ENGAGING TRAINEES IN QUALITY, SAFETY AND COST REDUCTION: Role of A Resident and Fellow Incentive Plan at UCSF

Disclosure: No conflict of interest

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It takes a village…

- CEO: Mark Laret
- CMOs: Josh Adler & Adrienne Green
- Hospital Finance: Herodia Allen
- GME faculty: Arpana Vidyarthi, Glenn Rosenbluth
- GME staff: Paul Day & Amy Day
- Program directors, GMEC, and faculty mentors
- Hospital and departmental QI faculty and staff
- Residents and clinical fellows
UCSF GME

- 80 Accredited Programs
- 50 Non-standard Programs
- 1365 residents and clinical fellows
- UCSF School of Medicine is Sponsoring Institution
- DIO reports to the Dean
- Three major affiliates: UCSF Medical Center (AMC), SFGH (County), SFVAMC (VA)
- GME Office funded by School of Medicine (but with contributions from UCSF Medical Center)
Medical Education and the New Public Interest

- Train future physicians to continually improve the delivery of care to realize its fullest potential benefit to the health and well-being of the population.

  Berwick DM. Academic Medicine, 2010

- Residents and fellows (and students, too) can and should be “part of the solution” to improve health care value.
BUILDING A RESIDENT AND FELLOW QUALITY AND SAFETY PROGRAM

Operational goals
Front line provider

Educational goals:
the trainee

Hospital

GME Program

Residents and Fellows

Courtesy: Arpana Vidyarthi MD
BUILDING A RESIDENT AND FELLOW QUALITY AND SAFETY PROGRAM

Accountable leadership

Hospital

GME Program

Accountable Leadership

Operational goals
Front line provider

Residents Council
CR development program
Patient Care Fund
RCA Engagement
Formal Curricula
Incentive Program

Residents and Fellows

Educational goals: the trainee

Courtesy: Arpana Vidyarthi MD
Pay for performance has become widespread: CMS, VA, private insurers, independent physicians associations, hospital systems, etc

At UCSF Medical Center: longstanding incentive program for all staff, all leadership

- Link everyone to organizational mission, vision, values, and goals
- Excluded physicians

Incentives for trainees? At first, resistance from both Program Directors and CMO
Program begun in mid year, 2007. Several key measures were well below goals.

Engage housestaff in the organizational mission, values, and goals, motivate improvement in quality/safety/satisfaction/cost, and teach systems-based practice and practice-based learning and improvement.

$1200 per trainee; “all for one”

Total budget $1.2 million per year
Three all-trainee goals each year:

- Patient satisfaction (2007- current year)
- Quality and Safety
  - Core measures 2007
  - Pain control (2007 - 2009)
  - Hand hygiene (2009 - current)
- Operations/Utilization
  - Reduce unnecessary lab tests (2009 – current)
Patient Satisfaction 2010-2011

Patient Satisfaction: For the period of June 2010 –July 2011, on the patient satisfaction survey likelihood of recommending question, maintain an annual average mean score of 90.5.
Patient Safety and Quality: For the period of July 2010 – June 2011, achieve 85% hand hygiene compliance for at least six of twelve months.
Resident and Fellow Incentive Goals: Resident Leadership

- Angela Walker MD
  - Pediatric-Dermatology Resident
  - Co-chair, Resident and Fellow Council
- Devoted vacation week October 2011 to hand hygiene
  - Met with fellow residents and chief residents
  - Spoke at Grand Rounds
  - Rounded with ward teams from multiple specialties
  - Handed out cards, “Good Job, Hand-hygiene Card” eligible for raffle prizes
  - Set up and staffed table in patient entrance to inform patients about hand hygiene
UHC Comparison Data

UCSF Ranked #1 in Tests Used per Patient Discharged
Lab Utilization: By June 2010, UCSF Medical Center will decrease its average CBC and CBC plus differential volume by 5% (1.05 to 0.99 tests/patient/day).
Lab Utilization: By June 2011, decrease by 5% the utilization of common laboratory tests (tests/inpatient day). CBC, CBC with diff, electrolytes (Na, K, Cl, CO2, HCO3, Mg, Ca, Phos), BUN, Cr, AST, ALT, total bilirubin, alkaline phosphatase, and albumin.
PROGRAM-SPECIFIC INCENTIVES

- Training programs invited to propose program-specific goals
- Requires resident champion(s), program director, departmental physician QI director
- Proposals evaluated by committee of Medical Center and GME leadership, QI leadership, Resident and Fellow Council, Program Directors.
- Iterative process
Program-Specific Incentives: 09-10

- Anesthesia (Achieved)
  - Goal: Antibiotics within one hour of incision

- Dermatology (Achieved)
  - Goal: Decrease wait time in clinic by 25%

- Emergency Medicine (Not Achieved)
  - Goal: Contact 50% of PCPs at discharge

- Internal Medicine (Achieved)
  - Goal: Contact 80% of PCPs at discharge
Neurology (Achieved)
- Goal: Document swallow exam in 90% of stroke patients

Neurological Surgery (Achieved)
- Goal: Increase “on time” OR start for 95% of cases

Ob-Gyn (Achieved)
- Goal: Decrease wait from presentation to induction

Pediatrics (Achieved)
- Goal: Complete asthma care plan on 90% asthma inpatients

Radiology (Achieved)
- Goal: Report critical results in 95% of eligible cases
Program-Specific Incentives: 10-11

- Anatomic Pathology (Achieved)
  - Goal: Decrease incorrectly submitted specimens
- Anesthesia (Achieved)
  - Goal: ICU transfer note
- Dermatology (Achieved)
  - Goal: Appropriate Medication monitoring
- Emergency Medicine (Achieved)
  - Goal: Smoking cessation in Emergency Department
- Internal Medicine (Achieved)
  - Goal: Same day electronic discharge summary
- Internal Medicine Subspecialty Fellowships (Not achieved)
  - Goal: Improve consultation notes
Neurology (Not achieved)
- Goal: Increase primary care provider communication

Ob-Gyn (Not achieved)
- Goal: Decrease wait from presentation to induction

Otolaryngology (Achieved)
- Goal: Patient satisfaction on “time spent with patients.”

Pediatrics (Achieved)
- Goal: Immunization status documented

Radiation Oncology (Achieved)
- Goal: Use of correct ICD-9 codes

Urology (Achieved)
- Goal: Reduce use of CBC by 15%
PROGRAM-SPECIFIC INCENTIVES: 11-12

- Anesthesia
  - Goal: Increase completion rate of ICU Transfer Notes
- Dermatology
  - Goal: Improve timely communication of biopsy results
- Department of Medicine Fellows
  - Goal: Improve Consult Notes
- Emergency Medicine
  - Goal: Decrease room to exam time for patients
- Internal Medicine
  - Goal: Increase completion of Advance Care Planning Notes
- Lab Medicine
  - Goal: Improve handoffs of clinical cases
PROGRAM-SPECIFIC INCENTIVES: 11-12

- Neurology
  - Goal: Decrease duration of nicardipine use
- Neurosurgery
  - Goal: Reduce lab test utilization
- OB/Gyn
  - Goal: Ensure compliance with antibiotic administration
- Ophthalmology
  - Goal: Document eye dilation in inpatients
- Otolaryngology
  - Goal: Schedule post-op appointments prior to discharge
- Pathology
  - Goal: Implement standard handoff procedure
PROGRAM-SPECIFIC INCENTIVES: 11-12

- Pediatrics
  - Goal: Increase primary care provider communication

- Radiation Oncology
  - Goal: Increase documentation of correct ICD-9 code

- Radiology
  - Goal: Attestation of radiation dosages in CT reports

- Urology
  - Goal: Increase appropriate lab testing for patients with kidney stones
B USINESS CASE FOR INCENTIVE PROGRAM: 
Program Costs

- Incentive payments
  - $1.2 million/year budgeted
  - 67% spent (10 out of 15 all-trainee goals achieved)

- Administrative time
  - GME and Medical Center leadership
  - Incentive committee
  - Program Directors and Departmental QI directors
  - Residents and fellows
BUSINESS CASE FOR INCENTIVE PROGRAM:
Program Benefits: Quantitative

- Cost avoidance
  - Costs to meet core measure compliance, other quality and safety mandates

- Cost savings
  - Increased efficiency (e.g. on-time OR starts)
  - Increased effectiveness (e.g. decreased readmission via PCP communication, reduced unnecessary lab tests)

- Revenue Generation
  - Potential for increase market share (e.g. patient satisfaction)
BUSINESS CASE FOR INCENTIVE PROGRAM:
Benefits: Qualitative

- Alignment of missions within institution and in clinical departments
- QI measures (e.g. improved metrics in mandated areas)
- Enhanced reputation (e.g. UHC ranking, other publically reported quality measures, improved patient experience)
- Educational (e.g. enhanced competence in practice-based learning and improvement and system-based practice)
EDUCATIONAL OUTCOMES:
Structured Interviews with Resident Champions

Learning fell into three categories:

- **System change**
  - Role of system in performance improvement
  - Realization of difficulty of implementation
  - How to leverage existing structures

- **Measurement**
  - Residents consistently had challenges with measurement

- **Teamwork and leadership**
  - Need to clarify team and leadership
  - Leadership styles: top down to consensus driven
  - Improved teamwork and camaraderie
“It seems obvious in the abstract, but the actual doing and measuring is hard to figure out. I learned about systems which I previously never thought about.”

“I think that it has been a fantastic learning experience, really about how to build consensus. These connections that were made will have many far reaching effects not just on the incentive (goal).”

“Residents feel like this is their project, and they aren’t even complaining about it. They feel like they can make a difference.”

“The incentive goal program was such a huge part of my residency educational experience. Being part of designing a program-within-a-program was so valuable and empowering. It came up in every job interview I had -- I think it really stood out to my interviewers as unique and important (and to me, too)!”
Clinical and educational goals can be fully aligned. Learners can be “part of the solution.”

Learning quality and safety and cost reduction requires experiential learning as part of a structured program.

Explicit curricular time must be created out of trainee schedules; need faculty development.

Trainee incentives are likely to be a good return on investment.
Keeping an “E” in GME