

RESEARCH SPEED DATING: RESEARCH QUESTION DEVELOPMENT FOR PRIMARY CARE PHYSICIANS

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INTRODUCTION

The ability to develop strong research questions is vital for physicians practicing evidence-based medicine. Traditional methods of teaching this abstract skill often fail to engage learners. Gamification, the incorporation of game elements into education, effectively enhances participation and reduces anxiety in complex tasks.^{1,2} We developed Research Speed Dating (RSD), a gamified activity designed to teach primary care providers—medical students, residents, fellows, and faculty—to formulate effective research questions. Our goal was to foster immediate engagement, creativity, and fun with a topic in which clinician engagement is challenging.

ACTIVITY STRUCTURE

Participants are divided into teams of two to five members. Facilitators prepare three decks of index cards labeled “Population,” “Objective,” and “Setting” (Table 1). Each team randomly selects one card from each deck and collaboratively formulates a research question. After 3–5 minutes, teams share their questions and receive facilitator feedback emphasizing creativity and feasibility (Figure 1).

Initially challenging or seemingly incompatible combinations are encouraged rather than redrawn, fostering creativity and critical thinking.

TABLE 1. Examples of Research Speed Dating Prompts

Population	Objective	Setting
<ul style="list-style-type: none">• Female patients• Patients with chronic pain• Immunocompromised patients• Patients with trauma• Geriatric patients	<ul style="list-style-type: none">• To reduce medical errors• To optimize care coordination• To improve antibiotic stewardships• To increase provider education• To reduce health disparities	<ul style="list-style-type: none">• Simulation center• Telemedicine• Home health• Rural health clinic• Emergency department

VARIATIONS OF THE ACTIVITY

RSD IS HIGHLY ADAPTABLE:

Team Structure Variations

- Limit groups to pairs for intensive collaboration
- Rotate group members between rounds to broaden interactions

Content Variations

- Add a fourth deck for study designs (eg, randomized controlled trials, qualitative methods)
- Organize cards using the PICO(T) framework³
- Focus prompts on themes such as chronic disease management and health disparities

Process Enhancements

- Incorporate a peer review step for teams to critique and refine one another's questions

CONCLUSION

RSD transforms the daunting task of developing research questions into an engaging learning experience. RSD enables faculty to approach research with more focused questions and to see direct research projects emerge from the activity. Adaptable and easy to implement, it promotes collaboration, creativity, and practical problem-solving.

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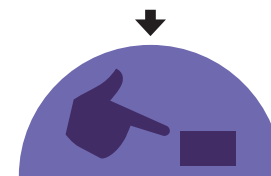
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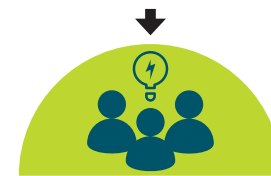
FIGURE 1.
Research Speed Dating Steps



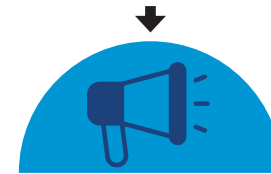
Teams
Divide participants
into teams



Draw
Draw one card from
each category



Brainstorm
Discuss team ideas
for 3-5 minutes



Share
Write ideas down and
take turns sharing