NEW IDEAS

Changing Spaces and Learning Environments to Improve Inpatient Interprofessional Education for Internal Medicine Residents

Setting and Problem

Internal medicine (IM) residents must demonstrate achievement of milestones in interprofessional (IP) and teamwork skills. Much of IM residency is spent in the hospital where daily IP collaboration is essential to patient care and safety. At the University of California, San Francisco (UCSF), chances for interprofessional education are often restricted to short, standardized IP meetings and sporadic informal interactions. This limits the opportunity for residents to develop and demonstrate IP and teamwork skills.

Intervention

UCSF clinician educators partnered with IP staff at the San Francisco Veterans Affairs Medical Center (SFVAMC) to design the inpatient Interprofessional Patient Aligned Care Team (iPACT) to provide work-based interprofessional education for IM residents. iPACT changed the traditional IM inpatient team model in 2 significant ways. There is a designated space for IP team members to work and learn together, and iPACT relies on nonphysician team members to establish and maintain a safe learning environment. An existing workroom on an inpatient wing was repurposed as the iPACT workroom with personal carrels and computers for iPACT members. Weekday morning huddles allow teams to formally discuss patient care. Team members are expected to work in the team room throughout the day. A large white board in the team room allows for clear written communications to all team members in a central place.

A social worker, pharmacist, and nurse case coordinator previously assigned to the team became the *core members* of iPACT, and were empowered and designated to set and maintain a safe team learning environment. The *core team* underwent extensive team building with an expert facilitator prior to iPACT's launch. Core members orient rotating team members to iPACT, invite other team members' knowledge and expertise, and volunteer their own knowledge and expertise. Core members deliberately debrief good and bad unintended outcomes on iPACT with individuals and the whole team in a nonthreatening, supportive way that is intended to assist the team in providing better patient care.

A grant funded the initial development of the iPACT model and core team. iPACT implementation did not require additional staff hires and did not disrupt the team's call schedule or participation in other program activities such as morning report or noon conference.

Outcomes to Date

iPACT became the team model for 1 inpatient IM team in July 2014 at the SFVAMC and expanded to an additional inpatient team in March 2016. The original iPACT continues today with its initial core members. To date, 69 interns and 43 residents have rotated through the iPACT model, with 5 trainees participating in iPACT both as interns and residents. Our evaluation of iPACT focused on resident learners' acceptance of iPACT and its IP educational impact.

An initial program evaluation survey to all 34 interns and residents from the first year had a 68% response rate (n = 23). A total of 70% of respondents (n = 16) preferred iPACT over non-iPACT inpatient IM teams at the SFVAMC. A total of 30% of respondents (n = 7) declined to answer which team model they preferred; however, 91% of respondents (n = 21) *strongly agreed* or *agreed* iPACT should be the inpatient team model for all IM teams at the SFVAMC. Written feedback indicated the iPACT workroom and colocation cultivated in-depth learning of IP team members' roles and expertise and better communication and collaboration with IP team members for patient care and safety.

iPACT observations showed iPACT members from all professions consistently seeking each other's expertise on systems, patient care, and knowledge throughout the day. In 1-on-1 interviews with residents and faculty, interviewees unanimously highlighted the importance of the iPACT workroom in eliminating IP communication barriers and credited the core team with fostering the unique learning and working environment of iPACT.

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NEW IDEAS

Teaching Nutrition in Graduate Medical Education: An Interactive Workshop

Setting and Problem

Nutrition counseling plays a critical role in disease prevention. However, nutrition education is not standardized or emphasized in medical schools across the country. This trend often continues during internal medicine residency, leaving trained physicians without the knowledge to confidently counsel their patients about nutrition and diet. Our project examines effective and interactive ways to educate resident physicians about nutrition and counseling within a community-based internal medicine residency program. Due to curricular and scheduling constraints, we focused on developing an integrated nutrition educational session for residency education.

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Intervention

A hands-on, experiential, 2-hour nutrition workshop was developed by a resident and faculty endocrinologist for the internal medicine residency at Kaiser Permanente Oakland Medical Center. The session included slide presentations interwoven with video clips, group activities, food-sorting contests, and a hands-on "dessert challenge" to provide nutrition education in an interactive and fun learning environment. Experiential learning techniques and learning through games, videos, mini-lectures (series of 5-minute teaching slides), and publicly available provider/patient resources were utilized. Learner feedback was obtained for future workshop planning.

A slide presentation was used to introduce topics, nutrition concepts, and activities, including basic teaching on energy balance, macronutrients, caloric equivalents, and glycemic index, interwoven with demonstration of patient resources (US Department of Agriculture: www.choosemyplate.gov and www.supertracker.usda.gov) and counseling tips such as the 5/20 Rule, which identifies foods as a poor ($\leq$ 5% of daily value) or good ($\geq$ 20% of daily value) source of a particular nutrient. Family guide materials from the National Heart, Lung, and Blood Institute *We Can!* program were distributed for use as provider/patient educational resources (TABLE).

Three 5-minute YouTube videos provided additional multimedia-based learning (TABLE). The first video highlighted the dearth of nutrition education in medical training. The second video was an entertaining segment from the US Food and Drug Administration (FDA), "The Food Label and You" series, showing a party competition highlighting common pitfalls in food choices. The third video was a news clip that showed a residency alumnus discussing the 2016 FDA-approved food label changes.

Interactive group activities included food-sorting games (by carbohydrate, fat, and sodium content) and a meal-planning exercise with caloric and carbohydrate restriction. The workshop culminated with a hands-on creative dessert challenge for 6 participant teams challenged to create a tasty dessert with specific macronutrient restriction, fashioned after a popular network cooking show, with 3 surprise required ingredients (graham crackers, bananas, and chocolate