

## 3 for 1: How to Accomplish Faculty Scholarly Activity, Resident Scholarly Activity, and Meet PBL Competency Requirements

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- Many community based residency programs encounter obstacles to meeting ACGME requirements for faculty and resident scholarly activity





- Five years ago, Crozer- Chester Medical Center's Internal Medicine Residency Program developed a program to address the Practice Based Learning and Improvement Competency that simultaneously addresses the resident and faculty scholarly requirement



- During this workshop we will:
  - 1. Define the PBL & I competency and the RRC-IM requirements for faculty and resident scholarly activity
  - 2. Describe the development and methodology of our program
  - 3. Highlight several projects to demonstrate how all three areas are addressed



- 4. Describe other benefits of our combined approach
- 5. Discuss obstacles, and how they were overcome
- 6. Discuss how this may relate to your home program/institution

## **Practice Based Learning and Improvement**



- Residents must be able to investigate and evaluate their patient care practices, appraise and assimilate scientific evidence, and improve their patient care practices
- Life-long learning
- Evidence based medicine
- Quality improvement
- Teaching skills



- Analyze practice experience and perform practice-based improvement activities using a systematic methodology
- Obtain and use information about their own population of patients and the larger population from which their patients are drawn



- Locate, appraise and assimilate evidence from scientific studies related to their patients' health problems
- Apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness



- Use information technology to manage information, access on-line medical information; and support their own education
- Facilitate the learning of students and other health care professionals



## **Resident Scholarly Activities**

- The curriculum must advance residents' knowledge of the basic principles of research, including how research is conducted, evaluated, and explained to patients, and applied to patient care
- The program must provide an opportunity for residents to participate in research or other scholarly activities, such as: original research, comprehensive case reports, or review of assigned clinical and research topics

## Faculty Scholarly Activities



- The faculty must establish and maintain an environment of inquiry and scholarship with an active research component
- The faculty must regularly participate in organized clinical discussions, rounds, journal clubs, and conferences

- Some members of the faculty should also demonstrate scholarship by one or more of the following:
  - Peer-reviewed funding
  - Publication of original research or review articles in peer-reviewed journals, or chapters in textbooks





- Publication or presentation of case reports or clinical series at local, regional, or national professional and scientific society meetings
- Participation in national committees or educational organizations
- The collective activities of the faculty must include all of the elements above



- Faculty should encourage and support residents in scholarly activities

## Who are we?



- Community Hospital Program
- University Program
- VA/Municipal

## Obstacles



- What obstacles do you face as a Community Hospital Program in achieving resident scholarly activity?
- What obstacles do you face as a University Hospital Program in achieving resident scholarly activity?

# PBL&I design

Ashish Rana, M.D.



## History

- 2001



## History



- 2001
- Single faculty (now expanded)

## History



- 2001
- Single faculty (now expanded)
- 36 projects in total

## History



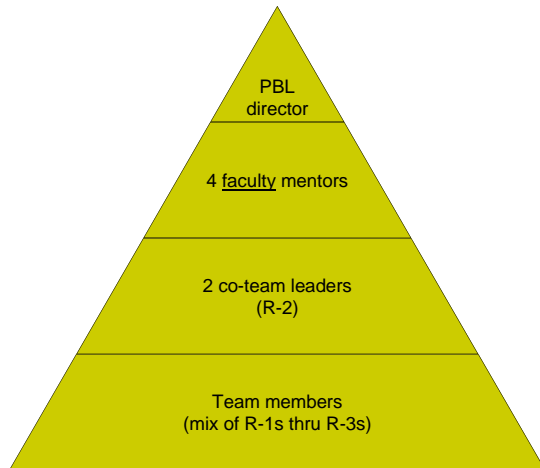
- 2001
- Single faculty (now expanded)
- 36 projects in total
- 8 had part II's

## History

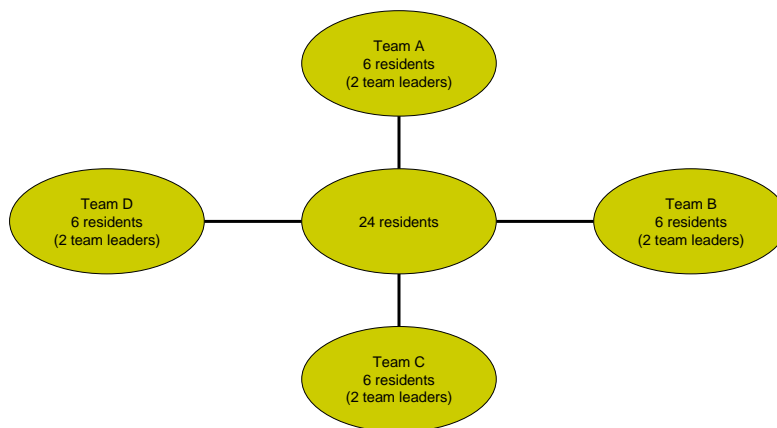


- 2001
- Single faculty (now expanded)
- 36 projects in total
- 8 had part II's
- 43 scholarly activities acceptances

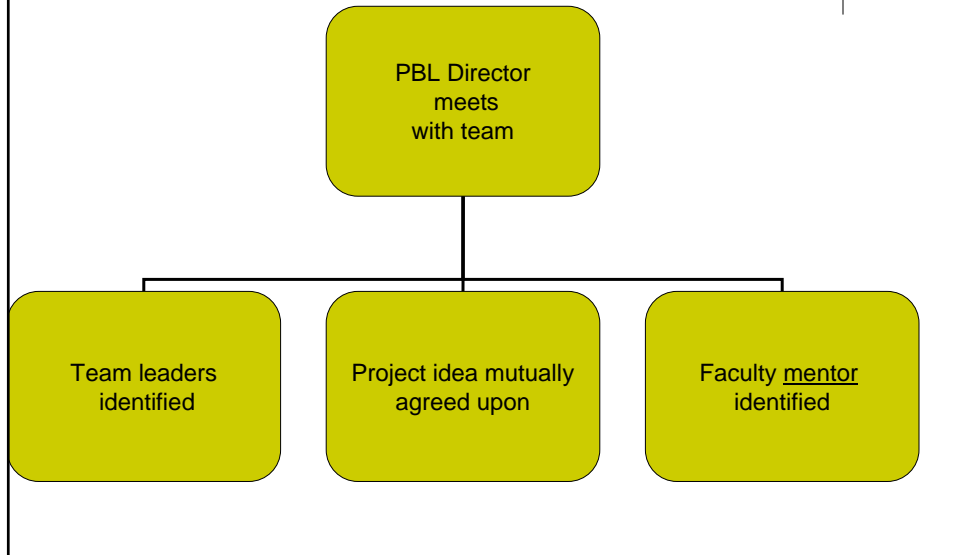
# System Design



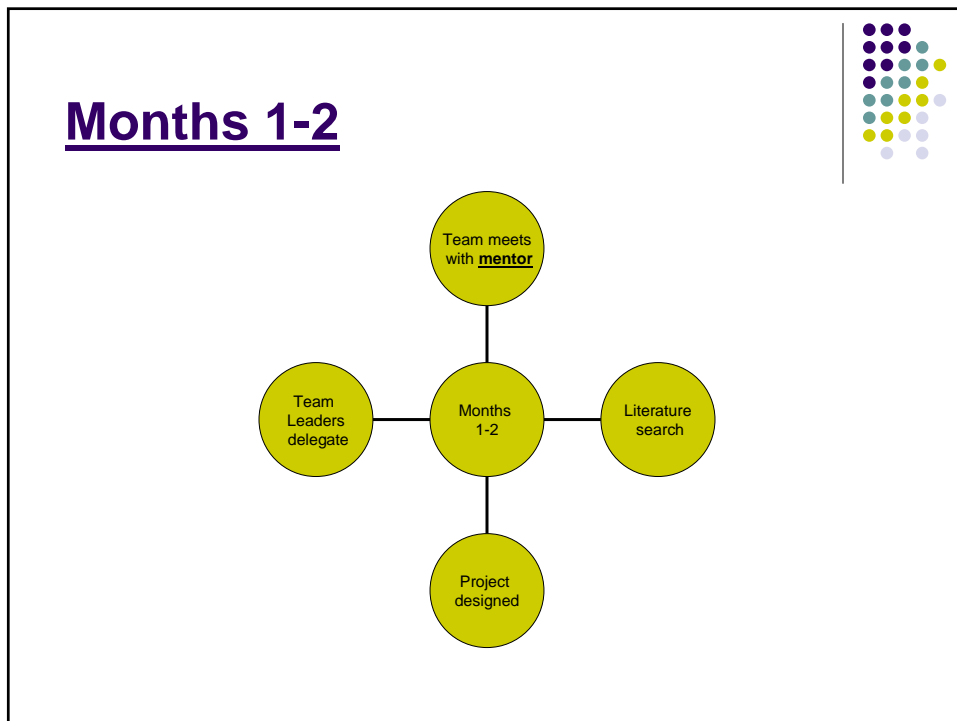
# Our program



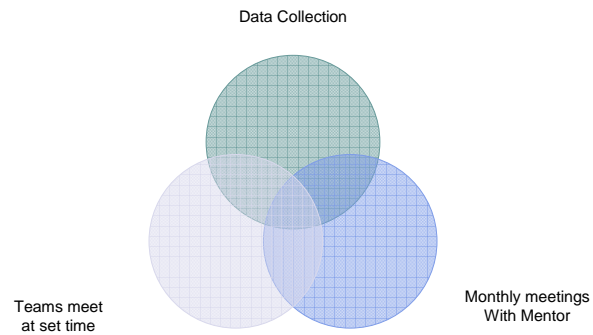
## Month # 1



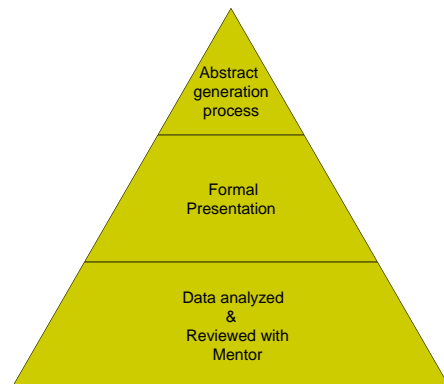
## Months 1-2



## Months 2-5

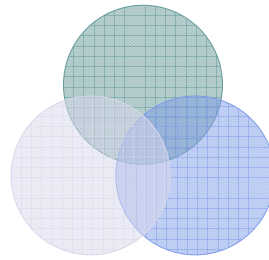


## Month 6 (last month)

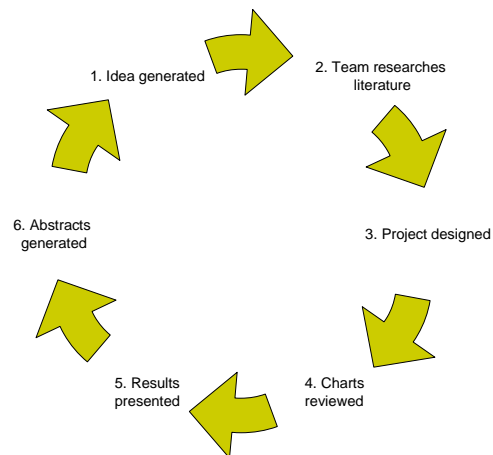




- Abstracts are filed awaiting a 'Call for Abstracts' 'Call for Posters' Publication Submission



## Cycle Repeats the next 6 months



## ACGME PBL&I definition



- 'involves the investigation and evaluation of care for their patients' ✓
- 'the appraisal and assimilation of scientific evidence' ✓
- 'improvements in patient care' ✓

## 8 Studies with Part II's



<i>Project title</i>	<i>Part 1 results</i>	<i>Part 2 results</i>
Breast Cancer Screening	CBE 30% SBE 9%	CBE 36% (20% ↑) SBE 14%
GI prophylaxis	Inappropriate use 73%	Inappropriate use 20% (73% ↓)
Advance Directives in those at risk	Obtained 10%	Obtained 18% (80% ↑)
Screening for Colon Cancer	Acceptance rates 30%	Acceptance rates 76% (153% ↑)



## 8 Studies with Part II's

<i>Project Title</i>	<i>Part 1 results</i>	<i>Part 2 results</i> *
Diabetes management at CMA	A1c at goal= 23% Target BP = 46%	A1c = at goal 37% ( 60% ↓ ) Target BP = 56% ( 22% ↑ )
Aseptic Precautions in CVP Placement	CRBSI = 1 in 3 (33%) of CVP placed	CRBSI = 1 in 11 (9%) CVP placed (72%↓ )
DVT Prophylaxis and apr use in hospital patients	1.# pts placed = 41% 2.Appr use = 49%	1.# pts placed = 71% (73%↑ ) 2.Appr use = 74% (51%↑ )



## 8 Studies with Part II's

<i>Project Title</i>	<i>Part 1 results</i>	<i>Part 2 results</i>
Housestaff Emergency Room Expediency and Efficiency of Upstairs Admissions	ED time for resident admission = 89 minutes	ED time for resident admission = 69 minutes with intervention (22% ↓ )

## Added Benefits



- DOM recognition from administration:
  - EBM Task Force Presentations
  - Grand Rounds invitation
  - Pay for Performance interests
  - ID projects embraced by Infection Control
  - Subjective importance to the residency aside from patient care only

## Powerful Projects:

The Plethora of  
Resident Benefit  
from PBL Projects



## Resident PBL Checklist



- ✓ Produce Despite Time Constraints
- ✓ Develop Skills and Camaraderie
- ✓ Improve Education and Patient Care
- ✓ Travel with the Program's Money
- ✓ Fill CV and Interview Time

## Production Despite Time Constraints



- 6-12 months/project
  - Six projects per resident tenure
  - Vary in intensity, time commitment
- Timeline facilitation
  - Chief resident checklist
  - PBL Director meetings
  - Mentor supervision
- Scheduled group time
  - Monthly noon conference
  - Happy hour at the pub

# Verbose and Colorful Slide



## 2002- 2003

- GI Prophylaxis in the floor patient
- Hyperlipidemia screening, treatment, and follow-up
- Prostate Cancer Screening
- Advance Directives in those at risk

## 2003- 2004

- Advance Directives in those at risk Part II
- Diabetes Management In the Ambulatory Care Setting
- Central Line Placement in the Inpatient Setting
- Screening for Colon Cancer
- Evaluation of Acute Dyspnea Using BNP
- Screening for Colon Cancer Part II
- Diabetes Management In the Ambulatory Care Setting II
- Aseptic Precautions in Central Line Placement Part II

## 2004- 2005

- DVT prophylaxis on the Inpatient Setting
- Physician Response to Anemia in the Ambulatory Setting
- Cervical Cancer Screening in Primary Care Practice
- Diabetes Management on the Inpatient Setting
- Ventilator Associated Pneumonia
- Osteoporosis Screening
- Breast Cancer Screening Part II
- GI Prophylaxis Revisited (III)

## 2005- 2006

- Utilization of Stress Dose Steroids in Septic Shock
- Pneumococcal Vaccination at CMA
- HER-EE-UP Study Part I
- DVT Prophylaxis Part II
- MRSA Colonization in Physicians
- Glycemic Control in the Critical Care Setting
- Breast Cancer Screening at CMA Part II
- Evaluation of Hypertension in the Outpatient Office

## 2006-2007

- Glucometer Accuracy in the ICU setting
- Use of ACE-Inhibitors in Diabetic Patients at CMA
- Use of the PORT SCORE in Assessing Appropriate Pneumonia Admissions
- HER- EE-UP MORE (Part II)
- Implementation of the CPIS
- Evaluation of Appropriateness of Admissions for CAP Based on PORT Score (II)
- Central Venous Line Complications
- Colonoscopy Screening And Surveillance at CMA

- Purple = Publication
- Red = Award
- Blue = National
- Green = Regional



# Bar Graph



## Research Skills



- Problem recognition
- Testable hypotheses
- Study design
- Data compilation and analysis
- Abstract and Poster preparation

## Interpersonal Skills



- Group effort
- Leadership roles and individual responsibility
- Interaction with mentors
- Interaction with medical records staff
- Presentation skills
  - Residency peers
  - Medical conventions
- Elbow rubbing

## Positive Change



- Residents become proactive for education and quality
  - Residency-specific quality issues
  - Direct patient care improvement
  - Educational updates and medical interest
- Projects consistently proven important

Central Line Placement (2003)	•One part project •Informative for change	•Educated proper form •Developed teaching video
Stress Dose Steroids in Septic Shock (2006)	•One part project •Informative for change	•Exposed confusion •Recommendations review
MRSA Colonization in Physicians (2006)	•One part project •Medical update/interest	•Exposed upcoming issue •Treatment offered
Glucometer Accuracy in ICU (2007)	•One part project •Medical interest •Informative for change	•Identified potential change in resident practice

## Someone Else's Dime



- Sunny Scranton, PA
- Philadelphia, PA APDIM
- Boston, Massachusetts
- New Orleans, Louisiana
- Toronto, Canada
- Minneapolis, Minnesota



- Several high class restaurants along the way!

## CV Fillers & Interview Fodder



- Abstracts, Posters, Publications
- Specialty-Directed Projects
- Interview Discussions
- Mentor Approval
- Conference Contacts

## Faculty Participation



- Refine the clinical question
- Assist in study design
- Guide and oversee literature review
- Monthly updates with team leaders
- Review of Presentation
- Present at presentation
- Assist in abstract/poster presentation

## Faculty Benefits



- Scholarly activity in the form of abstracts, poster presentations, and publications
- Chairman Appraisal
- Useful for promotion, FACP application
- Minimal time involved
- Guide resident scholarly activity towards an area of personal interest

## PBL & I Obstacles and Solutions



## Problem

- Medical Records
  - HIPPA



## Problem

- Medical Records
  - HIPPA

### Solution

- a. Signed letter from Chair and Project Director



## Problem

- IRB concerns



## Problem

- IRB concerns
  - PBL Director evaluates each project and determines whether this is 'research' vs QIP



# Idea Generation



Initially PBL Director gave out ideas

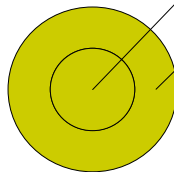


# Idea generation

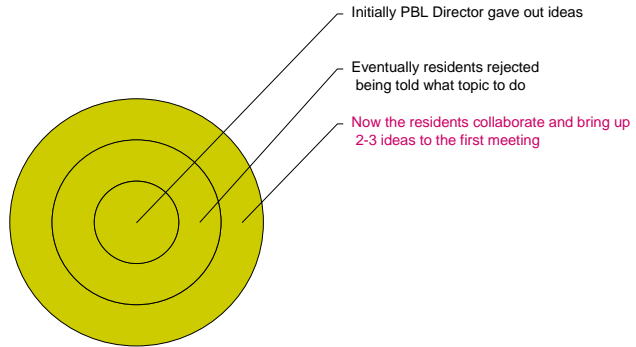


Initially PBL Director gave out ideas

Residents eventually rejected being given a topic



## Idea generation



## Problem



- Team Leader Motivation:
  - R-3 chosen for their experience, confidence, etc..



## Problem

- Team Leader Motivation:
  - R-3 chosen for their experience, confidence, etc..
  - They got 'senioritis'
  - Leadership suffered



## Problem

- Team Leader Motivation
- Solution: leaders changed to R-2s
  - new responsibility
  - fellowship interest
  - No 'senioritis'

## Problem



- Timeliness
  - 6 months of work done in the last month

## Problem



- Timeliness
  - 6 months of work done in the last month
    - Quality suffered
    - #'s suffered
    - Overall disinterest



## Problem

- Timeliness
  - 6 months of work done in the last month

### Solution:

1. Monthly meetings for 5 mins with PBL director
2. Monthly meetings with mentor
3. Assigned team meeting times



## Problem

- Mentor deficit

## Problem



- Mentor deficit
  
- Solution:
  - Chairman sets the expectation
  - PBL Director calls and sells the benefits
    - Academic promotion; Scholarly activity; FACP; CV; etc...
    - 90+% acceptance after the 'sell'



## Obstacles



- Review obstacles others have faced



- What do you do in your home institution to meet the requirement for resident scholarly activity?