

ABSTRACT: 2015 ELAM Institutional Action Project Poster Symposium

Project Title: A Continuous Quality Improvement Approach to Enhance Faculty Contributions to the Education Mission

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Collaborators: 1) Associate Deans: Curricular Improvement, Student Programs, Senior Associate Dean for Education, and 2) Faculty Directors: a) Curriculum & Assessment; b) Pre-Clerkship Curriculum, c) Introduction to Patient Care, d) Pre-Clerkship Assessment, f) Director Clinical Skills.

Background:

The School of Medicine will increase class size from 96 to 128 in 2017. Our curriculum is a highly integrated Patient Based Learning (PBL) curriculum with abundant small group learning. No departmental specific courses are offered in the first two years. Contributions to the integrated curriculum are highly variable across departments. Timely, accurate data on teaching contributions are not readily available and therefore are not routinely incorporated into decisions about allocation of faculty effort.

Objectives: This project has four objectives: 1) identify the number of faculty needed for mission critical roles to support an increased class size; 2) develop a model with defined equitable faculty teaching expectations for each department; 3) develop a web based Dashboard to enable departmental chairs, education leaders and the Dean to monitor teaching contributions and inform strategic decisions; 4) integrate data on faculty teaching expectations with clinical and research metrics to provide a more holistic representation of the SOM faculty activities.

Methods/Approach:

We engaged a faculty task force to: 1) quantify the faculty resources required to support an increased class size; 2) identify mission critical roles and prioritize difficult to recruit roles; 3) consider discipline specific expertise and prior knowledge of the medical students' experience needed in each role; and 4) develop metrics for departmental contributions. We assigned departments to three types : 1) basic science, 2) clinical with core clerkships, 3) all other clinical. We then developed specific expectations for mission critical roles that were adjusted by faculty FTE and department type. We created a dashboard that identified the degree to which each department met teaching expectations for each role. Different colors on the dashboard indicate contributions and ranged from sufficient to support an increased class size to not sufficient for current class size. AY2013-14 served as the pilot year. We validated data for the mission critical roles and engaged stakeholders to refine data organization and display through progressive PDSA cycles. We engaged department chairs to identify strategies to enhance departmental contributions. We created technical specifications to move the dashboard to a web-based application and link this with our curriculum management database with anticipated implementation in July 2015.

Evaluation Metrics:

To determine the effectiveness of the intervention we will collect and analyze data for AY2015-18.

Outcome	Metric
Project Management	Monthly Process Milestones
Reduce Variance in Contributions Among Departments	# Departments Meeting Expectations
Increased Faculty Contributions	# Departments Meeting Expectations
	# Individuals Contributing to Expectations
	# Individuals by Academic Rank Contributing to Expectations
Usefulness; Increased Transparency	SOM leaders feedback

Anticipated Organizational Impact

Increased Faculty Participation; Decreased Variability Among Departmental Contributions; Transparency; Integrated Holistic Representation of SOM Contributions; Academic Promotion/Retention.

A CONTINUOUS QUALITY IMPROVEMENT APPROACH TO ENHANCE FACULTY CONTRIBUTIONS TO THE EDUCATIONAL MISSION

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Presented at the 2015 ELAM Leaders Forum



BACKGROUND/CHALLENGE

- 30% increase in Undergraduate Medical Education (UME) class by 2017
- Highly integrated patient-based learning education curriculum
- No department-specific courses
- Contributions to UME highly variable across departments
- Lack of timely, accurate data on teaching contributions

OBJECTIVES

1. Identify the number of faculty needed for mission critical roles to support an increased class size
2. Develop a model with defined equitable faculty teaching expectations for each department
3. Develop a web based Dashboard to enable departmental chairs, education leaders and the Dean to monitor teaching contributions and to inform strategic decisions
4. Integrate data on faculty teaching expectations with clinical and research metrics to provide a more holistic representation of SOM faculty activities

DISCUSSION

RESULTS

- Data demonstrate considerably more variability in departmental contributions than anticipated
- Data identified vulnerabilities. For example, a single individual considering retirement providing the majority of departmental roles
- Dashboard makes transparent departments that are major education contributors and those with little to no investment

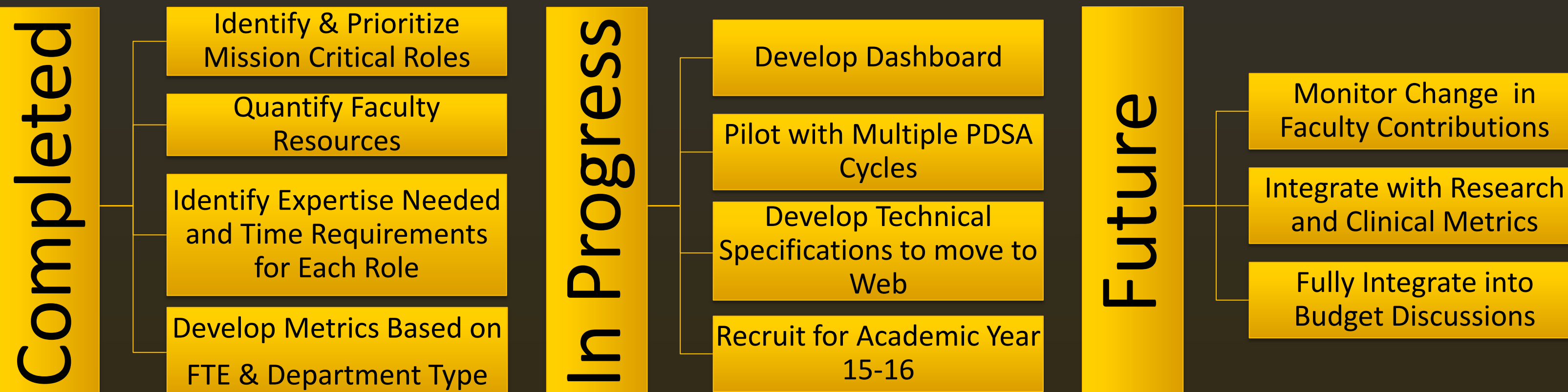
IMPACT

- Chairs gained an enhanced understanding of:
 - Mission critical roles including expertise and time requirements
 - Individual faculty members educational contributions
 - Areas “at risk” within their department
- Chairs actively engaged faculty to fill mission critical roles
- Leadership has accurate data to create an holistic representation of departmental contributions

NEXT STEPS

- Create a process to agree upon departmental FTE
- Create process to balance medical school teaching in departments with large undergraduate courses
- Create a process to seamlessly integrate into the annual budget cycle
- Determine impact of IAP in ability to recruit faculty to education mission

METHODS



OUTCOMES

Department Contributions for the Department of Sample Clinical Department
2013-2014

Sample Clinical Department: Core Clinical Department Summary

Role	Ask	Requested	Total Provided	# of Individuals	% Met
COMPASS Guides (year)	1 : 4 FTE	11.0	9	9	82%
IPC Facilitators (block)	1 : 3 FTE	14.7	5.5	8	38%
PBL Facilitators (block)	1 : 15 FTE	2.9	4	1	136%
CRE Part Graders (part)	1 : 10 FTE	4.4	4	4	91%
PCC-OSCE Graders (hour)	1 : 2 FTE	22.0	64.6	14	294%
Admissions Committee (year)	1 : 15 FTE	2.9	1		34%
Pre-Professional Scholars Committee (year)	1 : 30 FTE	1.5	0		0%
MSPE Committee (year)	1 per clerkship	1	1		100%
Advising Liaison (year)	7 FTE from Core Clinical Combined		1		
ASC Advisor (student)			9	9	
Clinical Advisor (student)			21	9	
CSP Committee (year)			1		
Interprofessional Small Group Facilitator (session)			9	3	
IPC Short Answer Grader (part)			2	1	
IPC Standardized Patient Grader (hour)			1.0	1	
ACE Preceptor (student/block)			35.7	17	

Department Specifics

2013-2014 Faculty: 44

Benchmarks

- indicates contributions are not sufficient for a class size of 104
- indicates contributions sufficient for a class size of 104
- indicates contributions sufficient for a class size of 128

Department List

Core Clinical	Other Clinical	Basic Science
Child Health	Anesthesiology & Perioperative Medicine	Biochemistry
Family & Community Medicine	Dermatology	Health Management & Informatics
Internal Medicine	Emergency Medicine	Molecular Microbiology & Immunology
Neurology	Ophthalmology	Nutrition & Exercise Physiology
Obstetrics & Gynecology	Orthopaedic Surgery	Pathology & Anatomical Sciences
Psychiatry	Otolaryngology	Pharmacology & Physiology
Surgery	Physical Medicine & Rehabilitation Radiology	

* includes only SOM appointments

Department Contributions for the School of Medicine

2013-2014

Role	Core Clinical 290 FTE				Other Clinical 143 FTE				Basic Science 118 FTE				All Departments Combined		
	Requested	Total Provided	# of Individuals	% Met	Requested	Total Provided	# of Individuals	% Met	Requested	Total Provided	# of Individuals	% Met	Total SOM Requested	SOM Provided	ALL Provided
COMPASS Guides (year)	72.5	52		72%	35.8	4		11%		8			108.3	64.0	67.0
IPC Facilitators (block)	96.7	67.0	52	69%		3	2						96.7	70.0	71.0
PBL Facilitators (block)	19.3	20.0	15	103%	9.5	10	6	105%	118.0	62	39	53%	146.9	92.0	93.0
CRE Part Graders (part)	29.0	22	17	76%					23.6	23	9	97%	52.6	45.0	45.0
PCC-OSCE Graders (hour)	145.0	175.4	49	121%	35.8	17.5	8	49%					180.8	192.9	214.6
Admissions Committee (year)	19.3	10		52%	9.5	6		63%	7.9	5		64%	36.7	21.0	21.0

EVALUATION STRATEGY

Outcome	Metric
Project Management	Monthly Process Milestones
Reduce Variance in Contributions Among Departments	# Departments Meeting Expectations
Increased Faculty Contributions	# Departments Meeting Expectations # Individuals Contributing to Expectations # Individuals by Academic Rank Contributing to Expectations
Usefulness; Increased Transparency	SOM leaders feedback • Individual meetings • Survey

COLLABORATORS AND MENTORS

Mentor: Patrice Delafontaine, M.D., Dean School of Medicine

Collaborators: Linda Headrick, M.D., Rachel Brown, M.D., Jack Gay, M.D., Kevin Kane, M.D., Steve Halenda, Ph.D., Carla Dyer, M.D., Mark Martin, Ph.D., Celso Velasquez, M.D.

ANTICIPATED ORGANIZATIONAL IMPACT

- Increased Faculty Participation
- Decreased Variability Among Departmental Contributions
- Transparency
- Integrated Holistic Representation of SOM Faculty Contributions
- Academic Promotion/Retention.