Developing Yourself Professionally: Academic Poster Creation

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GOAL of the Poster Creation Presentation

To add to your academic tool chest a professional development skill set
Objectives: Poster Creation

- Identify and review development tips (content, delivery) for an academic poster presentation.
- Analyze sample posters to determine how to create a poster with quality content and have eye-appeal to the viewer.
Purpose: Posters as a Presentation Tool

- Engage in conversation with like-minded people
- Convey main point of project to large/diverse audience
- Advertise work & institution & discipline
- Instantaneous feedback & networking with colleagues
Which book do you want to open?
Steps to Creating Posters

1. Plan
   1. Size-follow requirements
   2. Words-fonts
   3. Color scheme
   4. Images and graphics
   5. Decide on poster framework (research vs. education)

2. Assemble
   1. In PowerPoint or Publisher
   2. Proof and Edit......Edit.....Edit

3. Print

4. Transport
What to Mount it on?

- Conferences: 4’ high x 6’ wide cork boards, pushpins (review requirements)

- Foam Boards Sizes (requires easels)
  - 40x60
  - 30x40
  - 24x36
  - 20x30
  - Trifold 36x48, center panel 24x36

- Poster Board 22x28
Types of Poster Formats

- Research Posters
- Educational Posters
- Colloquial Posters
Research Language

- Research Question
- Introduction
- Methods
- Results
- Conclusions
- Limitations
- Future Research Questions
- Background
- Research Question
- Hypothesis
- Methods/Materials
- Results
- Discussion
- Conclusions/Future Research
- References
Education Language

- Objective
- Background
- Design
- Intervention
- Outcomes: short & long term
- Interpretation of outcomes, based on goals & objectives
- Challenges
- Future Steps/Teaching Point
Colloquial Language

- What is the question?
- What is the significance?
- How did you address the problem? What did you do?
- What did you find?
- What do you think it means?
- Any reservations?
- Where do you go from here?
Tricks

- Make a PowerPoint presentation
  - Custom: 1 slide with size for the poster
- Rule of 6 lines
- Identify and convey your message
  - Starts with the title of the poster
- Sequence logically/headings/bulleted text
- Use copy & paste for words, charts, images into a poster
Set size of poster on PowerPoint

PP/File Menu/Page Setup/Custom/Insert Width/Height/1 slide/landscape
Steps for Creating From Scratch

1. Start with new, blank page in PowerPoint
2. Set size of poster in page setup-check requirements
3. Select # of Columns: 3 vs. 4 (VERTICAL OR HORIZONTAL)
4. Add Title banner with words and images
5. Add Headers
6. Add text boxes (bullets or numbers)
7. Add images, charts, photos, graphs, lines, borders to text boxes
8. Edit, Edit, Edit
Rules of Consistency

- **Pick 2-3 fonts.** Use the same Font for all… (size, color, capitalization, alignment)

- **Headings** (i.e. 60 pt Goody Old Style, Bold, Shadowed, Garnet, Centered)
- **Body Text** (i.e. 32 pt Verdana, Black, Left justified)
- **Labels** (i.e. 20 pt Arial, black, centered)

- **Pick two or three colors**, use throughout poster
Rules of Readability

- **Title banner read from 20 ft**
- **Body text read from 6 ft**
- **Suggested font sizes** (depends on font)
  - Title of poster 96-120 pt
  - Author(s) and institution 60-72 pt
  - Headings 60-72 pt
  - Body Text 32-48 pt
  - Labels 20-32 pt

- **Test of readability – print 8.5 x 14 copy**
  - Can you still read it?

ALL CAPS
Rules of Consistency

- Keep shading same (color and fade)
- Keep borders same (color, style and thickness)
- Keep objects (text boxes, headings) aligned to guidelines (vertically and horizontally)
- Keep margins and gutters consistent
- Keep line spacing consistent, adjust for readability
Working With Text

- Use bulleted lists if possible—be consistent with selected bullets
- Align text boxes with guidelines
- Keep font size as large as possible, but be consistent
- Edit ruthlessly -- there is always too much text and errors
Example Fonts – All 46pt

- Verdana
- Arial
- Times New Roman
- Goudy Old Style
There is always too much text!

20% Text, 40% Graphics, 40% Empty Space
Working With Images

- Screen shot the image/insert/crop
- Copy/paste from another document
- Insert an image/excel file
  - web: public domain only or personal image file
- Before printing assure resolution is readable for poster size
What Images Do You Need?

- **Photographs: Resolution**
  - 72 DPI computer screen (too low)
  - 150-300+ DPI print
  - Web images won’t work unless 1200 x 1000
  - Find original digital pictures 1+ M pixels
  - Scan at 600+ DPI

- **Charts and Graphs**
  - What data can be best illustrated?
  - Use existing Excel graphs and tables
Planning & Printing Your Poster

http://www.postersession.com

http://www.posterpresentations.com
Conservation of Ink

- No solid dark color backgrounds
  - Use white or gradient of light color/shaded

- Compensate with decorative graphics, small areas of solid color

Conclusions
Basic Poster Guidelines

- Develop a short, results-oriented title with key words from abstract
- Use visual elements whenever possible
- Minimize text-use bullets and no paragraphs
- Select section headings
- Maintain large, easy-to-read font

AMEE GUIDE Creating effective poster presentations: Med Teach 2009.
What to Bring to a Poster Session

- Put details in Handout (e.g. references, surveys/questionnaires)
- Contact Information (business cards)
- Small version of poster to distribute
- Think about where you can place handouts
Average is no longer good enough
Description of the problem, clear statement of goals
Sample Posters to Critique

What do you like?

What do you dislike?

How clear is the title?

Where do you see the text is readable? White space?

Where do you see the use of bullets or numbering is useful?

Where do you see the insertion of images is additive to the poster story?

How is data reported? Summarized?
**Introduction and Objectives**

- Medical student attitudes towards psychiatry influence their choice of future specialty and form the foundation of their later actions as medical doctors.
- The psychiatry clerkship has been shown to strongly influence medical student attitudes and perceptions towards psychiatry.
- Even though medical student attitudes are improving, the proportion of students choosing psychiatry as a field remains low.
- Very few studies have evaluated the specific components of clerkships that impact these outcomes.
- The aim of our study was to directly examine systematically compare student satisfaction and attitudes toward psychiatry between a novel clerkship design and a more traditional approach.
- This represents the first study to evaluate the impact of two different clerkship designs simultaneously on medical student satisfaction.
- Our study is an initial effort at answering the question of breadth versus depth of experience in a clinical clerkship in psychiatry.

**Intervention**

- Students from three medical schools (ACCOM, NYITCOM, SUNY Downstate SOM) were assigned to a more traditional clerkship experience.
- Students from the Hofstra North Shore-LIJ School of Medicine rotated through a novel clerkship design.
- All students in rotations ending between July 2013 and March 2014 were asked to complete a voluntary and anonymous 10-item online survey at the completion of their rotation.
- Questions were presented in a multiple-choice format, with a scale ranging from minimal to no satisfaction to a high degree of satisfaction.

**Traditional Clerkship Experience**

<table>
<thead>
<tr>
<th>Primary Clinical Experience</th>
<th>Additional Clinical Experience</th>
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<tr>
<td>3 weeks</td>
<td>1 clinic conference every week</td>
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<tr>
<td>Adult outpatient</td>
<td>3.4 hours in ED (14:30-15:30)</td>
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<tr>
<td>Geriatric outpatient</td>
<td>1 half day in ED</td>
</tr>
<tr>
<td>1 week</td>
<td>3 days in inpatient recovery</td>
</tr>
<tr>
<td>Each week also included:</td>
<td>3 hours of didactics in the hospital**</td>
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**Novel Clerkship Experience**

<table>
<thead>
<tr>
<th>Primary Clinical Experience</th>
<th>Additional Clinical Experience</th>
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<tr>
<td>2 weeks</td>
<td>1 outpatient intake weekly</td>
</tr>
<tr>
<td>Adult outpatient</td>
<td>2 half days in ED</td>
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<tr>
<td>Geriatric outpatient</td>
<td>1 half day in ED</td>
</tr>
<tr>
<td>1 week</td>
<td>3 days in inpatient recovery</td>
</tr>
<tr>
<td>Each week also included:</td>
<td>3 hours of didactics in the hospital**</td>
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</table>

**Results**

- Analyzing all ten questions together showed that there was a significantly higher overall degree of satisfaction in the traditional clerkship compared to the novel clerkship.
- **Overall Student Satisfaction**

**Post-hoc analysis: Responses to individual questions**

<table>
<thead>
<tr>
<th>Group 1: Traditional Clerkship</th>
<th>Group 2: Novel Clerkship</th>
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**From the students...**

**Traditional Clerkship Experience**

- "It was a well-rounded experience with a good variety of exposure and opportunities to actively be involved in patient care."
- "I had a great time and had the ability to manage patients with the supervision of the attending and resident. Great psychiatry experience and I would recommend it to other students rotating through psychiatry."
- "I would have liked to rotate through different units possibly in 2 week intervals to gain more experience and knowledge."

**Novel Clerkship Experience**

- "Thank you for a great rotation. I had no thoughts of going into psychiatry, but after the rotation, I have a much better appreciation for what psychiatrists deal with and do."
- "Some of the more broken up experiences provided less of a feeling of being part of the care team and active learner. The weeks without as much moving around such as inpatient allowed more involvement in care."
- "It was difficult to fail as part of the team when you were aware with the team for such a short period of time. Otherwise, this was a great experience."

**Future Directions**

- Examine additional outcomes of the clerkship (e.g., self-assessment scores, demographics, match statistics, etc.)
- Include a stigma reduction program in the curriculum and evaluate its impact on student attitudes and career choices.
- Evaluate which specific rotations were preferred or disfavored by students.
- Assess the impact of a moderate variety of clinical experiences on student satisfaction and attitudes.

**Conclusion**

- There is a significant student preference for a rotation which favors a more traditional experience.
- The more intensive clinical experience, the better.
- There may be value in considering the impact of a clerkship design with a more moderate variety of clinical exposure on medical students' satisfaction and attitudes.
- Ultimately, students still expressed being satisfied in both the traditional and novel clerkships, which supports prior research indicating the essential value of strong clinical teaching, supervision, and enthusiasm for the field and practice of psychiatry.
The New Anatomist: Preparing to Teach in an Integrated Curriculum

Gina M. Sorrentino, Ph.D. Department of Science Education, Hofstra North Shore-LIJ School of Medicine, Hempstead, NY.

Seven Things No One Tells You About Building a Career in the Anatomical Sciences

Many new graduates in the anatomical sciences receive their doctorate degrees from research-centered institutions, and the teaching methods of the schools to which they are applying for faculty positions may be quite different and require significant adjustment.

This poster represents a personal account of the transition from a research-centered PhD program in Anatomical Sciences to full-time Assistant Professor in a new medical school with a fully integrated curriculum.

With proper guidance, graduates of the anatomical sciences can not only ease their transition into a new institution, but prepare themselves before graduation to take advantage of the job market.

1. Every school has a mission
2. A medical school is accredited
3. Assessment impacts teaching and student preparation
4. Anatomy is a piece of a bigger picture
5. You will be a member of a diverse faculty
6. What your Ph.D. skills bring to the curriculum
7. Surprise! Your research career isn’t over!

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*How would teaching at these three institutions be different?*

- What is the philosophy of the institution at which you trained? How does that compare to the institution to which you are applying for a job?
- How will these philosophies influence how you are evaluated for promotion?

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*You may work alongside another anatomiist, but your colleagues will comprise professionals of all stripes, from the specialist doctors and surgeons to the less expected medical lay experts.*
Surface Anatomy Utility in Medical Education and Near-Peer Teaching

Shayna Carp, William Rennie, M.D., 1,2 Keith Metzger, Ph.D. 1
1 Department of Science Education, 2 Department of Emergency Medicine, Hofstra North Shore-LIJ School of Medicine, Hempstead, NY

INTRODUCTION & PROJECT GOALS

Surface anatomy refers to anatomical features that can be seen or palpated without invasive techniques and has important implications clinically. In trauma situations, a clear understanding of anatomical locations and relationships is key for managing patient care. Performing clinical procedures relies on knowledge of surface anatomical landmarks that allow access to deeper structures. In surgery, surface anatomy knowledge is essential. Surface anatomy can also guide physical examination in many medical specialties; understanding where to place the stethoscope and why a physician auscultates at a particular point leads to more effective physical examination.

The goals of this project were 1) to assess the utility of a focused surface anatomy learning module and 2) to examine how that additional instruction affects student understanding of anatomical landmarks and their ability to apply that knowledge in a clinical setting. Additionally, this project aimed to assess the impact of near-peer teaching in medical education from both the teacher and learner viewpoints.

METHODS

- A series of modules relating surface anatomy to clinical scenarios was developed by an MS2, guided by faculty members.
- Presented to a subset of MS1 at Hofstra North Shore-LIJ SOM on a weekly basis.
- Each of the modules was developed around a specific goal and students were guided through activities using Socratic questioning by the near-peer.

Sample Clinical Scenario

A patient presents in the Emergency Department with a stab wound to the neck. At each location (A, B and C), what structures are you most concerned about managing? Which of the three locations is the most concerning from a standpoint of patient survival?

HYPOTHESIS AND CURRENT ANALYSIS

Current MS1s [intervention group] performance on surface anatomy-focused questions and ultrasound competency stations were compared to prior students [control group] who did not have the extra modules on surface anatomy

- Intervention group exam scores were equal to or greater than the control group for questions involving surface anatomy.
- In particular, they performed substantially better on question topics that were directly discussed in a module (i.e. targeted anatomy & terminology).
- Near-peer teaching had no measured negative effect on performance, and appears to have improved the understanding of particularly difficult topics.
A Case of Sarcoidosis Disseminated to Skeletal Tissues

Edon Rabinowitz, MD, Chinwe Ogedegbe MD, MPH, FACEP, Joseph Feldman, MD
Hackensack University Medical Center, St George’s University SOM

Introduction

- Sarcoidosis is a chronic inflammatory disease characterized by noncaseating granulomas.
- 90% have pulmonary, cutaneous or ocular involvement but any organ can be affected.
- In the US, peaks 3rd & 4th decade with predilection toward African American Women.
- Diagnosis of exclusion.
- Difficult to assess incidence of skeletal involvement.

The Case

- 33 year old Caucasian male with mediastinal Germ Cell Tumor (GCT) diagnosed and treated 3 years prior.
- Presents to ED with 2 months of worsening exertional dyspnea. Found to be in moderate respiratory distress and Hypoxemic.
- CAT scan reveals large anterior mediastinal mass. Subsequent biopsy consistent with Sarcoidosis.
- Failed to improve with systemic steroid treatment and presented to ED 6 months later with SVC syndrome secondary to enlarging mediastinal mass.
- Required debulking mediastinal surgery, pathology of specimen reported mature teratoma.
- Failure to improve, continued fatigue and respiratory symptoms raised suspicion of GCT dissemination.
- PET/CT evaluation revealed hypermetabolic foci of multiple lymph nodes and bone.
- Left iliac bone biopsy consistent with Sarcoidosis.

Discussion

- Multiple well documented painful bone lesions on imaging studies related to our patient’s GCT.
- Ddx: metastatic GCT, multiple myeloma, brown tumors of hyperparathyroidism, lymphoma, histiocytosis, osteomyelitis, Paget’s disease, fibrous dysplasia.
- Skeletal sarcoidosis speculated prevalence is 3-38%.
- More often in phalanges as compared to long bones, vertebra, pelvic bones, ribs.
- Rarely isolated skeletal disease documented.
- Certainty that pulmonary sarcoidosis preceded skeletal involvement in our patient.
- Greater correlation of ACE levels and inflammatory markers but underlying GCT confounds lab data.
- Treatment of disseminated sarcoidosis is a clinical challenge as traditional steroid and second line Methotrexate treatments may be unsuitable with underlying GCT. Limited data on long term prognosis.
- Limited radiographic findings to diagnose skeletal sarcoidosis. Some correlation with absence of periostitis on conventional radiography.
- PET scan may play role in the future.

References:

Academic Detailing: The P.I.V.O.T.\textsuperscript{1} Initiative, Part I

D. Blitz, J. Mallen, J. Rabin, T. Kwiatkowski, Y. Dlugacz, R.A. Silverman

Hofstra North Shore-LIJ School of Medicine, North Shore-LIJ Health System, Department of Obstetrics and Gynecology, Krasnoff Quality Management Institute, Department of Emergency Medicine

Introduction
- Pharmaceutical detailing has been used for decades to influence physician practice.
- This pilot project utilized a spin on this method called “academic detailing” in order to influence vaccination rates of pregnant women against influenza.
- Many studies indicate that too few pregnant women are vaccinated.
- Obstetricians frequently do not carry the vaccine, a key impediment to vaccination.

By piloting an office-based academic detailing program conducted by Hofstra medical students, we seek to increase the frequency of obstetricians that carry and administer influenza vaccine for pregnant patients during the 2012-2013 influenza season.

Methods
- Summer of 2012: 44 NSLIJ associated obstetricians from offices staffing over 100 obstetricians were contacted by email, letter, and phone to meet with 2 Hofstra medical students (DB and JM)
- Structured interviews were conducted with each obstetrician which also included a student presentation on vaccination during pregnancy, a questionnaire, and a survey regarding the interaction.

Discussion
- It appears from the interviews that carrying the vaccine was in large part dictated by perceived economic impact on the practice.
- Providers who carry the vaccine indicated they can break even on cost, an incentive to carry.
- Providers who do not carry the vaccine believe they will not be adequately reimbursed.
- In addition, providers highly rated the student interactions, welcoming the opportunity to participate in the academic detailing program.

Limitations
- Extensive interviews necessitated a relatively smaller sample size. Part II will be conducted in the winter to determine if academic detailing ultimately improved carrying and administering vaccine in the office.

Conclusion
- Medical students are able to gain access to providers to promote changes in practice.
- Among providers who did not carry, cost appears to be the most substantial barrier.
- Preliminary data suggests that affording offices with vaccine may be a potential solution to improve vaccination rates.
- January 2013: Part II of this study purports to establish if academic detailing alters practice.

\*ONLY 47\% OF PRACTICES INTERVIEWED REPORT CARRYING INFLUENZA VACCINE

Table 1: Characterization of Obstetricians

<table>
<thead>
<tr>
<th></th>
<th>All</th>
<th>Carriers</th>
<th>Non-Carriers</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>52.31</td>
<td>52.48</td>
<td>52.54</td>
<td>0.98</td>
</tr>
<tr>
<td>Gender (M:F)</td>
<td>51.1%:48.9%</td>
<td>42.9%:57.1%</td>
<td>58.3%:41.7%</td>
<td>0.31</td>
</tr>
<tr>
<td>Location by county (Nassau (N), Queens (Q), Suffolk (S))</td>
<td>N: 31</td>
<td>N:15</td>
<td>N:16</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Q:11</td>
<td>Q:5</td>
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<td>S:3</td>
<td>S:1</td>
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</table>

Figure 1: Reasons Cited for Carrying Vaccine

Figure 2: Reasons Cited for Not Carrying Vaccine

Figure 3: If The Vaccine Was Provided So As To Be Cost Neutral

\textsuperscript{1} Pregnant patient Influenza Vaccine Optimization Team
In 2007, the NSLIJHS provided in-service training to its leadership on “Rounding for Outcomes”. The source of the training was a Studer Group (Gulf Breeze, FL) video along with the LIJ Director of Service Excellence as facilitator.

Management implemented this project in every department and up on the patient floors.

Using this “communication and relationships tool” with the Pathology House Staff may be the first attempt at “Rounding for Outcomes” (RFO) in a GME Program.

Definition: RFO is proactively engaging, listening to, communicating with, building relationships with and supporting your most important asset ... your staff.

A “Leadership ‘Rounding for Outcomes’ Log was created to assist leaders in developing skills and leadership competencies necessary to attain desired results.

The feedback sought was under standardized headings: What is going right? Who should be recognized and rewarded? What systems and processes can be improved? Do you have the tools and equipment needed to do your job?

Follow-up actions included sending thank you notes listing the specific behavior/action being recognized. Staff is rewarded with a small gift.

Follow-up e-mail is sent to notify responsible individuals of an issue raised in order to achieve resolution.

A three-year analysis (2007-2010) was done on comments submitted at monthly “Rounding Sessions” with the Pathology House Staff at NSLIJHS.

Measurable results was key to this innovative project that changed the environment of our GME programs.

A confidential evaluation form provided House Staff feedback on the RFO process and its outcomes.

“It’s a non-threatening way to get things done.”

“RFO is a great way for the programs to assess what is going right.”

“A great platform to bring current issues and new ideas for helping the programs run more effectively.”

“I feel that RFO works with our program because our program coordinator and director are receptive to what we have to say.”

100% of the House Staff believe that other GME programs would benefit from using the RFO process.

The rapport with the House Staff is wonderful and the outcomes have been excellent improvements to the work environment of a very busy academic department. The House Staff are sure to showcase RFO during recruitment season.

Several of the environmental issues addressed led to significant outcomes for the department, the hospital and the residency program. Collectively, these were resolved with tools/equipment/furniture and/or room renovations, as follows:

- A completely renovated and equipped Grossing Room, Autopsy Room and two Residents’ Rooms among 3 sites.

- Space adequacy maintains case integrity, thus preventing specimen mix-ups. This is key to patient safety.

These accomplishments were deemed necessary by the Administration, even in a time of budgetary constraints, to show its investment in and support of GME.
Day One: What are the possibilities for the first day of gross anatomy courses?

Keith A. Metzger, Ph.D. 1, David Elkowitz, D.O. 1, 2, William Rennie, M.D. 1, 3
1 Department of Science Education, 2 Department of Pathology & Laboratory Medicine, 3 Department of Emergency Medicine
Hofstra North Shore-LIJ School of Medicine, Hempstead, NY

Introduction
- Activities on the first day of gross anatomy courses vary widely across different curricula
- Represents a crucial formative experience for medical students
- How can we best utilize this valuable time?

What Have Anatomists Done?

Laboratory Fundamentals:
- Laboratory safety and protocols
- Basic use of dissection tools and dissection technique training
- Chemical hygiene and proper use of personal protective equipment

Anatomical Instruction:
- Learning to differentiate between different tissue types (e.g., muscle, fat, fascia)
- Basic gross anatomy knowledge
- Cadavers often prone, hands and faces covered

Patient-Centered Approach:
- Professionalism & transformation a common theme
- Cadaver has sometimes been introduced as "first patient"
- Considering transition in many curricula to early clinical experiences, is "first patient" approach still meaningful?

Day 1 at Hofstra North Shore-LIJ SOM

Goal of "Observation and Correlation" Lab:
"Through observational, tactile, and dissection activities, students will begin the process of focusing their clinical eye. Additionally, they will start to understand the correlation between structures that are seen on the surface of the body, those lying deeper and physical findings, through exploration using gross dissection."

Part I: Observation & Inference (90 minutes)
- Small groups of students make observations and inferences about external morphology of cadaver
- Facilitator (course faculty) present with each group but intentionally stands back and lets group lead process of exploration

Part II: Dissection & Correlation (90 minutes)
- Goals are to correlate surface to deep anatomy and to identify different types of tissues
- Followed by peer instruction of different pulse points to each other

Part III: Reflection (60 minutes)
- Next day, students meet in small groups and conduct a reflective exercise related to their experiences on the first day of lab
- Open-ended reflective exercise

"Describe your experience in the Structure Laboratory during the Observation & Correlation session."

Measurable Outcomes

Knowledge
- Anatomical
- Clinical
- Technical

Skills
- Dissection
- Observation
- Reflection
- Clinical Reasoning

Attitudes/Values
- Professionalism
- Empathy
- Patient-centeredness

Assessment & Outcomes
- Can develop assessments grounded in competency-based medical education
- Integrates with other portions of curriculum, including clinical skills (i.e., physical diagnosis, communications, reflection)
- How does this experience impact students?
Patient-centered Explorations in Active Reasoning Learning and Synthesis (PEARLS): A pedagogy fostering early skills in leadership, teams, and problem solving

Hofstra North Shore-LIJ School of Medicine

Purpose
As healthcare evolves, physicians must lead teams to solve complex, system-wide problems. Education programs must address this shift to a team approach in patient care and health care delivery and incorporate learning strategies that develop leadership, management, and problem-solving skills to enable future physicians to practice effective medical care.

The learning and application of these skills is the pedagogical basis of PEARLS, a hybrid CBL-PBL design.

Description
PEARLS pedagogy is comprised of three pillars that can map to physician effectiveness skills:

1) PEARLS Process = Systems/Teams
2) Group Dynamics = Leadership/Management
3) Higher Order Thinking = Problem Solving

Each component has dedicated learning objectives which form the basis for an intense faculty and student development program. This development program introduces both groups to the knowledge and foundational skills essential for acquisition of these skills, and is matched with a rigorous observation process of small groups in action.

Goal
Students will synthesize material with peers through higher order learning conversations in groups that will function in an equivalent and interchangeable fashion.

Assessment & Evaluation
- Wrap-up
- Forms
  1) Assessment of PEARLS Group by Student
  2) Assessment of Student by PEARLS Faculty
- Formative and summative essay questions
- Student feedback to faculty (Friday)

Challenges
- Aligning assessment with PEARLS pillars
- Requires faculty development to assure facilitation is reliable and valid to the process
- Requires student development to assure students understand expectations and outcomes
- Evolution of complexity of cases
- Aligning additional course content with PEARLS curriculum

How can PEARLS be implemented elsewhere?
Educators could incorporate these skills into current PBL groups through student and faculty development.

Logistics
- Five groups of 8 students
- One faculty facilitator per group
- Two prepared cases per week
- Each course is 12 weeks

Monday
- “Check-in”
  - Both cases are presented and learning objectives are identified by students
  - Role of faculty facilitator is less active; to ensure that desired group process is occurring via direct observation

Wednesday/Friday
- Higher order discussions
  - Faculty member can facilitate using questions to probe critical thinking
Door-to-Balloon Times in Interfacility Transports of STEMI Patients
Larson, J; McFarlane, L; Kwiatkowski, T; Fornari, A; Ward, M.
Hofstra North Shore-LIJ School of Medicine, North Shore-LIJ Health System

Background
- ST-segment-elevation myocardial infarction (STEMI) patients should receive PCI less than 90 minutes after the initial patient contact with the health system.
- If a Door-to-Balloon time under 90 minutes is not possible fibrinolytic therapy within 90 minutes of contact is indicated.
- Patients who present to an ED at a hospital without PCI capabilities must be transferred to a PCI-capable facility but still must strive to meet the 90-minute Door-to-Balloon time recommendation.

Study Phases
- Phase I: Retrospective study
- Phase II: Focus group and intervention design
- Phase III: Intervention implementation and prospective study

Looking Back
- Summer 2012: Retrospective chart review of patients transported from five community hospitals to two tertiary care centers within the North Shore-LIJ Health System in the years 2010 and 2011.
- Analysis: There are opportunities for improvement for STEMI patients who require interfacility transport to a STEMI center.

Purpose of Phase II Study
Describe the steps, successes and challenges involved in the process of identifying and transferring STEMI patients to the tertiary hospital for cardiac catheterization.

Objectives
1. Determine areas for improvement and areas of success in the transfer of STEMI patients to tertiary hospital for PCI.
2. Determine how the process of transfer of STEMI patients be streamlined to occur in less than 90-120 minutes.

Methods: Focus groups will be conducted at all facilities

Sample Questions
- What is the process for obtaining an EKG once the patient is triaged?
- Describe what happens between the time the EKG is read and when cardiology is contacted at the tertiary care hospital.
- What type of preparation do you do before EMS arrives at the hospital?
- What is the process to receive and act on phone calls to transfer STEMI patient from a community hospital to tertiary care lab?
- Describe your impression of what happens upon arrival to the community hospital to pick up the transfer patient?
- Describe what process is in place from the time of phone contact with the community hospital to the decision to transfer a patient to the tertiary care hospital catheterization lab?
- Describe the catheterization lab role from the time of the transfer decision to arrival of the patient at the cath lab.

Selection of Participants
- Recruit representatives from all aspects of STEMI care and transfer
- Any member of the patient care team should be considered for participation in the focus group
- 6 to 8 members in each group including: physicians, nurses, nursing assistants, EKG technicians and ward clerks

Formation of Focus Groups
- Researchers pre-determined need for seven interprofessional focus groups
- Prepared questions to ensure we met the purpose & objectives of our study
- Questions are specific for each interprofessional group

Initial Impressions
- Conducted three focus groups
- Four focus groups are pending completion
- There is room to achieve STEMI goal of less than 90 minutes with small modifications to the current systems

Next Steps
- Determine the major themes from each group discussion
- Develop hospital-specific and health system-wide interventions
- Implement interventions
- Evaluate impact of interventions on Door-to-Balloon Time

Bibliography
Make the message Stick