

## Integration of Behavioral Sciences Utilizing an Active Learning Approach to Medical Students

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### Historical Perceptive: COMMUNICATION SKILLS

- Medical Schools have not required formal communication skills coursework as a prerequisite for admission.
- Often these skills are passively (inadvertently) taught or acquired as part of clinical medicine courses that teach physical diagnosis, end of life issues, presentation of patients, or by voluntary participation in small group educational events and peer teaching.

## Historical Perceptive: COMMUNICATION SKILLS

- Very few faculty are expert in areas of behavioral medicine or communications skills.
- Little faculty development is offered for facilitators or outside preceptors who deliver both active and passive (inadvertent) curricula in the area of behavioral or communication skills.
- Evaluation is done passively and subjectively by preceptors, often not until third year of medical education.

## Historical Perceptive: Behavioral Topics

- Behavioral medicine topics and sociological issues are taught only through specific, individual (**isolated**) courses.
- A few of these courses include medical ethics, medical jurisprudence, multicultural diversity, end of life issues, etc.

## Our Desire

To advance from traditional to innovative,  
from **GOOD to GREAT**  
in educating our medical students.

## Our Desire

Remaining true to our Osteopathic  
Philosophy, implies teaching the student a  
holistic approach to treating the patient,  
examining not merely the component  
parts, not merely seeking pathology but  
seeking wellness for the patient.

“You cannot find physical wellness without  
psychological and behavioral serenity as  
well.”

## The Challenge:

In a new medical school: how can we develop a curriculum that will produce knowledgeable, skilled, scientifically based, compassionate, ethical, professional, patient centered, competent osteopathic physicians?

Jim Collins, *Good to Great*  
Model for Achieving  
Excellence

## “GOOD TO GREAT!!!”

- Strong but non egocentric leadership – “plow horse”
- Get the right people on the bus and the wrong people off the bus
- Get the right people in the right seats on the bus
- Determine what we can do best

### Start with a Level 5 Leader Plow Horse Analogy

Not the SHOW HORSE

But

The PLOW Horse



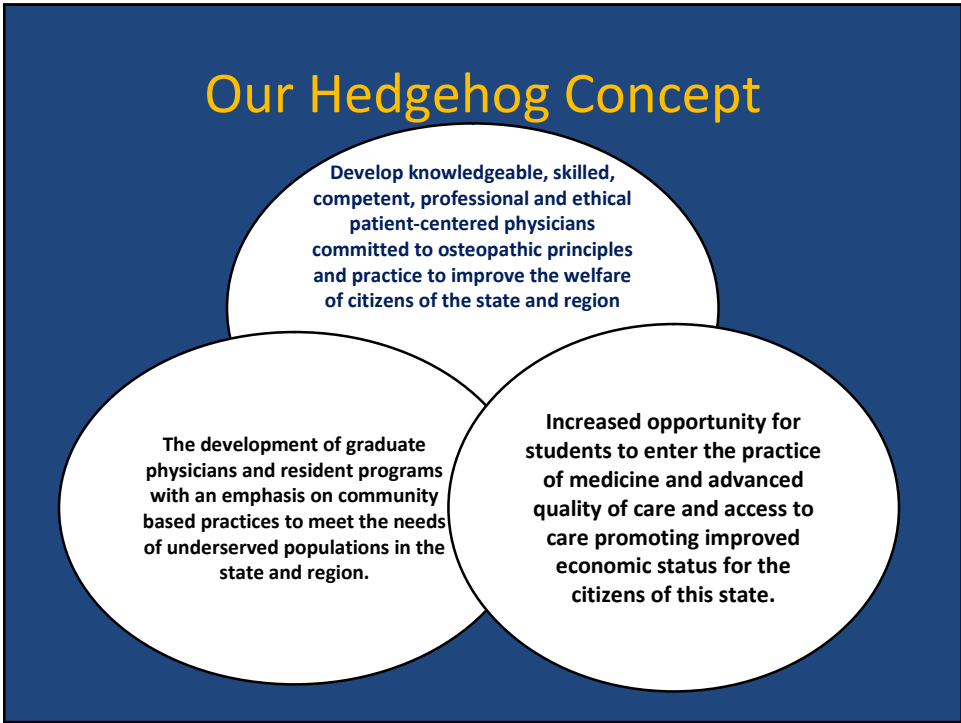
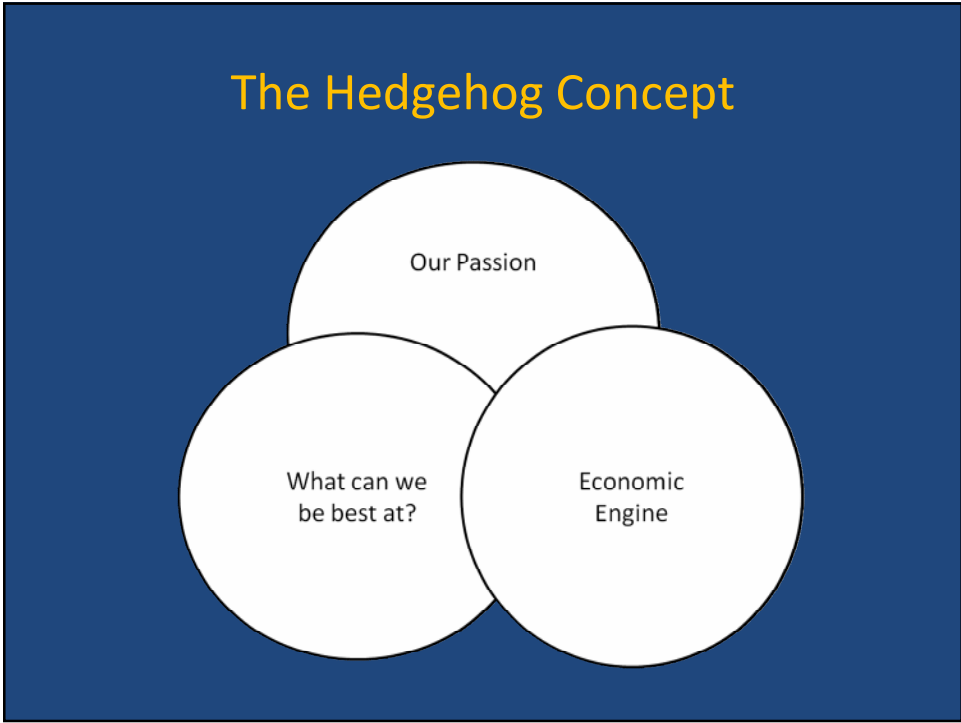
## Next: Who not What

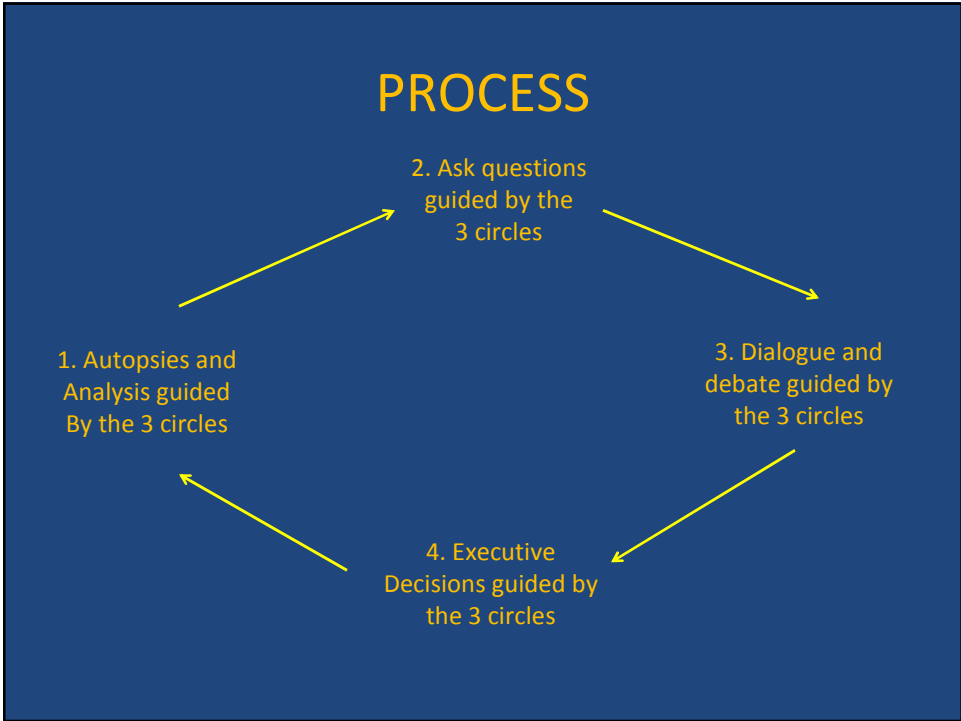
- The “RIGHT” people on the bus
- The “WRONG” people off the bus
- The “RIGHT” people in the “RIGHT” seats



## Confront the Brutal Facts


- Look at where Osteopathic Education has been
- Lead with questions as to how successful or unsuccessful this strategy had been
- Conduct autopsies (no blame game)
- Individual courses
- Passive not active learning
- No formal communication instruction
- No faculty development for facilitators or preceptors
- No placement of behavioral topics or skills within existing courses
- No faculty buy-in





## Why Historically Poor Results in Developing Behavioral Competencies in Physicians?

- **Silo approach to teaching - method**  
Because most education was delivered in isolation, not integrated throughout the curriculum and primarily delivered via didactic lectures and assigned readings, students memorized information for a test and promptly forgot the information.



## Why Historically Poor Results in Developing Behavioral Competencies in Physicians?

- It obviously was not, by the value placed on it by the faculty and administration, as important as the “hard sciences” and the delivery mechanism was not intended to change behavior, but to deliver information.



## Why Historically Poor Results in Developing Behavioral Competencies in Physicians?

- **Course content:**
  - There was no structured mechanism for the development of communication skills or more advanced skills to manage the behavioral variances patients present with as a result of their personality, belief system, or culture.

## Why Historically Poor Results in Developing Behavioral Competencies in Physicians?

- **Course Content**
  - Skills for delivery of bad news, counseling or educating patients about “Gordian” issues such as end of life, terminal conditions, etc. was often taught within geriatrics. Students related the content to the elderly, infirm and terminally ill.



## Why Historically Poor Results in Developing Behavioral Competencies in Physicians?

- **Course content:**
  - When incorporated into Clinical Medicine, the exercises were practiced on peers alone and never in standardized and simulated settings which were life-like and allowed for practice in a real-world context.

## Why Historically Poor Results in Developing Behavioral Competencies in Physicians?

- **Course content:**
  - Since teaching of communication often occurred in challenging settings and dealt with “GOMERS”, students learned to avoid feeling compassion enough to communicate with them. It made them uncomfortable and the indigent were perceived as “medical failures”.
  - Content was not presented in such a way that students would want to model communication skills to elicit the desires of this or other patient groups representing diversity in the population and diversity of opinion and values.

## Why Historically Poor Results in Developing Behavioral Competencies in Physicians?

- **Skills Evaluation:**
  - There were no assessment requirements for demonstrated communication competency by students.
  - Evaluations were often subjective and determined by clinical preceptors without a solid foundation.
  - Tools such as the Arizona Clinical Interview Rating Scale may have been handed out to students or preceptors, but were never explained.

## Why Historically Poor Results in Developing Behavioral Competencies in Physicians?

- **Faculty Development:**
  - There has been insufficient faculty development to develop communication and behavioral skills in those providing the majority of the education of medical students.
  - Clinical preceptors, who supply the majority of role modeling and silent curricular content to the students are given no faculty development or knowledge of what clinical skills are expected.

## Educational Psychology and Behavioral Education Research

- Review of the literature brought 2 points to the forefront:
  - Active, Contextual or Situated Learning
  - Multidisciplinary View

## The Importance of Contextual or Situated Learning

### Principles:

1. Knowledge and skill development need to be presented in realistic clinical contexts, e.g., settings that require applications involving the knowledge and skill

Knowledge alone does not change behavior. Behavior changes require practice, motivation and reward.

## The Importance of Contextual or Situated Learning

### Principles:

2. Development of new skills or change in behavior and the adoption of desired skills and behaviors among the students requires:

- active participation on the part of the student
- interaction with the "patient"
- repetition and practice
- peer and professional collaboration
- feedback from peers and educators
- opportunity to see desired outcomes

## The Importance of Contextual or Situated Learning

Principles:

Successful Methods include:

- small group case-based problem discussions
- interactive role playing
- evaluation of and by standardized patients
- experience with real patients in controlled settings
- patterning and mentorship by skilled experts

## A quote by Duffy and Jonassen

**“Decontextualised knowledge does not give us the skills to apply our understandings to authentic tasks because, we are not working with the concept in the complex environment and experiencing the complex interrelationships in that environment that determine how and when the concept is used.”**

Duffy and Jonassen (1992). *Constructivism and the technology of instruction: A conversation*. Lawrence Erlbaum Associates, Publishers, Hillsdale, NJ.

## Importance of a Multidisciplinary View

A multidisciplinary perspective provides

“... an understanding of the patient as a part of a broader social and environmental context that influences—and is influenced by—biological processes to produce health and illness behaviors, resilience, and functional capacity.”

Institute of Medicine of the National Academies

## Curriculum Development

- Curriculum Goals
- Learning Objectives
- Teaching Methods
- Evaluation Methods
- Outcome Measures



## Key Issues



- What knowledge must our students possess and what skills and competencies do we want our students to acquire? **Content and objectives**
- How can we best assist them in reaching these goals? **Teaching method**
- Are we being effective in helping our students reach their individual and our educational goals? **Assessment, feedback and reassessment**



## Key Issues



- How can we verify that students acquired and adopted the desired content, skills, behaviors etc.?...**valuation of individual students and outcome measures**
- How do our actions and outcomes connect to the values and outcomes expressed by the college?...Assessment of outcomes of all students compared to stated **Mission, Vision and Values**

## The Questions & The Challenges


- What does a doctor today really need to know???
  - No longer the “keepers of knowledge” as in the past
- How can he/she best utilize concepts, skills and knowledge to better understand the disease, the patient or the proper treatment?
- How will his/her actions facilitate health and wellness and will they make a difference in the outcomes?

## Integrated Skills, Behaviors and Competencies Identified:

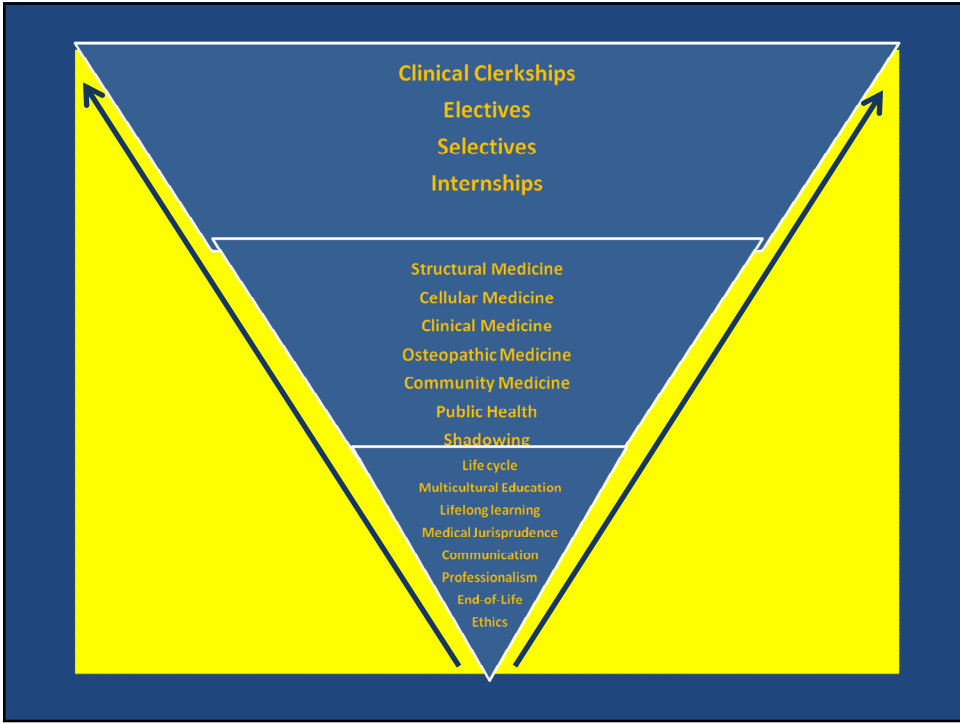
- Community Health Needs
- Medical Ethics and Legal Jurisprudence
- Professionalism in professional and patient interactions
- Human Development/Life Cycle
- Socioeconomic Challenges to medical care and health
- Communication skills
- Education and motivation of patients to change destructive behaviors or preserve wellness and personal health

## Integrated Skills, Behaviors and Competencies Identified:

- Dealing with the adversarial or non-compliant patient
- Needs and actions established by diversity of culture, values and language
- Palliative and End of Life Care Issues



First year – Behavioral Subjects – Vocabulary – Concepts  
  
 These topics infuse all other coursework and all other clinical experiences even through residency.



## Diverse Population Communication Challenges: What manner is effective and produces desired outcomes?

Students need experience with:

- Divergent cultures and values
- Age variables
- Gender and sexuality
- Race or ethnicity
- Language challenges
- Spirituality



## Teaching Methods

- Case based small-group discussions/seminars
- Interactive lecture/presentations
  - Video trigger tapes for discussion
- Role-playing with peers
- Student interactions with standardized and simulated patients
  - Encounters videotaped for student self-evaluation as well as instructor/SP evaluation and feedback
- Observation of clinical patient care (role modeling of experts)
- Student interactions with clinical patients in controlled settings
- Clinical rounds and case presentations to peers and educators

## Plan to Develop Desired Competencies:

- Passive  Active Learning
- Movement to small group, interactive learning
- Integrate biological, psychological, and sociological perspectives in case presentations



## Plan to Develop Desired Competencies:

- Rapid evaluation, immediate knowledge of results/ feedback and opportunities for remediation
- Integrate behavioral issues with clinical problems and biomedical evaluation of patients pathophysiology
- Conduct faculty development & consciousness raising to provide improved role modeling and to structure the “silent curriculum”

## Rational Change: New Concepts & New Methods, Not More Courses

- Integration of knowledge, skills and competencies into existing courses as thematic content to more nearly represent the “real” world (context)
- Provision of opportunities for evaluation, feedback and remediation on an active, ongoing basis throughout the student’s medical education

## Getting to Great by Changing the Way “It’s always been done!”

- **Stop** merely adding courses or content to the curriculum -- rather focus on competencies and adding value.
- **Break down** the silo’s that restrain medical education within disciplines.
- **Stop** evaluating what is not valued or taught

## Getting to Great by Changing the Way “It’s always been done!”

- Teach behavioral topics and skills as a part of integrated case based scenario's and not merely as lecture topics



## Getting to Great by Changing the Way “It’s always been done!”

- Provide real life simulations through mock malpractice trials, panel discussions with guests from various cultures, provision of ethical dilemmas for students to discuss, etc.



## Getting to Great by Changing the Way “It has always been done!”

- Evaluate what is valued:
- Competencies such as communication, compassion, respect for diverse populations, ethics and professionalism should be evaluated interactively and in real time, not with multiple choice examinations.
- **Invest** in faculty development and training for college based and clinical educators alike so they reflect our values.

## The Challenge: How to overcome “the hidden curriculum”

- Students learn more from observation of the actions of role models and peers than the ingrainning of words and concepts
- Students value what is valued by those that are superior or have regulatory control of them

## The Challenge: How to overcome “the hidden curriculum”

They learn more by observation of role models and “heroes” as they encounter difficult situations and of the values of the administration as reflected by how they utilize resources.



## The Challenge: How to overcome “the hidden curriculum”

Provide faculty development that will cultivate the kind of role model we want our students to emulate.

Monitor the use of resources by the administration to ensure they fall within the mission of the school.



## The Challenge: How to overcome “the hidden curriculum”

Place students in philanthropic or outreach settings where observation reinforces teaching and the values expressed by the faculty.



## ASSESSMENT of Communication, Education and Behavioral Assessment Skills

Clinical medicine course utilization of simulated and standardized patients allows for

- observation,
- self, patient and educator evaluation since all encounters are digitally recorded as well as directly observed.
- feedback is available on a real time or delayed basis.
- OSCE evaluations

## ASSESSMENT of Communication, Education and Behavioral Skills

Systems courses utilize small group case-based active learning activities which allow for

- peer and educator evaluation and feedback,
- student evaluation of preceptors,
- both active and "silent" responses
- evaluation of team participation

## ASSESSMENT of Communication, Education and Behavioral Skills

OMM/OPP courses require students to

- touch and evaluate their “patient”,
- communicate with and educate the patient,
- inform the educator of findings and clinical plans,
- change or direct desired behavior of the real, simulated or standardized patients.



## ASSESSMENT of Communication, Education and Behavioral Skills

- Direct observation of clinical educators and required evaluations submitted to clinical education
- Evaluation of others which makes the student reflect on their own actions

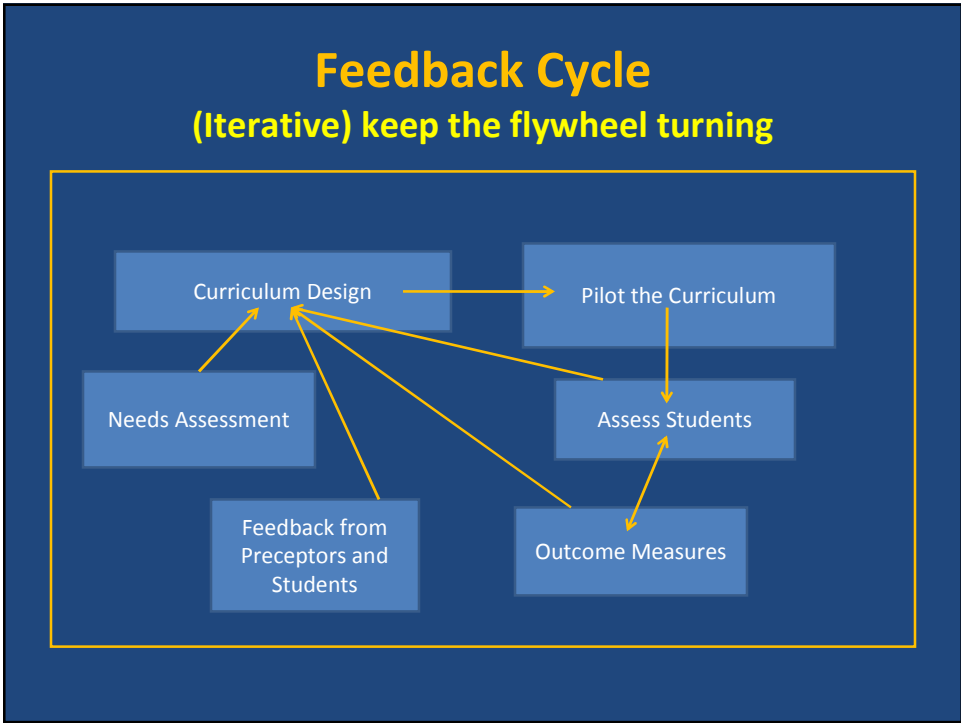
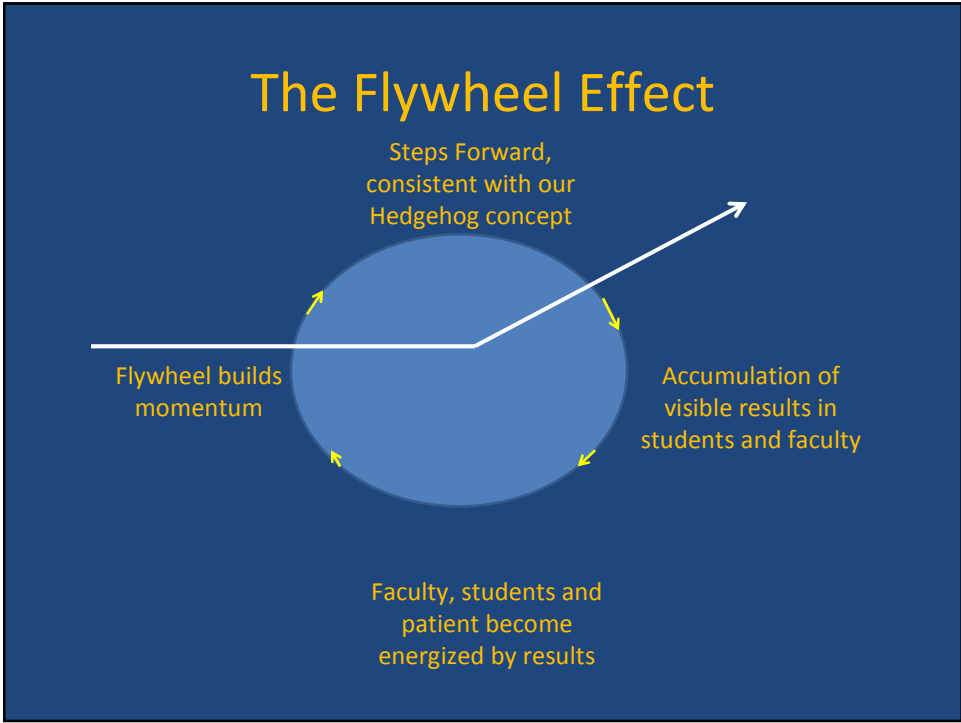
## ASSESSMENT of Communication, Education and Behavioral Skills



- Direct clinical observation and evaluation of the student's actions and interactions during patient encounters in the hospital, ambulatory clinics and during outreach health events performed by clinical educators

## Additional Evaluation Measures: Outcomes

- Student Progress Committee Actions
- Faculty Advisor actions and interactions
- COMLEX II PE Scores
- Patient Satisfaction Ratings
- Alumni Questionnaires
- The student participation in outreach, professional and service events.



## Our Desire

To advance from traditional to innovative,  
from **GOOD to GREAT**  
in the education of our medical students.

**COMMENTS???**

**SUGGESTIONS???**

**QUESTIONS???**