards was to promote high-quality learning and safe care in teaching institutions.\textsuperscript{1} When the standards were established, the ACGME promised the profession that it would revisit them in 5 years.
The actions of the ACGME must fulfill the social contract, and must cause sponsors to maintain an educational environment that assures:

- the safety and quality of care of the patients under the care of residents today

- the safety and quality of care of the patients under the care of our graduates in their future practice

- the provision of a humanistic educational environment where residents are taught to manifest professionalism and effacement of self interest to meet the needs of their patients
See Programs Isolated, Operating Within (a) Institution(s)
See Programs Immersed In, Influenced By, and Influencing the Sponsoring Institution(s)
The Next GME Accreditation System — Rationale and Benefits
Thomas J. Nasca, M.D., M.A.C.P., Ingrid Philibert, Ph.D., M.B.A., Timothy Brigham, Ph.D., M.Div., and Timothy C. Flynn, M.D.

In 1999, the Accreditation Council for Graduate Medical Education (ACGME) introduced the six domains of clinical competency to the profession, and in 2009, it began a multiyear process of restructuring its accreditation system to be based on educational outcomes in these competencies. The result of this effort is the Next Accreditation System (NAS), scheduled for phased implementation beginning in July 2013. The aims of the NAS are threefold: to enhance the ability of the peer-review system to prepare physicians for practice in the 21st century, to accelerate the ACGME’s movement toward accreditation on the basis of educational outcomes, and to reduce the burden associated with the current structure and process-based approach.

LIMITATIONS OF THE CURRENT SYSTEM

When the ACGME was established in 1981, the GME environment was facing two major stresses: variability in the quality of resident education and the emerging formalization of subspecialty education. In response, the ACGME’s approach emphasized program structure, increased the amount and quality of formal teaching, fostered a balance between service and education, promoted resident evaluation and feedback, and required financial and benefit support for trainees. These dimensions were incorporated into program requirements that became increasingly more specific during the next 30 years.

The results have been largely salutary. Perfor-
The Accreditation “System” Emerges

• The Next Accreditation System (**NAS**) 2009-Present
  • Annual Program Screening
  • Concentration on Programs that Underperform
  • Emphasis on Departmental and Institutional Oversight
  • Sets the stage for use of Meaningful Outcomes
  • Facilitates Innovation through Core Program Requirements

• The Culmination of the Outcomes Project, **Milestones** 2007-Present
  • National Agreement on Key Elements of Specialty Competency
  • Stimulation of Investigation in Evaluation, Feedback, Mentorship
  • Phase 1 of Identification and Measurement of Meaningful Outcomes

• The Clinical Learning Environment Review (**CLER**) 2011-Present
  • Recognition of the Impact of Quality and Safety on Long-Term Educational and Clinical Care Outcomes
  • National Imperative to Educate Physicians in Quality and Safety Systems through engagement
Continuous Program Improvement Cycle

“Practice Based Learning and Improvement for Programs”

Goal: Excellence in Achievement of Program Aims

Study Your Program
- Established Program Aims
- Annual Peer Feedback (NAS-AR)
- Milestone Evaluations
- Resident Evaluation
- Faculty Evaluation
- Board Performance
- Clinical Context Evaluation
- Community Need

Conduct Your Program

Modify Program Elements

Annual Program Evaluation

10 Year Self-Study
(Re)Establish Aims

Accreditation Site Visit
What Will Drive the Structure and Content of our Residency Programs in the Near Future?

Needs of Patients and the Public

The Required Outcomes in Each Clinical Competency (Milestones)

- Design Educational Experiences
- Select Faculty

Effectiveness in Achieving Program Aims

National Evaluation Tools to Track Outcomes
- Formative and Summative
- Clinical Outcomes Tracking (not just counting)

Introduction of New Competencies

Expert Physicians who aspire to Mastery (Outcomes)

External Accountability For Outcomes

“Deliberative Practice”
Systematically Evaluate Individual Residents
Singapore Internal Medicine
Class of 2013, n=40

Singapore Milestones: Individual resident data, Only 3rd year IM residents (n=40)
Continuous Improvement at a National Level
Proportion of Residents Achieving Level 4 Outcome Across All Sub-Competencies, by Level of Training, June, 2014

Neurological Surgery
n = 1,253
100% of enrolled residents

Proportion Reaching Level 4

PGY1  PGY2  PGY3  PGY4  PGY5  PGY6  PGY7
PC  MK  SBP  PBLI  PROF  ICS
Getting Nervous?

That brings us to 2014
Medicine in 2035: Selected Insights From ACGME’s Scenario Planning

Abstract

The Accreditation Council for Graduate Medical Education (ACGME) has the responsibility for overseeing the preparation of future physician specialists and subspecialists to serve the American public. To ensure ACGME’s ability to adapt and sustain its accreditation activities in a future marked by significant uncertainty, its administration and board of directors embarked on a planning process that would frame its strategic actions in support of this responsibility. We describe the scenario planning process, and report key insights that resulted from it. We also discuss in greater depth a subset of those insights, which challenge certain conventional truths, call for new collaborative directions for ACGME, and reaffirm the importance of professionalism in service of the public across all future scenarios evaluated.

Editor’s Note: The ACGME News and Views section of JGME includes data reports, updates, and perspectives from the ACGME and its review committees. The decision to publish the article is made by the ACGME.

Introduction

It is the responsibility of the medical profession to prepare the next generation of physicians to provide excellent medical care to patients and to the public. To do so with the pace of change is accelerating, uncertainty about future operating circumstances is high, and control of critical future conditions is often in the hands of others. To appreciate this approach to strategic planning, one must understand that scenarios are not forecasts. They are risk management tools designed to address the range of future uncertainties, in this case facing health care and graduate medical education. In this case, the aim was to prepare the ACGME for strategic risk management, rather than planning by prediction of a single endpoint. The products
Starting Framework

• Time window of 20 years (2035)
• Structure of health care delivery unpredictable
• Scientific advances will march on, but in less than predictable fashion
• Technology will increase its penetrance into health care
• World events are unpredictable
• Health care is shaped by broader societal and political forces
Types of Scenario Planning

- Proactive/Strategic
- Normative Scenarios
- Stability/Clarity
- Financial Scenarios (Spreadsheets)
- Operating Environment
- Probability-Based Scenarios
- Interactive (War Gaming) Scenarios
- Uncertain/Ambiguity
- Reactive/Tactical
- Event-Driven (Operational) Scenarios
- Strategic Management (Alternative Futures) Scenarios
# ACGME Scenario Planning Space

<table>
<thead>
<tr>
<th>U.S. Economic Vitality</th>
<th>Social Contract</th>
<th>Societal Change</th>
<th>Health Care as Percentage of GDP</th>
<th>World Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strong</td>
<td>Broad-Inclusive</td>
<td>Evolutionary</td>
<td>Decreasing</td>
<td>AFTA but move to regional structure</td>
</tr>
<tr>
<td>Weak</td>
<td>Limited-Exclusive</td>
<td>Revolutionary</td>
<td>Increasing</td>
<td>WTO world</td>
</tr>
<tr>
<td>1</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Security State</td>
</tr>
<tr>
<td>2</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>There’s an App for That, Too?</td>
</tr>
<tr>
<td>3</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>You are on your own/Live and Let Die</td>
</tr>
<tr>
<td>4</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>The Web are us.</td>
</tr>
<tr>
<td>5</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Free Markets Unchained</td>
</tr>
<tr>
<td>6</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Mr Smith Goes to Springfield, but weird</td>
</tr>
<tr>
<td>7</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>“Stuck in the muddle with you”</td>
</tr>
<tr>
<td>8</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Trading Places</td>
</tr>
<tr>
<td>9</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Cloudburst</td>
</tr>
<tr>
<td>10</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Not Nice to Fool (with) Mother Nature</td>
</tr>
<tr>
<td>11</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Number 2 and NOT trying harder</td>
</tr>
<tr>
<td>12</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Boom-doggle</td>
</tr>
<tr>
<td>13</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Dim Sum</td>
</tr>
<tr>
<td>14</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Just turn off the lights</td>
</tr>
</tbody>
</table>
There's an App for That, Too?

Cloud First

Free Markets Unchained

Boom Doggle

ACGME in 2014

ACGME Core Strategies

2035 Planning Space
ACGME’s Mission

We improve health care and population health by assessing and advancing the quality of resident physicians’ education through accreditation.
ACGME’s Vision
We imagine a world characterized by:

- a structured approach to evaluating the competency of all residents and fellows,
- motivated physician role models leading all GME programs,
- high quality, supervised, humanistic clinical educational experience, with customized formative feedback,
- clinical learning environments characterized by excellence in clinical care, safety, and professionalism,
- residents and fellows achieving specialty specific proficiency prior to graduation,
- residents and fellows are prepared to be Virtuous Physicians who place the needs and well being of patients first.

In other words, the context and content of the program prepares the graduate to meet public need.
Across the worlds, it was seen that there will be:

• increased complexity in society and medicine, calling for seamless inter-professional team-based approaches.

• increased information transparency, with accompanying challenges to the veracity of competing offerings of data and analyses.

• little tolerance for approaches to accreditation, credentialing and licensing with burdensome process inefficiencies.

• commoditization of healthcare services accelerated across the scenarios.
Across the worlds, it was seen that:

• there is no consensus on the future shape (and stability) of healthcare delivery; maximization of provider career flexibility will be crucial.

• no single “specialist mix” distribution fits all scenarios

• the medical education system must be capable of supplying a wide variety of physicians by specialty

• the current dichotomous conceptualization of the physician workforce (e.g., primary care vs. subspecialist, “generalist-specialist mix”) is not a useful approach for planning
ACGME Strategic Planning: Pivotal Observations

Regardless of the future state, medical education must:

• Be responsive to societal needs
• Be forward-facing and anticipatory of the needs of those we serve
• Be outcomes-oriented and evidence-based, whenever possible
• Promote effective inter-professional team-based care
Regardless of the future state, medical education must result in graduates who:

- provide for and promote the safety and highest quality patient care throughout their careers
- appreciate how both individual patients and society view value in medical care
  - understand both the biologic and social determinants of health
  - understand how to deliver patient centered health care to all
- manifest professionalism and effacement of self-interest to meet the needs of their patients
Regardless of the future state, ACGME must:

- Promote Institutional and Program Excellence
- Facilitate Innovation
- Be Responsive to Public Need
- Fulfill our portion of the Social Contract
- Partner with other organizations to achieve our goals
## ACGME Strategic Direction Statements

### 2005 - 2014

- Foster innovation and improvement in the learning environment
- Increase the accreditation emphasis on educational outcomes
- Increase efficiency and reduce burden in accreditation
- Improve communication and collaboration with key internal and external stakeholders

### 2014 - Future

- Prepare the Profession to Meet Future Public Needs
- Pursue Knowledge Development in Medical Education
- Harmonize the Continuum of Medical Education
- Enhance Inter-Professional Team-Based Care
- Increase Engagement on Behalf of the Public
- Enhance ACGME’s Flexibility and Adaptability
The Profession’s Roles in Preparation of the Next Generation of Physicians to Serve the American Public

Accountability to the American Public

The Social Contract

- Direct Provision of Education by Professionals
  - Sponsoring Institutions
  - Program Directors
  - Faculty
  - Learners

Oversight of Education by the Profession

- Accreditation of Institutions and Programs
- Certification and Licensure of Individuals

Medicine as a Public Trust

The Social Contract

Accountability to the American Public

Direct Provision of Education by Professionals

- Sponsoring Institutions
- Program Directors
- Faculty
- Learners

Oversight of Education by the Profession

- Accreditation of Institutions and Programs
- Certification and Licensure of Individuals
Accountability and Graduate Medical Education

• Professional Accountability
  • for the effectiveness of the educational effort in producing physicians with the competencies required by the public, ultimately measured in patient outcomes after graduation

• Economic Accountability
  • for the use of resources provided by society in support of the educational effort

• Public and Social Accountability
  • for the effectiveness of the profession in providing the resource that is the profession in meeting the public need

Applied by T. Nasca from concepts related to Health Care Delivery in:
Emanuel, E.J., Emanuel, L.L.
Pipeline and Continuing GME (Fellowship) Programs (2013-2014)

© Accreditation Council for Graduate Medical Education (ACGME), 2015
Sources: ACGME DATA BOOKS, 2009-2010, 2013-2014
**Entering Pipeline Residents and Continuing GME Fellows**

<table>
<thead>
<tr>
<th>Academic Year</th>
<th>Occupied Positions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001-2002</td>
<td>7,209</td>
</tr>
<tr>
<td>2002-2003</td>
<td>7,971</td>
</tr>
<tr>
<td>2003-2004</td>
<td>8,304</td>
</tr>
<tr>
<td>2004-2005</td>
<td>8,570</td>
</tr>
<tr>
<td>2005-2006</td>
<td>8,932</td>
</tr>
<tr>
<td>2006-2007</td>
<td>9,292</td>
</tr>
<tr>
<td>2007-2008</td>
<td>9,636</td>
</tr>
<tr>
<td>2008-2009</td>
<td>10,058</td>
</tr>
<tr>
<td>2009-2010</td>
<td>10,472</td>
</tr>
<tr>
<td>2010-2011</td>
<td>10,694</td>
</tr>
<tr>
<td>2011-2012</td>
<td>11,099</td>
</tr>
<tr>
<td>2012-2013</td>
<td>11,624</td>
</tr>
<tr>
<td>2013-2014</td>
<td>11,994</td>
</tr>
</tbody>
</table>

**Net Cumulative Change**

- Entering Pipeline Programs: 2,875 (11.9%)
- Entering Continuing GME Programs: 4,785 (66.4%)

© Accreditation Council for Graduate Medical Education (ACGME), 2015

Sources: ACGME DATA BOOKS, 2009-2010, 2013-2014
Annual Growth in Pipeline Positions (Year over Year)

© Accreditation Council for Graduate Medical Education (ACGME), 2015

Sources: ACGME DATA BOOKS, 2009-2010, 2013-2014
Annual Growth in Continuing GME Positions
(Year over Year)

<table>
<thead>
<tr>
<th>Academic Year</th>
<th>Occupied Positions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003-2004</td>
<td>333</td>
</tr>
<tr>
<td>2004-2005</td>
<td>266</td>
</tr>
<tr>
<td>2005-2006</td>
<td>362</td>
</tr>
<tr>
<td>2006-2007</td>
<td>360</td>
</tr>
<tr>
<td>2007-2008</td>
<td>344</td>
</tr>
<tr>
<td>2008-2009</td>
<td>422</td>
</tr>
<tr>
<td>2009-2010</td>
<td>414</td>
</tr>
<tr>
<td>2010-2011</td>
<td>222</td>
</tr>
<tr>
<td>2011-2012</td>
<td>405</td>
</tr>
<tr>
<td>2012-2013</td>
<td>525</td>
</tr>
<tr>
<td>2013-2014</td>
<td>370</td>
</tr>
</tbody>
</table>
Summary

- Core Program numbers have grown, but positions have flattened
- Matriculating US LCME and AOA graduates have increased, with proportionate decreases in IMG matriculation in Pipeline programs
  - In 2013-2014 the correlation was 1:1
- Subspecialty program numbers and positions have grown, in part due to creation of new subspecialty disciplines over the past 14 years
- Geographic dispersion has not occurred (data not shown)
Institute of Medicine Report  
July 2014

- Acknowledges Professional Accountability
- Concentrates on Economic Accountability
- Questioned Use of Public Funds
- Recommends Government-based Economic and Social Accountability Systems

http://www.nap.edu/catalog.php?record_id=18754
The single greatest barrier to constructive evolution of GME in the United States is the GME Reimbursement System, followed closely by individual institutional structural barriers to change.

Both must be modified to meet Public Need, and affirm the Public’s Trust.
A Few Parting Thoughts…
The Way Ahead Is Difficult But Not Impossible
Optimism

“What lies behind us and what lies before us are tiny matters compared to what lies within us.”

Oliver Wendell Holmes
“The Future ain’t what it used to be!”

Yogi Berra
Philosopher, New York Yankees Catcher
Thank You!