Design and Work Plan for Establishing a Standardized Patient (SP) Program at King Abdul-Aziz University: A "How to" Guide

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Abstract

One of the main objectives for establishing a Clinical Skills Center in King Abdul Aziz University Hospital (KAUH) is to teach and train students and faculty members in the field of medicine to contribute to high quality health care service. The basis for establishing the Standardized Patient (SP) Based Instruction and Assessment Programs arises from:

1- Strategic Goals number (2), (7), (8), (10) and (11) set by the university.
2- Educational reform with reversion to the SPICES Model Curriculum.
3- The growing demand of innovative instruction and evaluation methods appropriate for delivering the new curriculum.
4- The mandate to develop competencies in terms of knowledge, skills and attitude, to smoothly and appropriately deliver the new curriculum.

Situation: The current status reveals that the Clinical Skill Center does not possess the facilities and manpower to initiate and implement the Standardized Patients Program (SP) in both teaching and testing strategies, and yet there is a great need to initiate and develop a Standardized Patient Based Instruction and Assessment Programs to be used in enhancing students, and faculty members, communication skills and examination skills.

Vision: Establishing a program for faculty members in KAUH and other health professions institutions all over the Kingdom of Saudi Arabia; who can participate in the development of Standardized Patients (SP) Based Instruction and Assessment Programs.

Mission: The Clinical Skills Center is committed to design a program that fosters interactive encounters between students, faculty members and standardized patients that promote the development and assessment of examination, interpersonal and communication skills that are keys to successful practice.

Methodology: Standardized Patient (SP) Based Instruction and Assessment Program is planned to be established by October 2010. Upon the agreement between King Abdul Aziz University and Illinois University in Chicago Illinois, USA, the Medical Education Department organized a fellowship program to take place during the month October 2009 in the United States of America. A group of faculty members was trained in the Graham CPC in Illinois University. Five faculty members: Two from Obstetrics and Gynecology Department, one from Pediatric Department, one from the Radiology Department and one from the Medical education Department joined the fellowship program as the first task force group.

One Clinical Skills Center Technician was among the task force group. The SPs Fellowship Program at the GCPC provided the theoretical knowledge and practical skills faculty members needed in order to design and implement the Standardized Patient (SP) Based Instruction and Assessment programs in health professions education settings. This group is responsible to initiate, design and establish the SPs program. This group will also be responsible to recruit and train faculty members in the use and management of the SPs program in KAUH. This paper describes the steps necessary to implement an SP program at KAUH integrated within the undergraduate curriculum. The suggested facility, manpower, and operational phases were designed specifically for this purpose.

Key Words: SP – Program – King Abdul Aziz – Guide.

Introduction

STANDARDIZED Patients (SPs) are individuals trained to act as a real patient in order to simulate a set of symptoms or problems. They consistently simulate a specific medical condition or disease allowing all students to be exposed to the same experience during clinical examination or patient interviewing. For over twenty years, SP programs have been used as a valid, reliable and practical method of teaching and evaluating medical students in U.S.A. When properly trained, a SP can serve as a patient, teacher and evaluator, allowing medical students the opportunity to practice and receive feedback on specific skills related to patient interviewing and physical examinations.

The Clinical Skills Center in King Abdul Aziz University Hospital (KAUH) was established in 2009 to teach and train students and faculty members in the field of medicine to contribute to high
quality health care service, but lacked the capability of implementing an SP program.

This paper describes the steps necessary to implement an SP program at KAU integrated within the undergraduate curriculum. The suggested facility, manpower, and operational phases were designed specifically for this purpose.

**Material and Methods**

**Program goals and objectives:**
- To build a pool of SPs by recruiting and train candidates and to develop the database required for implementation of SP program within KAU.
- To develop and improve history examination and communication skills:
  - Taking medication history.
  - Obtaining a complete history.
  - Evaluating mental status.
- To enhance specialized communication skills:
  - Giving bad news to a patient or their family member.
  - Assessing behavioral risks.
- To enhance faculty development:
  - SPs can be used to improve clinical teaching skills. Faculty members can watch themselves and others on videotape as they grapple with the teaching problem at hand, and have a chance to practice and consolidate their new teaching skills.
  - Giving effective feedback.
  - Teaching efficiently in busy clinical settings.
  - Asking questions to improve clinical thinking.
- Construct student clerkship examinations.
  - Selected cases can construct an examination that matches the clerkship objectives. Cases might include customizable patient checklists and patient findings questionnaires (post-encounter stations to assess clinical reasoning based on the previous interaction). Clerkship Examinations in: Pediatrics, Obgyn, family medicine, nursing, pharmacy.
  - Objective Structured Clinical Examinations (OSCEs) in the same specialties. (An OSCE is composed of a series of brief standardized clinical encounters and post-encounter stations).
- Other long term goals:
  - Enhance communication and interpersonal skills of practicing clinicians.
  - To develop and improve physical examination skills.
  - Measure outcomes of skills training programs.
  - Train clinicians to select patients for clinical trials.
  - Train examiners for high stakes performance assessments.
  - Train administrators to deal with difficult situations.
  - Provide quality control assessments and feedback in clinics and physician offices.

**Program design:**

The program has been designed to fit in the curriculum of fourth year medical students during Clinical Skills module. The departments currently involved in this module are medicine, surgery, obstetrics and gynecology, and pediatrics. This is done by rotations of bed-side teaching. They concentrate on history taking, physical examination, and deferential diagnosis. They are assessed by the end of the module through inactive OSCE mocks, which is currently done using real patients and residents from the same departments. The use of real patients, a genuinely ill and possibly frightened individual, can have a negative impact on students learning at this stage. Also using a college or resident to simulate a patient lacks authenticity and safe environment for learning. The incorporation of professionally trained Standardized Patients SPs can create a safer learning environment for medical students through simulation scenarios, prior to experiencing the complexity of “real” patients.

The design of the current program allows interactive encounters between students, faculty members and standardized patients that promote the development and assessment of examination, interpersonal and communication skills that are keys to successful practice.

**Implementation plan:**

**Phase I:**

The initial phase started with a fellowship program at the Graham CPC in University of Illinois Chicago, USA during the month October 2009 to properly expose and train highly qualified members of staff from college of medicine at King Abdul Aziz University. The group members were chosen from different departments: Obstetrics and Gynecology, Pediatric, Radiology, Medical education Departments in addition to Clinical Skills Centers technician. The SP Fellowship Program at the GCPC provided the theoretical knowledge and practical skills faculty members needed to establish the Standardized Patient (SP) Based Ins-
duction and Assessment program in health professions education setting.

Specifications for the designated area, equipment required for running the program, and specialized SP software have been submitted and processed (out of the scope of this paper). The area has been designed that each room looks like a real exam room to allow as real as possible experience. They are equipped with computers, wall-mounted cameras and microphones for recording of the encounters. Outside these exam rooms, workstations have been placed in a common area for students and faculty to complete checklists, or evaluation the program.

An important aspect of this phase, was the development and translation of the SP manual, all policies and procedures, and job descriptions of all personnel who will be responsible for the SP program into Arabic language. That was necessary since the student-SP interactions are all going to be in Arabic.

**Phase II:**

This phase will start February 2011 with the recruitment of SPs. The aim is to develop a local pool of SPs and establish the database for the program. The initial number of SPs required at this stage is 20 to 25. These will have to cover a range of ages and features to be able to simulate several types of patients for the cases developed.

**Standardized patients should have the following minimum qualifications:**

- Demonstrate ability and willingness to work cooperatively with learners, other SP’s, faculty and staff.
- Demonstrate ability to be instructed by a SP Educator and portray these skills consistently.
- Demonstrate flexibility, reliability and punctuality with scheduling and assignments.
- Intelligence and good recall.
- Ability to follow directions.
- Commitment to the education of health professionals.
- Lack of biases towards the healthcare system.
- Ability to work with others in a respectful manner.
- Good communication and interpersonal skills.

They will be trained to simulate real cases from the curriculum (chest pain, difficulty in breathing, abdominal pain, etc ...) which represent some of the cases needed for clinical skills module for fourth year medical students and they will only be used for history taking. No physical examinations will be assessed at this stage.

Workshops and seminars have been prepared to be conducted shortly after that to KAU faculty and department chairs to introduce the concept of SP.

**Phase III:**

The average number of fourth year medical students at KAU is 250 male and 250 female students, a total of 500 students each year grouped by gender. Each group is taught separately during undergraduate years. Subjects or modules taught to female students during the first semester are then taught to male students during the second and vice versa.

The aim of this phase of the implementation plan is to allow a one hour encounter between a trained SP and each 4th year student (female/male) as part of their clinical skills module.

During the first 15 weeks of the fall semester (beginning Sep. 2011) 288 encounters can be conducted over 6 continuous weeks within the semester. Fourth year medical students will be allowed one-on-one encounter with a professionally trained SP on one of three chosen topics (cases) which fit the Clinical Skills Module curriculum. These cases will be developed in phase II. The encounters will be recorded to assess students’ history taking skills. Each encounter is followed by debriefing and feedback session by a faculty member and the SP (if required). The same will be applicable for the second semester for the other gender students.

Six standardized patients will be used for this activity, where only four will be used for the encounters on a specific day and the other two will be for standby.

**Detailed plan for first semester:**

- **Weeks 1 & 2:** Case A-Topic to be chosen (history taking).
- **Weeks 3 & 4:** Case B-Topic to be chosen (history taking).
- **Weeks 5 & 6:** Case C-Topic to be chosen (history taking).

1- Activity will take place three days per week.
2- Sessions will be held from 10-12am and 1-3 pm (4 hours per day).
3- Time assigned for each student encounter is 1 hour, to allow time for debriefing, feedback, instructions, or further explanations necessary.
4- Four (4) SPs will be used on each day (each in a standardized room) allowing four (4) student encounters per hour (total of 16 students per day).

5- 48 encounters can be scheduled every week.

6- During the six week period 288 encounters can be conducted (covering more than the number of students).

The above encounters will be recorded and documented for evaluation of the implementation phase. Also they will be used for further modification of the program and for presenting to other faculty members to encourage the incorporation of SPs in their teaching.

The required personnel for the execution of program and their suggested roles (job descriptions) are summarized in Table (1).

<table>
<thead>
<tr>
<th>Title</th>
<th>Role</th>
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<tbody>
<tr>
<td>Program director</td>
<td>Oversees the entire operation of the simulation center</td>
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<td></td>
<td>Acts as a liaison with departments and administration within the institution</td>
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<td></td>
<td>Interacts with other members of the simulation community on a local, national and international level</td>
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<td></td>
<td>Oversees the financial aspects of the center</td>
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<tr>
<td>Associate Director</td>
<td>Is responsible for the promotion and development of research</td>
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<td></td>
<td>Is involved in project planning, proposals and oversight</td>
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<td></td>
<td>Responsible for recruiting &amp; supervision of staff</td>
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<td></td>
<td>Responsible for the daily operations, coordination and oversight of the center</td>
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<td></td>
<td>Conducts facility tours and marketing of the center</td>
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<td></td>
<td>Interacts directly with the group of Faculty Facilitators with regards to their training, preparation, scenario writing, and final cases</td>
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<td>Conducts needs assessments for users; ensures that learning objectives for each user groups is met</td>
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<td>Assistant director</td>
<td>Works in conjunction with different departments to make use of the center (workshops, student encounters)</td>
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<td></td>
<td>Responsible for quality assurance of the center and its services</td>
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<td></td>
<td>Acts as a trainer for team members to run the simulation center</td>
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<td></td>
<td>Is involved in recruiting &amp; supervision Standardized Patients (SPs)</td>
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<td></td>
<td>Supervises SP staff and their preparation for encounters.</td>
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<td></td>
<td>Coordinates and oversees SP projects.</td>
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<td></td>
<td>Is Involved in daily running of the center.</td>
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<td></td>
<td>Initiates a research programs in the center.</td>
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<td>SP Coordinator</td>
<td>Is responsible for the accountability of the research output of the center</td>
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<td></td>
<td>Provides solid evidence of the scientific viability of the center</td>
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<td></td>
<td>Is responsible for SP recruitment, assignment and training</td>
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<td></td>
<td>Maintains SP database as well as updates SPs’ knowledge and performance</td>
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<td></td>
<td>Is involved in project management and oversight</td>
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<td></td>
<td>Is Responsible for the stage management issues (makeup, accessories for room and actors)</td>
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<tr>
<td>Center coordinator</td>
<td>Facilitates the day to day operation of the simulation center</td>
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<td></td>
<td>Manage budget, acquiring of new equipment and marketing of the program</td>
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<td></td>
<td>Maintain the project data base</td>
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<td>Establishes reports and statistics of the center for development or research purposes</td>
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<td>Faculty facilitator</td>
<td>Develop scenarios/cases that fit in the curriculum</td>
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<td>Assists with SP training and coaching, to identify pain threshold or mimic a difficult medical condition</td>
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<td></td>
<td>Involved in debriefing and evaluation of students</td>
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<td>SPs/Actors</td>
<td>Participate in educational programs to promote student learning through realism, as real as possible simulations</td>
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<tr>
<td>IT Administrator</td>
<td>Involved in the set-up and maintenance of video cameras, website, server, and supporting equipment around the center</td>
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<td>Responsible for proper function of system on daily basis and user access to the SP system</td>
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<td></td>
<td>Responsible for trouble-shooting and repair of equipment, sever, software, or website</td>
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Rules and regulations for SP hiring and training:

Standardized Patients are hired on a project-by-project (case-by-case) basis. All SPs are hired as part-time hourly employees of KAU. In order to be hired for a project, an SP must meet all of the patient criteria as described in the case written by the faculty facilitators.

Training for each project is paid, and may take anywhere from 4-6 hours depending on the complexity of the case. Many of our cases include a physical exam performed by medical students or residents, which may require additional training. Projects can run up to a few hours to a few weeks in length and may occur on any weekday between 7:00am and 4:00pm.

Each SP is expected to attend a group orientation session. During orientation, all aspects of participation in the program are covered, from paperwork and payroll, to the calendar and scheduling of exams and training, to the assessment of communication skills, to the physical exam, to the cases themselves.

New SPs should expect to put in several hours of training and rehearsal prior to working with students. They will be provided with a patient scenario to study that they will work on at home to help perfect the simulation. They will need to think about the scenario and practice the specific verbal and non-verbal behaviors appropriate for the role. Training and rehearsal may involve the followings: Reading and studying the case information, viewing video recordings of prior encounters, observation of others performing the role in rehearsal and/or an exam, informal role-playing with members of the Clinical Skills Center (CSC) team, and formal role-playing with faculty members. The primary goal involves two components: Consistent and realistic portrayal of the patient role, and consistent and accurate completion of an assessment checklist.

After learning the roles, SPs may go through “mock encounters” or dress rehearsals with faculty. These physicians also provide feedback on the cases and to the SPs so that the content of the cases and the portrayal of the patient are realistic. In this way, the most realistic, reliable, and accurate cases possible can be presented.

Standardized patients responsibilities:
1- Work in a professional manner when interacting with learners, faculty, fellow SP’s and staff.
2- Portray all aspects of the case as trained including history of current, problem, affect/behavior and physical findings.
3- Complete checklists accurately and consistently.
4- Inform the program office of changes in contact information such as name, telephone, and address.
5- Receive ongoing feedback from the SP coordinator and modify behaviors accordingly.
6- Provide appropriate feedback to learners and colleagues as directed by the SP coordinator and Trainer.
7- Sign and adhere to the Standardized Patient Contract.
8- Other duties as assigned.

Anyone hired as an SP at the CSC will be considered an independent contractor with the center. This means that SP are not eligible to receive benefits from the university such as health insurance, workman’s compensation, vacation, sick time, etc. SP report directly to the SP coordinator. SPs will be instructed and trained by an assigned SP coordinator for a given project. During teaching or assessment activities SP should expect that the learner may interview, counsel and/or physically examine them.

Payroll:
SPs are expected to be paid 50-200 SR per hour depending on what they are performing.
1- During their training the average pay should be SR50/hour with minimum of 2 hours.
2- During student encounters:
   a- Involving physical exams: SR200/hour with minimum of 2 hours.
   b- Involving history tacking/communication: SR100/hour with minimum of 2 hours.

Application process:
Anyone interested in applying to become a SP is required to complete a profile/application form prior to being interviewed. This application is located at the CSC. Applications may also be sent by mail, email, and or fax. Once the program office has received a completed profile, SP will be contacted later about an interview. At the interview, prospective SP receives an orientation about the program and are then interviewed individually by an SP coordinator. Following the interview, an applicant will be contacted by letter regarding the results of the interview. At that time, an applicant may be informed that they will be added to the SP database and if there’s an upcoming project for which they may be appropriate. Applicants who do not meet the minimum requirements for the position will also be mailed a letter of notification.
References


