

# Build-A-Care Workshop: A Novel Gamification of Health Systems Concepts in the Instruction of Trainees in Global Models of Care



David Geffen  
School of Medicine

Kenneth Kim<sup>1</sup>, Samuel Lewis<sup>1</sup>, Vivek Shah<sup>1</sup>

<sup>1</sup>David Geffen School of Medicine at UCLA

## Background

Both here at DGSOM and in medical schools across the nation, **Health Policy and Systems** knowledge has been identified by many students and educators alike as **integral to the understanding and practice of medicine** in the 21<sup>st</sup> century. Despite its importance, however, many medical schools including DGSOM still have yet to integrate a robust and engaging curriculum in health systems and policy. The medical education literature has for many years favored the **“flipped classroom”** model, and so the authors sought to develop a **“game-like” exercise** to teach the concepts of **global and comparative models of health care delivery** as one component in a potential robust health systems and policy curriculum.

## Methods

The authors devised an exercise that divided students into small groups and had these groups design an “ideal” health care delivery system based on a set of rules as noted.

To pilot this exercise, 8 first- and second-year medical students were invited to participate in a trial run. After the trial run, qualitative feedback was solicited and integrated into the plan for any future pilot or established curriculum activities.

<b>Coverage</b>	5 (generous)	4	3	2	1
<b>Equity</b>	5 (equitable)	4	3	2	1
<b>Cost</b>	5 (frugal)	4	3	2	1
<b>Efficiency</b>	5 (efficient)	4	3	2	1

Fig. 2 Designed health system scoring characteristics

## Rules of the Game

- Teams of **4-6 learners**
- Team discussion to **“build their own healthcare system,”** focusing on the parameters listed in Fig. 1 (~30min)
  - **Near peer tutors** provide guidance if learners are confused by vocabulary or concepts
- Each team **presents** their devised system to the other groups and a panel of “expert” moderators (~10min)
  - A portion of this presentation time should be allocated for moderators to challenge the team members with questions
- After all teams present, the moderators assign a **score** based on characteristics of the system outlined in Fig. 2 and designate a “winner”

Key Parameters			
<b>Revenue Source</b>	<b>Direct Pay</b> Consumers pay directly to insurance plans	<b>Selective Taxes</b> All consumers pay differing amounts	<b>General Taxes</b> All consumers pay the same amount
<b>Reimbursement Allocation</b>	<b>For-profit private</b> Private companies decide how services are covered	<b>Non-profit private</b> Plans can be managed privately, but only w/ limited profit	<b>Government funded</b> Government decides which services are covered
	+/- public option	+/- public option	
<b>Care Delivery</b>	<b>Private</b> Private providers provide the care		<b>Government Delivered</b> Providers are employed by the government
<b>Payment Structure</b>	<b>Fee For Service</b> Each service paid at a set fee	<b>Bundled</b> Specific services are “bundled” together	<b>Capitation</b> Each patient gets a set payment for all their needs
<b>Cost Sharing</b>	<b>High</b>	<b>Low</b>	<b>None</b>
<b>Benefits Covered</b>	<b>Catastrophic</b> Only the most expensive care is covered (e.g. hospitalizations)	<b>All Medical Care</b> Doctors, hospitals, diagnostics	<b>Everything Related to Health</b> Medical care, Drugs, Dental, Social Determinants of Health

Fig. 1 Suggested designed health system parameters. Of note, individual groups did not discuss all parameters and prioritized which conversations were most engaging based on their interest and prior expertise

## Results

- **Little quantitative information** was able to be obtained due to the small scale and nature of the pilot exercise
- The exercise was met with **positive qualitative feedback** from participants
- Many felt that the **gamification and team-based nature** of the exercise was helpful in both teaching health policy concepts and making them more **accessible** to new learners
- Feedback also included the importance of **“tutors” or “guides”** to help groups understand concepts during the exercise and a **comprehensive debrief** afterwards

## Discussion

While this **pilot project** was limited in its small scale and in that it was not a scientifically rigorous study, the authors feel that the exercise devised (or one with similar parameters and timeframes) would work extremely well if implemented in a group of medical trainees, even in **policy-naïve learners**. By participating in this exercise, learners will begin to appreciate not only the variety seen in global models of care, but also the complexities and tradeoffs involved with each component of the health care system.

They feel this exercise would work best in combination with **easily-digestible pre-readings** and a comprehensive **debriefing lecture** that would show how models of care in other countries might compare to those devised by the groups in the exercise.

The authors would be excited to **work with medical student and resident educators** in implementing a larger-scale pilot project within a medical school or resident conference curriculum along with more rigorous data collection to evaluate the efficacy of such an exercise.

We hope this exercise is a strong initial step in the development and integration of robust and engaging curricula in health systems and policy in medical schools and residency programs throughout the nation.