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## Using Simulation to Improve Leadership Skills

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## Music City, USA



I have no financial relationships with commercial support to disclose.

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## Educational Objectives

Following this presentation, you should be able to:

1. Describe the elements of effective leadership
2. Articulate why and how simulation-based interventions can be used to improve leadership skills
3. Articulate how to use simulation-based techniques to teach leadership skills to a non-medical professional

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- Origin of words *lead*, *leader*, *leadership* is “*laid*”, alluding 'path' or 'road'.
  - verb *læden* = 'to travel'. A leader is an individual who shows other travellers the path ahead
- Leadership has been described as the behavior of an individual when directing the activities of a group toward a shared goal.
- Leadership skills can be learned, developed, and perfected.
- Leadership skills are adaptable and can and should evolve over time.

Abdulaziz Al-Sawai. Leadership of Health Care Professionals. Where Do We Stand? Oman Med J. 2013 Jul; 28(4): 285–287.

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## Nashville Health Care Council

- Helping senior health care leaders **define complex problems; identify solutions through collaboration; and foster leadership skills.**
- Individuals accepted into the program are: CEO, COO, CMO, CFO, CTO, CIO, C-suite leader. Chairman, President, Senior Vice President, Executive Vice President, Managing Partner, Managing Director, Principal or Co-Founder – healthcare organizations.

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- Enhancing the classroom curriculum is an immersion component that exposes Fellows to behind-the-scenes looks at diverse aspects of the health care sector.
- We were asked to create an immersive experience using simulation to address the experiential elements of the curriculum.

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## VUCA

- Volatility-----Vision
- Uncertainty-----Understanding
- Complexity-----Clarity
- Ambiguity-----Agility

Bennett, N. and Lemoine, J. What VUCA Really Means for You. Harvard Business Review, Vol. 92, No. 1/2, 2014. Available at SSRN: <https://ssrn.com/abstract=2389563>

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## Healthcare Leadership Competencies

- An organization that comprises several medical organizations in the U.S. has studied leadership extensively and found 5 core competencies:
  - Communication and Relationship Management
  - Facilitator/Vision
  - Professionalism
  - Business
  - Knowledge of the Healthcare Environment

<http://www.healthcareleadershipalliance.org/Common%20Competencies%20for%20All%20Healthcare%20Managers.pdf>

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## THE SIMULATION EXERCISES

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## COLOUR BLIND

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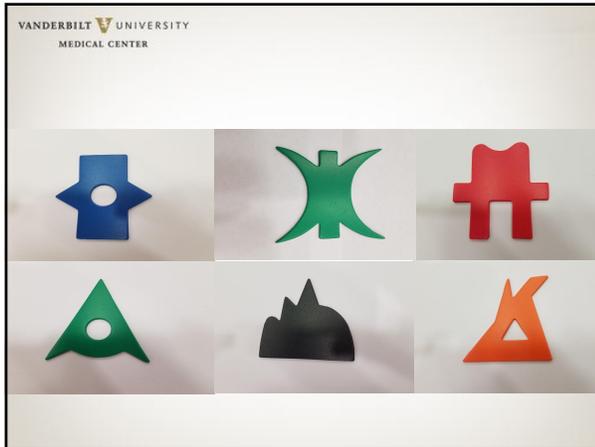
## Colour Blind

- Colour Blind™ (RSVP Design, Johnstone, UK) was originally developed for air traffic control cadets.
- Team cognitive exercise

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## Colour Blind

- Team members all wear blindfolds
- Ensure total dependence upon the quality of their verbal communication.
- Group together gather information that will allow them to solve a puzzle.



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- They ascertain which two-colored and abnormally shaped pieces are missing from a set of 30 pieces (consisting of 6 shapes and 5 colors).

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### Colour Blind - Objectives

- Refine skills that will help ensure common understanding (sense making) between team members.
- Emphasize the importance of checking and feedback.
- Demonstrate how communication can break down in teams, and to enable teams to identify and rectify such communication failures.

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### De-briefing

- Sensemaking
  - Different team members will describe or understand the descriptions of the shapes in different ways. Team success depends on effective communication between team members.
  - These differences can stem from culture, gender, experience, etc.

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- The team must develop methods to accurately identify and clarify information ambiguity. This can be accomplished through cross-checking and double-checking, for example.
- The team will fail unless collectively (and individually) they develop a common understanding of the situation (called team situation awareness).

- Process and Communication Management
  - Individual team members often have information that is critical to successful team performance
  - Everyone has something to contribute – you may have to elicit it from some members.
  - It is essential that all members of the team participate – teams cannot afford to have “social loafers” (those who intentionally do less work than other team members).

- Diversity in Communication Styles and Needs
  - Different team members will describe or understand the descriptions of the shapes in different ways. Team success depends on effective communication between team members.
  - Team members should be able to adapt their communication style to accommodate the needs of other team members (or, by the way, especially patients and their families).

## MRS. FAIRBANKS

## Mrs. Fairbanks

- Locally developed - M. B. Weinger and Vanderbilt University School of Medicine (Nashville, TN)
- complex, multiparty negotiation role-play exercise that includes an elderly standardized patient (SP).

## Mrs. Fairbanks

- Assigned roles on a clinical care team making hospital discharge decisions about a geriatric patient.
  - charge nurse,
  - physical therapist,
  - hospitalist physician,
  - orthopedic surgeon
  - social worker

## Mrs. Fairbanks

- They must negotiate
  - the location to which the patient should be discharged
  - how to manage the patient’s invalid spouse
  - the appropriate rehabilitation therapy regimen
  - how to manage the patient’s insulin-dependent diabetes
  - how to manage the patient’s refractory atrial fibrillation.

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## Mrs. Fairbanks

- The team first meets together and tries to reach consensus on the five inter-related decisions based on their positions.
- The geriatric SP is then wheeled into the room.

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- The SP is trained to assume negotiation positions that are designed to be contrary
- Trainees re-negotiate with the patient, who has different preferences.
- The SP is trained to be appropriately but incompletely influenced to retreat from his/her inherent preferences.

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## Mrs. Fairbanks - Objectives

- Understand the importance of and methods for team resolution of conflict situations.
- Understand and overcome barriers to effective communication.
- Effective information transfer (especially listening) - obtaining input and information from everyone on the team and from the patient.

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## Mrs. Fairbanks - Objectives

- Importance of interpersonal and cultural differences, and their influence on team decision-making.
- Integrating patient preferences into care decisions especially when they are in conflict with the providers' preferences.

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## Debrief

**Exercise Observation Form**  
*(for Faculty as well as the Medical Student role)*

Session: \_\_\_\_\_ Exam Room: \_\_\_\_\_ Notes for SP Improvement:

**Student Assignments:**

Hospitalist: \_\_\_\_\_  
 Orthopedic Surgeon: \_\_\_\_\_  
 Physical Therapist: \_\_\_\_\_  
 Charge Nurse: \_\_\_\_\_  
 Social Worker: \_\_\_\_\_  
 Medical Student: \_\_\_\_\_

**Decisions Before & After Patient Enters Room:**

	Before	After
Discharge facility		
Spouse facility		
PT/OT		
Diabetes		
Arrhythmia		

**Debriefing Points:**

- Engagement (role immersion)
- Participation
- Relationships and Coalitions
- Influence
- Role of anecdotal vs. real evidence
- Decision-making (how/why)
- Climate & Conflict
- Patient's Role & Influence
- Professionalism

Notes: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

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## Debrief

- Separate the people from the problem  
*Think of each other as partners in negotiation rather than as adversaries.*
- Focus on Interests Not on Positions
- Invent options for mutual gain
- Use Objective Criteria
- BATNA

Getting to YES: Negotiating agreement without giving in: Fisher / Ury Institute for Medical Simulation, Comprehensive Workshop, Boston

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## AIR IN THE BAG

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- Manikin based teamwork exercise
- Patient: Cecilia Langston
- Procedure: 3 vessel Coronary Artery Bypass Grafting
- After the sternum is closed, the anesthesiologist begins to awaken patient.
- Cardio-thoracic surgeon leaves the OR and reports to the family that the surgery has gone well with no complications

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- After the CT surgeon leaves to talk to the family, the patient experiences a drop in Blood Pressure.
- The anesthesiology attending instructs the anesthesiology resident, "Hang the cell saver blood... put in under pressure but give only half because I see air at the top of the bag." The anesthesiology resident hears the order except for the part about "give only half."
- 15 minutes later, the patient arrests.
- The anesthesiology resident notices the IV line filled with air, the empty cell saver bag, the lack of BP and no cardiac electrical activity.
- He is devastated because he is very experience and he cannot believe that he has done this to the patient



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### Transactional versus Transformational Leadership

**Transactional Leadership**

- Operational oriented
- Motivates others to achieve goal

**Transformational Leadership**

- Team oriented
- Focuses on collaboration and shared vision

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### Essential Elements of ACRM

- **Communication & cooperation:** Assertiveness, willingness to challenge, & conflict resolution
- **Leadership & followership:** Adaptability & flexibility
- **Resource management:** Dynamic prioritization
- **Team situation awareness:** Cross-checking & feedback
- **Team decision making:** Error trapping



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- Role Clarity**
- Establish the leader
  - Communicate essential team-related information
  - Identify established protocol to be used or develop a plan
  - Assign roles and responsibilities
  - Systematically handoff responsibilities during team transactions
  - Execute protocol or team-established plan
  - Communicate decision and actions to team members
  - Re-plan patient care in response to new information
  - Acknowledge the contributions of team members to team goals
- Communication**
- Demonstrate mutual respect in all communication
  - Address professional concerns directly
  - Resolve conflicts constructively
  - Advocate and assert a position or corrective action
  - Invoke the Two-Challenge Rule
  - Use common terminology in all communications
  - Cal out critical information during emergent events
  - Use check backs to verify information transfer

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- Personnel Support**
- Call for help appropriately
  - Balance workload within the team
  - Team members take responsibility for assigned tasks
  - Offer assistant for task overload or with difficult tasks
  - Constructively use periods of low workload
  - Alert team to potential biases and errors
  - Report slips, lapses, and mistakes to team
- Resources**
- Use equipment properly
  - Ensure equipment is operating correctly
  - Obtain needed material resources
- Global Assessment**
- Request situation awareness updates
  - Provide situation awareness updates
  - Cross monitor actions of team members
  - Seek information for planning and decision making
  - Offer information for planning and decision making
  - Integrate individual assessments of patient needs
  - Prioritize tasks for patient

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**DISCLOSURE**

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- After 20 minutes of CPR, the patient regains normal Blood Pressure, Heart Rate and is hemodynamically stable.
  - However, the patient no longer follows commands or opens eyes to stimulation.
  - The anesthesiology attending and surgeon are busy with another case.

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- The Attending Anesthesiologist is positive that enough time has elapsed for us to obtain a Neurological Exam
  - He seems to feel that the patient may have had an anoxic brain injury
  - You have to deliver this news to the brother (SP)



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### 2018 Evaluations

Immersion Activity - Vanderbilt Medical Simulation	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Rating Average	Response Count
Helped me better understand the need for good communication skills in various medical settings.	21	2	1			4.75	24
I learned something new from this exercise.	23		1			4.92	24
This was a good team building exercise for the Fellows.	20	4				4.83	24
I would recommend the Fellows continue this activity for future classes.	21	3				4.88	24
Overall Satisfaction	20	3	1			4.79	24

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- ### 2018 Evaluations
- Great eye opener
  - Great for a new health care person to understand complexity of medicine
  - That was fantastic
  - As a frontline clinician was very good to experience
  - Excellent
  - Excellent !!
  - Awesome experience
  - This was fantastic - thank you!
  - Great learning experience
  - Pleasantly surprised!

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## QUESTIONS?