Professionalism in Medical Education: Gaps, Maps and Goals

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On a scale of 1-10, How interested are you in learning about professionalism in medical education?

1. Not at all
2. A little but not much
3. Somewhat
4. Enough to listen
5. It's definitely interesting
6. More interested than not
7. A lot
8. More than most other topics
9. Extremely interested
10. More interested than any other topic

Objectives

1) Identify issues that contribute to current concerns about professionalism
2) Describe past and emerging models in medical education for edification about professionalism
3) Describe hypotheses for conceptualizing professionalism as a complex adaptive system
4) Discuss suggestions for improving professionalism training

Professionalism

- Profession: Not just a job
  - Specialized knowledge and expertise
  - Privilege granted by society with reciprocal rights and responsibilities
  - Serves others
  - Self-regulating
  - Moral/ethical dimension
  - Altruism, honor, compassion, responsibility, respect, social justice

Professionalism

- Major initiative in medical education
- Concerns raised for past 30 years
  - Relman, NEJM, 1980 “medical industrial complex”
  - Public discontent began in began in 1970's
- Educational response ≈ 2000
  - Swick, Cruess, Innui
  - Steps
    - Defining
    - Educating
    - Assessing
    - Institutional commitment

SCHLESINGER
The percentage of (non-disciplined) practicing physicians who admit to unprofessional behavior while in medical school is:

1. ≥5%
2. 10%
3. 15% ✓
4. 20%
5. 25%
6. 30%
7. 35%

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Survey Results (% agreeing)

<table>
<thead>
<tr>
<th>Honor Codes are effective</th>
<th>45.3%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would turn in a classmate</td>
<td>42.0%</td>
</tr>
<tr>
<td>Everyone cheats at some point</td>
<td>22.5%</td>
</tr>
</tbody>
</table>

Most common forms of cheating observed:

| Copying test answers | 15.3 |
| Getting advance information from others | 15.7 |
| Turning in assignment prepared by someone else as own | 14.1 |

Percent who admit cheating:

| Jr High | 31.4% |
| High school | 40.5 |
| College | 16.5 |
| Medical school | 4.7 |

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The Devil is in the Third Year
Physicians routinely underestimate the amount of distress patients experience.

1. True
2. False

- Correlation between physician and patient perceptions of patient distress very low
- 30% concordance
  - improved in outpatients setting
- Physicians overestimate mild suffering, underestimate severe suffering


Steinhauser, K. E. et al. Factors Considered Important at the End of Life by Patients, Family, Physicians, and Other Care Providers. JAMA. 2000; 284:2476-2482.

<table>
<thead>
<tr>
<th>Attends to comfort and cleanliness</th>
<th>Patients</th>
<th>Nurses</th>
<th>Physicians</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keeps pt and family informed</td>
<td>93.7</td>
<td>87.2</td>
<td>*</td>
</tr>
<tr>
<td>Follow up</td>
<td>79.4</td>
<td>76.1</td>
<td>*</td>
</tr>
<tr>
<td>Preps for seeing pt (reads chart)</td>
<td>91.0</td>
<td>92.0</td>
<td>*</td>
</tr>
<tr>
<td>Is approachable</td>
<td>70.3</td>
<td>80.4</td>
<td>*</td>
</tr>
<tr>
<td>Responds to calls and pages</td>
<td>*</td>
<td>85.7</td>
<td>*</td>
</tr>
<tr>
<td>Maintains composure</td>
<td>*</td>
<td>86.6</td>
<td>83.1</td>
</tr>
<tr>
<td>Polite and personable</td>
<td>*</td>
<td>84.3</td>
<td>*</td>
</tr>
<tr>
<td>Tailors info to pt needs</td>
<td>*</td>
<td>77.2</td>
<td>*</td>
</tr>
<tr>
<td>Is pt advocate</td>
<td>*</td>
<td>86.5</td>
<td>*</td>
</tr>
<tr>
<td>Respects clinical &amp; admin. staff</td>
<td>*</td>
<td>85.9</td>
<td>*</td>
</tr>
<tr>
<td>Keeps up on literature</td>
<td>*</td>
<td>85.1</td>
<td>*</td>
</tr>
<tr>
<td>Willing to report impaired colleague</td>
<td>*</td>
<td>80.7</td>
<td>*</td>
</tr>
<tr>
<td>Culturally sensitive</td>
<td>*</td>
<td>79.9</td>
<td>*</td>
</tr>
<tr>
<td>Committed to lifelong learning</td>
<td>*</td>
<td>77.4</td>
<td></td>
</tr>
</tbody>
</table>

Green, Zich, & Mihoud, 2009
Altruism, personal morality and competence are primary components of each physician's conceptualization of professionalism.

1. True
2. False
3. I hope so
4. I don’t know

The hidden curriculum refers to:

1. Planned presentations
2. Informal messages that support the formal curriculum
3. Values and ethics expressed by an institution
4. Unplanned, implicit lessons taught by what is done or not done

Formal v. Informal v. Hidden Curriculum

**Formal**
- Written policies
- Course objectives, evaluations, assignments
- Expressions of values & ethics
- Explicit, planned, intended

**Informal**
- Incidental
- Opportunistic
- Intended
- Unplanned

**Hidden**
- Subtle, structural, implicit
- What is conveyed, done or not done
- Culture of medicine
- Ways of thinking, behaving, believing
- Implicit, unplanned
Concerns about Formal Curriculum

- Ethics and professionalism are just courses; can be taught like any other
- Assumes agreement and adherence
- Assumes didactic instruction produces behavioral correlates
- Focuses on individual
- Neglects power differentials
- Neglects mixed messages/cognitive dissonance

Formal vs. Hidden Curriculum

- Empathy
- Compassion
- Altruism
- Efficiency/bedside rationing
- Weariness
- Poor communication
- Mistrust/cynicism
- Cost-effective
- Destructive detachment
- Self-interest

Lived Curriculum

- “When it comes to duty, your first importance is to get an education”
- “…the unwritten code being…I don’t want to make my senior look bad.”
- “If the attending says “drop it”, I would not pursue it.”
- “…from the day you get here, they look at you and ask ‘do you really belong here?’”
- Student told “getting along with superiors” was important part of professionalism when reported resident required him to write up his discharge summaries

Students reports

- Patient centered care impossible
- Role models demonstrate inconsistent values
- Feel powerless
- Describe abuse, humiliation, mistreatment
LCME Standards
MS-31-A

Learning environment...
- Medical schools must ensure that the learning environment for medical students promotes the development of explicit and appropriate professional attributes (attitudes, behaviors, and identity)...
  - Create appropriate learning environment
    - Explicitly refers to formal AND "informal attitudes, values and lessons conveyed"
  - Requires defining and promulgating professional attributes school expects students to acquire
  - Regularly assess learning environment and improve

Knowledge and Attitudes

- Students acknowledge
  - Importance of ethics and professionalism
  - Specific knowledge lacking
  - Attitudes conflict


Student Inclination to Report Misconduct

Student Attitudes toward Professionalism Training

**RESENT**
- See professionalism in early years as peripheral or insulting
- Resist many traditional tenants of professionalism
  - "Duty" unacceptable
  - Life balance as important as professional responsibility
  - Integrity a personal matter; codes, not binding
  - Sanctions define merit

**DESERVE**
- Believe they need more training
  - MS- 42%
  - Residents- 24%
  - M.D.'s- 41%
- Feel unprepared to resolve dilemmas

References:

Student Educational Preferences

- **Value:**
  - Role modeling (even pre-clinical)
  - Valued, but less
  - Small groups
- **Do not Value:**
  - Lectures and
    - 27% find helpful; 27% believe are useless
    - Parts considered insulting
    - Required reflections


Experiences Pre-clinical Medical Students Clinical Medical Students Residents (Psychiatry)

| Encountered ethical conflicts | 4.5 | 6.0 | 6.0 |
| Education Prepared for dealing | 3.9 | 5.2 | 5.2 |
| Amount of Training received | 4.26 | 5.0 | 3.98 |
| Training is adequate | 3.8 | 4.5 | 3.8 |

9 point scale, 1 = none, 9 = very much.

References:

But don’t test me…

Roberts, et al. 2004

Gap 5: Knowledge/Behavior
Opinion of Boomer Physicians

10. Consider the dedication and work ethic of physicians coming out of training today. Are physicians being trained today:

<table>
<thead>
<tr>
<th>Year</th>
<th>Less dedicated and hard working</th>
<th>More dedicated and hard working</th>
<th>Just as dedicated and hard working</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>68%</td>
<td>0%</td>
<td>26%</td>
<td>6%</td>
</tr>
<tr>
<td>2004</td>
<td>64%</td>
<td>0%</td>
<td>29%</td>
<td>5%</td>
</tr>
<tr>
<td>2000</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Career Choices: Controllable Lifestyle

![Bar chart showing career choices 1997-2003]

Impact of Generation on Work Functioning

- Definitions
- Motivations
- Attitudes
  - Flexibility
  - Collaboration
  - Respect based on expertise, not role
  - Impatient
  - Feedback preferences
  - Pragmatism

Student Use of Social Networking

<table>
<thead>
<tr>
<th>Survey Questions</th>
<th>Yes</th>
<th>No or Not Sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are you aware of any incidents at your school involving inappropriate language?</td>
<td>22%</td>
<td>78%</td>
</tr>
<tr>
<td>Did any of these incidents involve content that fits the following categories?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Profanity</td>
<td>23%</td>
<td>77%</td>
</tr>
<tr>
<td>Discourtesy</td>
<td>16%</td>
<td>84%</td>
</tr>
<tr>
<td>Offensive</td>
<td>16%</td>
<td>84%</td>
</tr>
<tr>
<td>Sexually suggestive</td>
<td>16%</td>
<td>84%</td>
</tr>
<tr>
<td>On your school’s social networking policies cover:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Your student’s privacy specifically addressed and posted internet use?</td>
<td>21%</td>
<td>79%</td>
</tr>
<tr>
<td>Don’t know how effective your school is at addressing student online content?</td>
<td>24%</td>
<td>76%</td>
</tr>
<tr>
<td>Do you feel that you are being effective in addressing student online content?</td>
<td>25%</td>
<td>75%</td>
</tr>
<tr>
<td>Is there a conversation at your school that is responsible for addressing student online content?</td>
<td>24%</td>
<td>76%</td>
</tr>
<tr>
<td>Are students posted unprofessional content online?</td>
<td>25%</td>
<td>75%</td>
</tr>
<tr>
<td>Is there documentation at your school that is responsible for addressing student online content?</td>
<td>24%</td>
<td>76%</td>
</tr>
</tbody>
</table>

Educational research about how to best teach professionalism

1. Clearly supports role modeling as the best approach
2. Is inconclusive about the best approach
3. Indicates that medicine is doing well in teaching professionalism

Limited Educational Data Base

- Systematic review of professionalism research (10 yrs)
- No definitive answer to:
  - Definition of professionalism
  - Curriculum design to promote professionalism
  - Selection of ideal candidate to develop professionalism
  - Teaching and role modeling approaches to facilitate professionalism
  - Assessment of professionalism

Faculty Concerns

- Conflicting demands on time
- Curriculum constraints
- Other objectives (knowledge and skills)
- Lack of awareness about impact of experiences on students

Other factors

- Curriculum organization
- Lack of faculty development in education
- Belief in lectures, integrity residing within individual
Processes of Selection

- Disproportionate reliance on cognitive criteria
- Uncertainty about how to evaluate non-cognitive attributes
  - Screen out those who have unsuitable personal qualities
  - Select-in those with personal qualities predictive of desired future behavior
  - Personal interview not best technique for process, especially in isolation

Development of Standardized Instruments

- Mini Multiple Interview (MMI)
  - Admissions “OSCE”-type evaluation over cultural
  - 10-12 stations, about 10 minutes each
  - Multiple windows on attitudes, critical thinking, ethical reasoning, communication, personal qualities
  - Multiple evaluators increase reliability and validity
  - Multiple stations reduce chance artifacts and examiner bias

Assessing Professionalism: A Difficult Task

- Professionalism includes knowledge, skills and behaviors
- No consensus definition or elements
- Single tools unable to capture multiple factors
- Lack of consensus about best approach

<table>
<thead>
<tr>
<th>MMI</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective</td>
<td>Standard</td>
<td>Clinical examination</td>
<td>Personal</td>
<td>Communication</td>
</tr>
<tr>
<td>Ante-grade average</td>
<td>0.36</td>
<td>0.19</td>
<td>0.03</td>
<td>0.36</td>
</tr>
<tr>
<td>Grade</td>
<td>0.09</td>
<td>0.09</td>
<td>0.06</td>
<td>0.09</td>
</tr>
<tr>
<td>Multiple</td>
<td>0.94</td>
<td>0.36</td>
<td>0.17</td>
<td>0.36</td>
</tr>
<tr>
<td>Personal interview</td>
<td>0.10</td>
<td>0.07</td>
<td>0.36</td>
<td>0.10</td>
</tr>
<tr>
<td>Standardized</td>
<td>0.07</td>
<td>0.10</td>
<td>0.36</td>
<td>0.07</td>
</tr>
</tbody>
</table>

* P < 0.05; ** P < 0.01; *** P < 0.01

Assessment of Professionalism

- Are tools reliable and valid?
  - Enough are
- Are tools adequate for task?
  - Many are
- Are faculty adept at using effectively?
  - Probably not
  - “The biggest problem in evaluating competencies is the inconsistent use and interpretation... by unskilled faculty.”
- Is the developmental nature of professionalism addressed?
  - No
  - Over reliance on summative evaluation


Gap 9: Professionalism Objectives/Assessment

Competing Values

- Altruism vs. self-interest
- Primacy of patient welfare vs. fair allocation of limited resources
- Patient's best interest vs. education
- Humanism vs. Professionalism


Gap 10: Ethical principles/Practical constraints
The best metaphor to capture how a college of medicine works is

1. A train
2. An orchestra
3. An ant colony
4. A military unit

How to tie all this together

- Need a new map or lens
  - Challenge traditional ways of thinking about how professionalism works
- **Old assumptions:**
  - Every observed effect has an observable cause
  - Even complicated phenomena can be understood through analysis; whole can be understood by analyzing the parts
  - Analysis of past events allow prediction of future events
- These old assumptions apply to simple and complicated but not complex systems

### Medical Education as a System

- **What is systems thinking?**
  - Emphasizes the relationships among system's parts, not the parts themselves.
  - Concerns interrelationships among the parts and the parts' relationship to the functioning whole.
  - Focus is on seeing underlying patterns and deep structures to system trends and events.

- **Types of systems**
  - Simple
  - Complicated
  - Complex Adaptive

### Definitions

- **Simple System**
  - Stable, static pattern
  - Parts tightly connected
  - Predictable cause-effect relationships
  - System reducible to parts and processes; replicable
  - Directive leadership, designed change, predictable outcomes
  - Answers are knowable, with recipes or prescriptions for action
  - Ex: Brewing coffee, riding a bicycle
Definitions

- Complicated System
  - Dynamic patterns of feedback loops with many interrelated parts within and across subsystem levels
  - Recursive, linear and non-linear cause-effect relationships; reinforcing and balancing feedback loops maintain equilibrium
  - Expert analysis can identify causal loops, deep structural causes to actions; strong leadership effective
- Ex: An airplane, an orchestra, a military unit

Complex (Emergent) Systems

http://www.pbs.org/wgbh/nova/nature/emergence.html

Characteristics of Complex Systems

- Many interacting elements/agents
- Non-linear interactions
- Dynamic and open
- Self organizing and adaptive (no single leader)
- Feedback and co-evolution
- Minor changes produce disproportionately major consequences
- Actions emerge, cannot be imposed
- Simple rules can underlie complex patterns
- Whole is greater than the sum of its parts
- Unpredictable outcomes
- Past influences but does not predict future
- Tensions are not resolved

From Hierarchies to Systems Maps
Practical Implications

- **New model**
  - Manhattan Project vs. Civil rights movement
- **Change assumptions**
  - Professionalism does not ONLY reside within individual
  - Must create conditions optimal for wanted results
  - Early patient contact and continuity—supported
  - Use guided reflection and discussion to support living in the tragic gap
  - Appreciate unintended consequence (CAS)

New Models

<table>
<thead>
<tr>
<th>Old Model</th>
<th>New Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competency</td>
<td>Character: Trait</td>
</tr>
<tr>
<td>Interactions</td>
<td>Interaction: of environment, knowledge, skill, attitude</td>
</tr>
<tr>
<td>Individual issues</td>
<td>Lapses: unprofessional</td>
</tr>
<tr>
<td>Challenges</td>
<td>Continues, developmental, ongoing</td>
</tr>
<tr>
<td>Response to Lapses</td>
<td>Positive</td>
</tr>
<tr>
<td></td>
<td>Educational, targeted</td>
</tr>
</tbody>
</table>

Modify Institutional Structures

- Professionalism feedback and support
- Integrated and systematic assessment and evaluation
  - Hidden curriculum, comprehensive scope
- Employ novel and effective teaching techniques
  - Guided reflection
- Be prepared, seek feedback and prepare to change
Medical Education Examples

• Complex Systems Implementation
  ◦ Relationship Centered Care Curriculum
    (Indiana University School of Medicine)
  ◦ Align Informal and formal Curriculum
    • Emergent design
    • Recognize and disseminate success
    • Complex Responsive Processes of Relating

Other Models

• Roadmap to Professionalism
  Pizker COM Chicago
  ◦ Vertically integrated advisory groups
  ◦ Targeted programming and assessments
  ◦ Attitude surveys
  ◦ Experiential workshops
  ◦ Research

• Integrated Principal Clinical Year (Harvard) (Krupat, et al)
  ◦ No erosion in patient centered attitudes
  ◦ Longitudinal, mentoring, interdisciplinary, guided reflection, group support

• Relational Learning

Our Own Slogan

THINK GLOBAL. ACT LOCAL.
Social action.
Compassion.
Altruism.
Ethics.
Compassion.
Honesty.

Our local action I will take today to promote professionalism will be to:

1. Provide positive feedback on an exemplary event
2. Monitor my behavior for mixed messages
3. Discuss a component of the hidden curriculum
4. Find a way to intentionally enact altruism, social justice, duty, etc.
The Gaps

1. Where we are/want to be
2. Public/Professional Discrepancies
3. Past/Present Models of Professionalism
4. Boomer generation/Younger generation
5. Formal/Informal/Hidden Curriculum
6. Student expectations/Realities
7. Educational Ideals/Practices
8. Admission Criteria/Selecting perfect applicant
9. Knowledge/Behavior
10. Defined Objectives/Assessment
11. Ethical Principles/Ethical Principles/Practical constraints
12. Traditional assumptions/New models of professionalism determinants
   - Simple/Complicated/Complex systems