

professional development of a small group of physicians, with intended benefits for patient care and population health in a nation with a fragile health care system.

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Using Gamification to Understand Accreditation in Postgraduate Medical Education

Setting and Problem

Accreditation of postgraduate medical education (PGME) exists in a number of nations and requires a thorough understanding of the inherent concepts for optimal use. Ideally, accreditation entails assessment of programs against standards to benefit stakeholders, such as patients, learners, or the public. This establishes it as a social construct. Defining the elements of PGME accreditation from an international perspective is a daunting challenge, given that local context and considerations vary. The components of this complex construct can be understood effectively with “gamification.” Gamification has been beneficial in other educational areas to clarify concepts and enhance comprehension.¹ Here we offer an

accreditation consensus game to guide groups of stakeholders in international settings through the relevant questions and answering these questions through a range of strategic options.² Our gamification approach illuminates accreditation in PGME from an international perspective and highlights its social attributes.

Educational gaming in health professionals education is an emerging teaching methodology that promotes active learning environments where participants engage in activity and reflect on that activity, abstract useful insights from the analysis, and put the results to work.³ A recent systematic review found gamification often is more effective than other approaches.⁴ Participants learn from their own actions and benefit from interactions with others and the discussions that follow.⁵ Games facilitate experiences which become resources for learning. The game in this article is designed to promote critical thinking and reflection on the complex social construct of accreditation in a fun and exciting way, which in turn may increase retention. Our gamification approach builds on and adapts the framework constructed from a previous study of Dutch accreditation development (TABLE).²

Intervention

Participants are assigned to small groups and are tasked with constructing their ideal accreditation system by discussing the options presented as playing cards for each of the why, what, how, and who elements of the framework, and reaching consensus about the most appropriate option(s), while taking into account their local context and stakeholders’ perspectives. Variations of the game include playing from the perspective of different stakeholder groups (eg, administrators, clinical teachers, patients, and others) and contrasting the outcomes.

The accreditation game and the instructions to play are available as online supplemental material.

Outcomes to Date

Our aim was to use gamification to enhance insight into relevant concepts of PGME accreditation and in turn enhance the applicability and adaptability of accreditation concepts to different international contexts and stakeholder perspectives. Comparisons of the strategies that come from these different contexts and perspectives could result in new knowledge about enduring concepts across different national contexts and relevant attributes for a given situation. For example, participants from recently developed PGME education systems were most interested in quality assurance philosophies, while

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TABLE

Accreditation Strategy Framework

Framework	Statements To Discuss in the Game	No. of Statement(s) Chosen in Game
Why: Mission		
Quality of training	Training is the primary focus and the foundation for good (future) health care. Sometimes this leads to compromises with current patient care.	1
Quality of health care	Health care is the primary focus. Training programs are subordinate to patient care; care must not be compromised by training.	
Accountability	The main task is protecting public interests. The accreditation authority is accountable to society, and the public must be convinced about the quality of training. Transparency, independence, and impartiality are prerequisites.	
How: Vision		
Quality assurance	Quality assurance is the duty of an accreditation authority. The main task is developing minimum standards and checking compliance of training programs. If minimum quality is shown, the training program is to be accredited.	1
Quality improvement	Quality improvement is the focus of the accreditation authority. The training program must demonstrate continuous quality improvement. Checking compliance to minimum standards is not routine anymore.	
Quality control	Quality control is the duty of the accreditation authority. The emphasis is on outcomes. The training program must show data about residents' and graduates' performance. The accreditation authority is not engaged in the process of training.	
How: Strategy		
Standardization	The standards assure minimum quality of training for every resident and a minimum quality of care for every patient. Deviation from standards is not allowed.	1
Self-regulation	Training sites use internal quality systems for self-regulated quality management. The accreditation authority remains at a distance as long as trust seems justified.	
How: Main approach of the accreditation authority		
High trust	A high trust attitude is based on trust and flexibility, leading to intrinsically motivated medical professionals.	2
Justified measures	To prevent incidents, it is essential to monitor the programs with rigor, and take measures when they show noncompliance to standards.	
Innovation	One of the most important tasks as accreditor is to monitor changes and innovations in medical education and health care. These should be implemented with the help of standards in order to initiate and stimulate innovations effectively.	
Collegial advice	Sharing ideas as colleagues and peers for the governance and processes of training is the main approach during the accreditation process.	
What: Postgraduate medical education quality domains		
Quality of education	The focus of standards is the curriculum, structure, and content of training.	2
Residency performance	The focus is on intermediate outcomes during training (eg, assessing the progress of the residents).	
Graduates' performance	The focus is on graduate outcomes.	
Workforce planning	The right mix of medical specialists with the right skills for the community's future needs should be trained. The content and structure of medical specialty training programs must mainly consider health workforce requirements.	

TABLE

Accreditation Strategy Framework (continued)

Framework	Statements To Discuss in the Game	No. of Statement(s) Chosen in Game
Who: Role of key stakeholders		
Residents	Residents are responsible for their quality of training. Residents must engage in the governance and review of the program. Residents must make use of the opportunities given.	3
Program directors and clinical educators	Program directors are leaders and change agents. All supervisors are subject to faculty development. Teaching skills are essential for training.	
Interprofessional education team	Health care is a team effort. Training of health care professionals also is a team effort and accreditation has to be interprofessional as well. Accreditation of the medical specialist silo alone is an outdated approach.	
Accredited training program	Depending on the context this could be a training program accredited at the national, regional, or local level (eg, specialty college, university, or training site). Their role is to organize and facilitate good quality training.	
Community/public input	The public as our client should be engaged in the governance and review of training programs. The needs and demands of the society are continually changing. Training programs should adapt to changing societal needs.	
Government/ministry	The government or ministry has oversight in health care and education and must be involved in the workforce planning, structure, and evaluation of the programs.	
When		
Episodic evaluation	The accreditation process takes place in a regular, repetitive cycle (eg, 5 to 10 years) with an emphasis on the point-in-time evaluation.	1
Continuous evaluation	The monitoring of programs by the accreditation authority is a continuous and rigorous process.	
Risk-based evaluation	Resources needed for the expensive accreditation process are compelling. Only programs at risk based on screening data should be prioritized for the rigorous evaluation.	

stakeholders from more mature systems desired continuous quality improvement, customization, and variation for the sake of excellence.

The game was specifically designed to ensure participants make difficult choices in selecting the best or most optimal statements based on their ideal accreditation system (ie, there were fewer card places in the game than statement choices available). In multiple evaluations after tryouts of the game in several countries, we saw that this approach was well-liked and useful. We believe that this game increases insight that accreditation systems are based on choices among a range of strategic options, and sparks reflection on how these concepts would apply to local systems.

The application of this accreditation game is not limited to PGME; with a few alterations it could also be useful for accreditation of medical schools or other health professionals' education. In addition, educational games could be helpful in promoting accreditation.

In many cases educational games involve a competitive activity,⁶ whereas in our accreditation game we encourage participants to build their ideal system and compare its qualities with the existing system in a collaborative manner. Future research needs to be conducted regarding the effectiveness of the game in learning retention and this approach for understanding other complex constructs in PGME.

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