NEW IDEAS

"Teaching Tokens" to Enhance Residents-as-Teachers Curriculum: Pilot Intervention to Improve Clinical Efficiency

Setting and Problem

Residents play an important role in the clinical education of medical students, and residents teaching in the ambulatory setting face unique challenges to sustain clinical quality and efficiency. Residents-as-Teachers (RAT) programs have emerged to support residents in their education role(s), but the programs are increasingly at risk as residents' curricular time is

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allocated to other programmatic requirements. To prepare residents to teach in the ambulatory setting, we developed a "just-in-time" approach that stimulates workplace-based training of teachers.

Intervention

Teaching tokens provide just-in-time learning focused on efficient teaching behaviors to enhance the ambulatory educational experience. Tokens are optional paper reminders jointly selected by students and their resident preceptors to stimulate resident teaching. Each token identifies a specific focus followed by specific teaching behaviors to support that focus, with an extra line for resident/student co-generated strategies (FIGURE).

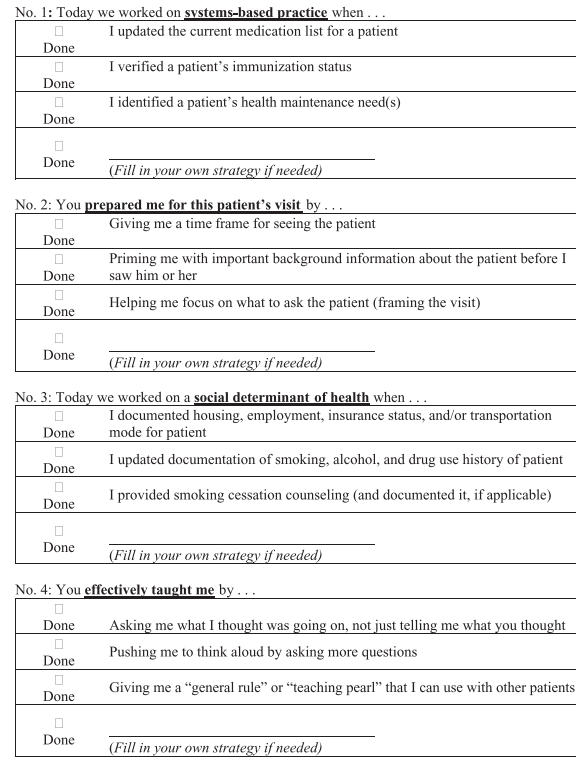
Token teaching behaviors were derived from a literature review of ambulatory precepting strategies. Initially, tokens focused on strategies that promote meaningful student contributions to patient care and support teachers' clinical efficiency while aligning with student and resident competencies. These strategies included (1) priming learners and framing the patient visit; (2) incorporating students into systems-based practice; (3) using effective microteaching techniques (eg, the "One-Minute Preceptor"); and (4) integrating the consideration of social determinants of health into teaching and care.

Prior to introducing teaching tokens into the RAT curriculum, we piloted the intervention with ambulatory preceptors (n = 9) and their assigned medical students at 3 teaching sites affiliated with the Medical College of Wisconsin. Preceptors and students were oriented to the purpose and process of the tokens, and they were asked to use tokens for at least 1 clinic session. Based on feedback from this pilot, we refined the token content, determined an optimal strategy for token distribution, and designed an orientation for implementation within the Waukesha Family Medicine Residency Program.

The teaching token orientation was then incorporated into an existing RAT workshop for postgraduate year 1 through 3 residents. During this 20-minute session, residents received a brief presentation on the teaching tokens, including the background, purpose, and process for use in an ambulatory clinic. Residents divided into dyads and triads to practice using the tokens. At the session's end, residents completed a brief quiz regarding the tokens' purpose, content, and process. To assess residents' understanding, we also had each resident generate at least 1 new teaching token.

Outcomes to Date

Incorporating teaching tokens into a RAT curriculum required minimal time investment, and the tokens have been positively received by the residents. Quiz results from our orientation revealed all attendees correctly identified at least 1 of the 3 tokens' primary purposes, with 73% correctly identifying two. More than 90% of residents correctly identified the process for token distribution. Resident-generated token ideas focused on (1) direct observation of clinical skills; (2) students' chart documentation responsibilities; and (3) shared goal setting for the clinic session.


No. 1: Today we worked on **systems-based practice** when . . .

☐ Done	I updated the current medication list for a patient
☐ Done	I verified a patient's immunization status
☐ Done	I identified a patient's health maintenance need(s)
☐ Done	_____ (*Fill in your own strategy if needed*)

No. 2: You **prepared me for this patient's visit** by . . .

☐ Done	Giving me a time frame for seeing the patient
☐ Done	Priming me with important background information about the patient before I saw him or her
☐ Done	Helping me focus on what to ask the patient (framing the visit)
☐ Done	_____ (*Fill in your own strategy if needed*)

No. 3: Today we worked on a **social determinant of health** when . . .

☐ Done	I documented housing, employment, insurance status, and/or transportation mode for patient
☐ Done	I updated documentation of smoking, alcohol, and drug use history of patient
☐ Done	I provided smoking cessation counseling (and documented it, if applicable)
☐ Done	_____ (*Fill in your own strategy if needed*)

No. 4: You **effectively taught me** by . . .

☐ Done	Asking me what I thought was going on, not just telling me what you thought
☐ Done	Pushing me to think aloud by asking more questions
☐ Done	Giving me a "general rule" or "teaching pearl" that I can use with other patients
☐ Done	_____ (*Fill in your own strategy if needed*)

FIGURE
Teaching Token Examples

Since implementation of the teaching tokens, residents have provided highly positive feedback, noting that tokens prompt more clinical teaching. Residents have requested additional tokens to broaden their teaching strategies. We anticipate several next steps related to token expansion and evaluation. New tokens have been generated and distributed based on residents' suggestions. The token approach is being implemented in other primary care resident teaching clinics. Comparative pre-post analysis of students' ratings of residents on existing evaluation forms will provide data regarding teaching proficiency. We plan to assess how teaching tokens affect residents' enjoyment and confidence in teaching.

The teaching token approach is a brief intervention that engages residents as teachers with just-in-time literature-based teaching strategies. Preliminary findings reveal that residents value this approach and adopt these strategies for more efficient teaching. While our

intervention was targeted to resident teaching in primary care ambulatory clinics, tokens may be an effective means to improve feedback to resident teachers and enhance clinical efficiency across multiple settings.

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