



## **IPE Faculty – HIV Facilitation Guide**

### **Session 1**

#### **Missed Opportunities – The Case of Morgan Rivera**

## **Purpose**

After preparatory readings, health professions students from multiple health colleges will actively engage in inter-professional dialogue related to contemporary issues associated with HIV/AIDS in the United States.

## **Objectives**

1. Given a problem scenario, individuals will collaborate as an interdisciplinary team to identify and examine causes that contributed to the etiology of medical error;
2. Teams will collaborate to analyze, evaluate and report risks to patient safety within a specific scenario;
3. Teams will collaboratively appraise and justify approaches to preventing systemic errors associated with a specific scenario.

## **Conceptual Background**

This team-based learning experience was designed and implemented as a component of a large, required longitudinal interprofessional learning activity for first and second year students at a large Southeastern US Academic Health Science Center. Team-based learning was adopted as an instructional method based on its ability to promote discourse and involvement and to accommodate the limited number of faculty facilitators at our disposal. Team-Based Learning is a highly prescriptive process that must be implemented in a formulaic manner. A Team Based Learning Exercise consists of several components (Sibley & Spiridonoff, ND):

1. Pre-readings or assignments: Background materials foundational to the topic or subject associated with the learning experience.
2. Individual Readiness Assurance Test (IRAT): A graded multiple choice test or quiz that is taken individually, this test or quiz holds students accountable for the foundational knowledge associated with the pre-readings or assignments.
3. Team Readiness Assurance Test (TRAT): The same graded multiple choice test or quiz as the IRAT, this time taken as a team. An Immediate Feedback Assessment Technique (IF-AT) is used to score this component.
4. Appeals: Following the TRAT the facilitator encourages teams to appeal questions to which they did not receive full credit. This process encourages students to reengage with the pre-readings or assignments, reinforcing material that they may have found difficult.
5. Mini-Lecture/Review: A very brief review of basic concepts that were difficult for students.
6. Application Activity: This is where the majority of the time associated with this learning experience is focused. The activity is built in a manner that provides the entire class to

provide feedback and reflection to each other, while engaging with each other and understanding diverse perspectives around the same problem or issue.

We strongly encourage individuals who have limited experience with Team-Based learning to take the time to familiarize themselves with the method. More information, including instructional videos, on team-based learning can be found via the Team-Based Learning Collaborative (<http://www.teambasedlearning.org>).

### **Learner Preparation**

Prior to engagement in this activity, learners should be provided the following materials. A complete resource can be accessed here:

### **Facilitation Schema**

This material was developed as a three-hour learning experience; it is the first of three interprofessional learning experiences during the academic year. Each session will maintain a common theme: HIV/AIDS.

The IRAT consists of seven (7) multiple choice questions answered on a Scantron or other quiz sheet. The TRAT consists of the same seven (7) multiple choice questions. These questions should be answered on an IF-AT card (Epstein Educational Enterprises). The Application Exercise consists of multiple interactive problem solving questions. To facilitate inter-team discussion, a set of four answer cards (A-D, printed on cardboard of four different colors), was used for simultaneous reporting of team answers on multiple choice discussion questions.

We recommend that two facilitators should be assigned to this activity, with one designated as primary facilitator. Students should be assigned to enumerated tables prior to the session. Ideally, each table will have either six or seven students. There should be two different colored folders on each table at the beginning of each session. The first folder (*e.g.*, red) will contain an IRAT for each student; IRAT answer sheets for each student; a single IF-AT form for the TRAT; and a sheet that has a description of the appeals process if a group wants to challenge one of RAT questions. The second folder (*e.g.*, blue) will hold a copy of the Case, a series of patient narratives that will be incorporated into this activity, for each student; and a set of Application Exercise Questions. These folders should be explicitly colored for easy identification. Extra copies of all materials, including the individual answer sheets and IF-AT forms, should be on hand. Students should be explicitly instructed to NOT open the folders until provided instruction. Additionally, students should be explicitly instructed NOT to work ahead.

### Example Schedule of Events:

1:00	15	Welcome, overview of objectives, TBL and agenda
PM	min	

1:15 PM	10 min	Individual Readiness Assurance Test
1:25 PM	15 min	Group Readiness Assurance Test
1:40 PM	5 min	Discussion of appeals process
1:45 PM	10 min	Video introduction (linked via mediasite, you will also have a USB drive just in case)
1:55 PM	10 min	Introduce application activity
2:05 PM	30 min	Teams work through application activity
3:00 PM	20 min	Discussion of application activity
3:20 PM	15 min	Summary, review of objectives, open questions and answer

#### Implementation Advice Based on Lessons Learned:

1. Provide name tags for learners.
2. Use candy/nominal prizes as rewards for team performance/participation.
3. Implement an interactive icebreaker activity prior to beginning the “application exercise” (e.g., name their team). This is particularly useful when students have not worked together prior to this experience.
4. Specific instruction should be given to students to eliminate working ahead, or as an alternative, release each application exercise question as they are discussed. One method of doing this would be to print each application exercise question on a different colored sheet of paper.
5. Establish a website or learning management system (LMS) course shell for the experience. Host pre-reading materials and information about the exercise on the LMS. For learners who may be new to team-based learning, we recommend including links to the Team Based Learning Collaborative website and two helpful videos:  
<http://www.teambasedlearning.org>  
<http://www.utexas.edu/academic/ctl/largeclasses/#tbl>  
<http://www.youtube.com/watch?v=BIVPLYGdBLg>

6. Suggested talking points to introduce the activity:

Welcome: This is a collaborative, interprofessional team-based learning exercise that includes students from across the health science center.

Teams: Healthcare is delivered in interprofessional teams. The purpose of this experience is to allow you to work together as an interdisciplinary team to make decisions about complex problems related to healthcare.

Format: This experience will employ aspects of Team Based Learning. We will begin our learning experience by taking an individual readiness assurance test, followed by a team readiness assurance test. Both of these tests are based upon the pre-reading assignments. After we have completed these tests we will move to our application exercises.

## **Readiness Assurance Test**

### **Readiness Assurance Test - Facilitation Guide**

The RAT is currently formatted for Epstein Education IF-AT form # B024.

IRAT instructions to learners: Learners will have a specific answer sheet to hand in, but should mark their answers on the questions, which they will keep. Individuals should select the single BEST answer. At the end of the IRAT, one student from each team should collect all team answer sheets and take to the front of the room and place them in the manila envelope; all IRAT scores from the room will go in that one envelope. Once done, the team may begin the TRAT using the scratch-off sheet (15 minutes).

TRAT instructions to learners: The questions for the TRAT are exactly the same questions as the IRAT but are answered after discussion among the team. This is one way to introduce the scratch-offs to the students:

“Your next assignment is to discuss each question, one at a time, within your team and decide which one is the best answer. We are going to use the scratch off card to record your answer. If your team thinks A is the best answer scratch off A. If you scratch off A and find the star (sometimes it is in the middle, other times it is on the right or left) your team receives 4 points. If you do not find a star and it is blank, discuss the answer again and choose another answer. If you scratch it off and find a star your team will receive 2 points. If you do not find a star discuss again and scratch off another answer. If you find a star you will receive 1 point. If you scratch off all the answers to find the star you will receive no points. Everyone on the team gets the same score on this test. This is still a closed book test. Does anyone have any questions?” Following the TRAT, a team member must bring the TRAT answer sheet to the front of the room where it

should be placed in the same single manila envelope as the IRAT scores. We usually ask the teams how they scored, but there is not time to go into this in detail.

Questions about the correct answers should NOT be discussed in class; rather, we strongly recommend encouraging appeals. Following the collection of TRAT forms, facilitators can briefly introduce the appeals process, one way of phrasing it might be: “If you want to appeal an answer to a question, a detailed instruction sheet was given to you. The correct answers are based on the literature and readings assigned but if you feel it is incorrect after re-reading the assigned prereadings, please fill out the appeal sheet (Appendix). Please site your source and provide evidence from the literature to support your team answer. This is a team-based appeal.”

Following the appeals process, it may be appropriate to conduct a mini-discussion to emphasize the concepts that are most problematic for students. Determining which concepts were difficult can be accomplished by grading quizzes while students are working on the TRAT or querying students as to which questions they struggled with both as individuals and as a group. It is highly recommended that this discussion be student-centered.

### **Individual and Team Readiness Assessment Test – GNV – B023**

#### **Questions for IPLH Session 1 – BBDBDAACDBCAAB**

1. HIV attacks cells important for immune system function (CD4 cells) leading to infectious complications. Which is the correct term used to describe these infectious complications?

a) Intentional infections

**b) Opportunistic infections**

c) Cryptic infections

d) Pathogenic infections

Discussion: HIV attacks CD4 cells, which are an important part of the human immune system and help fight off opportunistic infections and infection related cancers. Opportunistic infections are infections that rarely occur in the absence of immunodeficiency.

2. Which of the following defines the presence of AIDS in a person with HIV infection?

a) HIV viral load > 100,000 copies/mL

**b) CD4 count < 200 cells/mm<sup>3</sup>**

- c) CD4 count > 500 cells/mm<sup>3</sup>
- d) HIV viral load < 20 copies/mL

Discussion: AIDS and HIV are two stages of the same infection. HIV infection is merely the presence of HIV infection. AIDS is advanced HIV infection which is diagnosed in people with a CD4 count < 200 cells/mm<sup>3</sup> or in those with certain infections and cancers that rarely occur outside the setting of severe immunodeficiency.

3. Which of the following is TRUE in regards to the HIV Care Continuum?

- a) Used to gauge progress toward the goals of the National HIV/AIDS Strategy
- b) Used to direct HIV prevention services most effectively
- c) Represents the series of steps from HIV diagnosis to successful treatment of HIV with medications

**d) All of the above are true**

Discussion: The HIV Care Continuum is the series of steps from the time a person is diagnosed with HIV through the successful treatment of their infection with HIV medications. This continuum helps gauge progress toward the goal of the National HIV/AIDS Strategy and direct HIV prevention resources most effectively.

4. Which population is most represented in the HIV epidemic in the US?

- a) Heterosexual men and women

**b) Gay and bisexual men**

- c) Babies born to mothers who have HIV infection
- d) Needle sharing intravenous drug use partners

Discussion: Gay and bisexual men of all races have the highest incidence of HIV disease in the United States.

5. HIV can be transmitted by all of the following, EXCEPT

- a) Blood transfusion
- b) Sexual contact
- c) Breastfeeding

**d) Bites of mosquitoes**

Discussion: HIV can be transmitted through blood and bloody body fluids, breast milk, vaginal and rectal fluids. It is not spread through mosquito bites.

6. **True** or False. Scientists currently believe that HIV mutated from Simian Immunodeficiency Virus which was transmitted to humans by contact with chimpanzees.

Discussion: Scientists have identified a type of chimpanzee in Central Africa as the source of HIV infection in humans. They believe that the chimpanzee version of the immunodeficiency virus (called simian immunodeficiency virus, or SIV) most likely was transmitted to humans and mutated into HIV when humans hunted these chimpanzees for meat and came into contact with their infected blood.

7. Which race/ethnicity experiences the greatest burden of HIV disease in the US?

**a) African Americans**

- b) Whites/Caucasians
- c) Hispanics/Latinos
- d) Asian Americans

Discussion: Compared with other races and ethnicities, African Americans account for a higher proportion of new HIV diagnoses, those living with HIV, and those ever diagnosed with AIDS. This group is disproportionately affected by the HIV epidemic. In 2014, 44% (19,540) of estimated new HIV diagnoses in the United States were among African Americans, who comprise 12% of the US population.



8. The risk for opportunistic infections is assessed by an evaluation of which of the following labs?

- a) HIV viral load
- b) Urinalysis
- c) CD4 count**
- d) Platelet count

Discussion: HIV infects CD4 cells which are critical for proper immune system functioning. The risk for opportunistic infection is assessed by measuring the CD4 count as certain infections occur more commonly below particular CD4 thresholds.

9. Drugs used to treat HIV infection are called

- a) Antibiotics
- b) Antihypertensives
- c) Proton pump inhibitors
- d) Antiretrovirals**

10. True or **False**. You can rely on symptoms to tell whether a patient has HIV.

Discussion: Symptoms alone cannot determine the presence or absence of HIV infection. The only way to determine if HIV infection is present is to test for the presence of this virus.

11. Which of the following is not a goal of the National HIV/AIDS Strategy?

- a) Reducing HIV incidence
- b) Increasing access to care and optimizing health outcomes
- c) Achieving a more coordinated national response to the HIV epidemic
- \*d) Decreasing the prevalence of co-infection among individuals who are HIV positive**

Discussion: The four goals of the National HIV/AIDS Strategy are:

1. Reducing HIV incidence

2. Increasing access to care and optimizing health outcomes
3. Decreasing HIV-related health disparities
4. Achieving a more coordinated national response to the HIV epidemic

12. **True** or False. The vast majority of people living with HIV are in low and middle income countries, particularly in Sub-Saharan Africa.

13. Many people living with HIV infection are uninsured or under insured for the care they need. The federal government has a comprehensive system of care that provides assistance to this population. This program is called

**a) The Ryan White HIV/AIDS Program**

- b) The Magic Johnson Care Program
- c) The Consortium for the protection of people with HIV
- d) The Minority AIDS Initiative

Discussion: The Ryan White HIV/AIDS Program provides a comprehensive system of care that includes primary medical care and essential support services for people living with HIV who are uninsured or underinsured.

14. Which type of HIV test allows for earlier detection of HIV infection?

a) 2<sup>nd</sup> generation

**b) 4<sup>th</sup> generation**

c) 1<sup>st</sup> generation

d) 3<sup>rd</sup> generation

Discussion: The 4<sup>th</sup> generation test detects HIV earlier by identifying the HIV-1 p-24 antigen. The current CDC HIV testing algorithm also recommends a nucleic acid amplification test (NAAT) to detect acute HIV infection in patients with a positive 4<sup>th</sup> generation HIV test but a negative antibody test.

**Video Introduction**

Suggested talking points:

Gainesville, FL is a unique community, while HIV is prevalent in our area, particularly in the surrounding rural areas, it is logistically impossible to provide each of you with a longitudinal clinical experience so that you could get to know an individual who is HIV positive. The North Florida AIDS Education Training Center is fortunate to work with some exceptional individuals who advocate for themselves and their community. We were able to record a few of their voices this summer, our goal was to provide an opportunity for you to hear from someone who is living with HIV, to learn about their experiences and their needs.

**The video will be provided via mediasite via this link:**

<https://mediasite.video.ufl.edu/Mediasite/Play/b6510db18ff744d4b3ad72870b1452f71d>

I will also provide USB drives with the video loaded on to them at the time of the activity. A facilitator will need to log into the classroom computer in order to access the video. I cannot log in for you, if the computer times out...you need to be able to log back in. I will test each room for video/audio prior to use, that being said, technological issues do happen. Students should be able to access via their own devices if there is a room-based technical issue. For this reason I've shortened the url to <http://bit.ly/2cWEEExW> so that it can be easily shared.

### **Application Exercise**

Morgan Rivera is a 29-year-old woman who presents to the Academic Health Center emergency room for a nonproductive cough, progressive shortness of breath (dyspnea) with exertion and fever of 101.6 for the last week. She is admitted to the hospital with a diagnosis of *Pneumocystis jirovecii* pneumonia (PCP).

The documentation in her medical record indicates she was hospitalized at the Academic Health Center four months ago for a compound (open) right radius and ulna fracture in her dominant arm/hand that required open reduction and internal fixation (ORIF) surgery. The note indicates her injury was a result of a "fall off her porch after several hours of partying with her friends." A urine drug screen at the time of that hospitalization was positive for marijuana and cocaine. The chart does not indicate discussion regarding her drug use occurred in the hospital. It is written that Morgan was diagnosed with HIV infection at the time of her hospitalization because she was noted to have white plaques on her buccal mucosa (lining of her cheeks) consistent with oral candidiasis (thrush) during intubation for the surgical repair of her arm fracture. The chart also

indicates large carious lesions in her back teeth and broken tooth; a referral to dentistry is suggested. Her lab workup at that time showed her CD4 count was 98 and HIV viral load was 78,000 (a 'normal' CD4 count for an individual who is not HIV+ is between 500 and 1600 cells/mm<sup>3</sup>, a CD4 count below 200 is indicative of significant risk for developing serious illness).

The chart notes antiretrovirals were not started in the hospital because Morgan lacked insurance and there was concern for how she would access these medications after discharge. Morgan was started on fluconazole for the thrush and oxycodone for pain from the surgery for the fracture. It appears she was not started on trimethoprim/sulfamethoxazole (Bactrim), a medication used to prevent PCP when CD4 counts are less than 200 or the patient presents with thrush. The patient care team associated with this hospitalization did not a consult with the infectious disease team.

The discharge summary states that Morgan was discharged home with verbal and written instructions to call the local health department to initiate HIV care. Post-operative appointments with orthopedics were scheduled at the time and written on her discharge paperwork. There was no written referral to occupational and physical therapy for continued rehabilitation following the surgery on her dominant arm/hand.

At the time of hospitalization for PCP, the care team obtains additional past medical history from Morgan. She claims her health has been "pretty good" until recently. She reports she drinks four to five beers per day, "but I don't touch that hard stuff", smokes one to two blunts of marijuana per day and uses cocaine regularly. When pressed about the cocaine use, she states "about 1 rock about every other day – depends when I can get some." When asked about her mental health, she responds that she has a longstanding history of depression – "I had a rough childhood and that's been hard. My mama raised me by myself and she was addicted to crack and had all sorts of bad boyfriends; they did some bad things to me." When asked about the "bad things," Morgan states that one of them raped her when she was nine, but "my mama didn't believe me and said I must have led him on." Morgan has three children, with her first pregnancy at age 14. "The kids spend most of the time with my grandmother; I've gotten in trouble with the kids because of my cocaine use." Morgan tells the team she has no real income but sometimes gets money by selling cocaine and through prostitution.

The care team learns that Morgan kept her post-operative appointments with orthopedics, but she complains to the team she has trouble making a fist in her right hand. "It hurts and doesn't seem very strong." When asked to make a fist, the physician assistant on the care team notes that she has poor grip strength in that hand. The physician assistant asks if she has seen any one for occupational and physical therapy and Morgan shakes her head "no." Morgan's chart in the EMR indicates that she had multiple no-shows for scheduled appointments. When asked about these visits, Morgan explains that she doesn't have reliable transportation, instead, relying on a friend who will sometimes let her use his car.

Task:

The Quality Improvement and Patient Safety Team at the hospital has been tasked with examining patient cases when test information unrelated to the patient's primary complaint/condition has not been followed up on.

Your interprofessional consultant team is asked to use the Root Cause Analysis Worksheet (Appendix) to study Morgan's case to better understand why there was not follow-up on HIV care, to develop a set of recommendations and a plan of action to prevent something similar from occurring in the future. If your team notes other issues with care, they are asked to describe and make recommendations regarding those as well.

Your team's analysis, findings, and recommendations should focus on systems and processes that need to be improved, changed, or eliminated, or the implementation of new systems and processes.

### **Application Exercise - Facilitation Guide**

This application exercise was developed using Michaelson's 2008 Essential Elements of Team Based Learning as a framework, therefore it emphasizes the 4 S's: Significant, Same problem, Specific choice, Simultaneous report. We encourage the user to familiarize themselves with methods for Team Based Learning via the Team Based Learning Collaborative (<http://www.teambasedlearning.org>).

Following the brief discussion of appeals, students should be told to open the second folder and remove and distribute the activity instructions. Students should work in teams to complete their RCA worksheet. It would be reasonable to review the worksheet with your room after providing teams appropriate time to engage each other and answer questions to the best of their ability. A suggested sequence would be to establish that Morgan was indeed harmed and to determine the harm(s) that occurred. To establish a priority issue that needs to be addressed (obviously there are many), it would be important to emphasize that priorities could be rank ordered, with HIV treatment as a high priority. Optimal care for HIV would conform to the HIV Care Continuum:

1. Diagnosis
2. Linkage to care
3. Engaged or retained in care
4. Prescribed antiretroviral treatment
5. Suppressed viral load

Students' solutions may be unfeasible or impractical, that is ok...the point is to get them to think about the disease and social determinants. Once completed each team's sheet should be turned in to you, the materials should be brought back to H5, or turned over to the IPE Office.

### **Facilitator Discussion**

Items for root cause analysis-what goes wrong in her care

- Lack of patient education about HIV when diagnosed
- Medical error-omission of drug needed to prevent PCP pneumonia
- No referral to infectious disease team while in-patient
- Linkage to HIV care unsuccessful-Successful linkage to care occurs if patient has initial HIV care appointment within 1 month of diagnosis per the new updates to the National HIV/AIDS Strategy
- Lack of linkage to the Health Department. This is a requirement and the health department follows-up with the patient, and does seek out every sexual partner of the infected person and interviews this individuals.
- Lack of assessment/referral for treatment of her substance use disorder and depression
- Resources to assist patient in accessing medical services in the outpatient setting not explored (e.g., Medicaid application, Ryan White eligibility application)
- Lack of referral to OT and PT
- Lack of referral to dentistry (Ryan White Fund can coordinate dental resources)

## APPENDIX

### *Pneumocystis pneumonia*

*Pneumocystis pneumonia* (PCP) is a potentially life-threatening infection that occurs in immunocompromised individuals, especially in those with HIV, but also in hematopoietic cell and solid organ transplant recipients; those with cancer (particularly hematologic malignancies); and those receiving glucocorticoids, chemotherapeutic agents, and other immunosuppressive medications.

The most significant risk factors for PCP in patients without HIV infection are glucocorticoids combined with other immunosuppressive therapies (eg, cyclophosphamide) and other defects in cell-mediated immunity.

In patients without HIV infection, PCP typically presents as fulminant respiratory failure associated with fever and dry cough. This is in contrast to PCP in HIV-infected patients, in whom the infection is usually indolent.

The typical radiographic features of PCP in HIV-uninfected patients are diffuse, bilateral, interstitial infiltrates, but other patterns may be seen.

The diagnosis of PCP should be considered in patients with risk factors for PCP who present with pneumonia. PCP is most commonly diagnosed by microscopy with staining of an induced sputum specimen or bronchoalveolar lavage fluid.

An induced sputum sample is usually the initial procedure for the diagnosis of PCP. If PCP is not identified by this modality, then bronchoscopy with bronchoalveolar lavage should be performed. *PCP* is the most common opportunistic respiratory infection in patients infected with AIDS. It typically occurs in HIV-infected patients with a CD4 count <200 cells/microL who are not receiving antiretroviral therapy or appropriate prophylaxis.

Antimicrobial therapy directed against *P. jirovecii* is the mainstay of treatment for PCP. In addition, some patients will require adjunctive corticosteroids. Antiretroviral therapy (ART) should be initiated or resumed to restore cellular immunity. For patients with severe disease, we recommend treatment with intravenous (IV) trimethoprim-sulfamethoxazole (TMP-SMX) rather than IV pentamidine. For individuals with mild to moderate disease, we suggest treatment with oral trimethoprim-sulfamethoxazole.

Patients should be monitored for adverse events related to their treatment regimen. Several of the antimicrobial regimens used to treat PCP are associated with significant side effects. A change in regimen may be needed for patients who develop severe adverse reactions (eg, Stevens-Johnson syndrome with TMP-SMX, pancreatitis).

Patients who do not show any improvement (eg, tachypnea, hypoxemia) after four to eight days of therapy are considered treatment failures. Treatment failure may be due to the severity of disease at the time of diagnosis or to a concurrent infection that was not previously identified. Although the impact of drug resistance on treatment outcomes has not been established, we modify the treatment regimen for patients failing therapy, especially those with severe disease and those who do not improve after eight days

For patients with PCP who are not receiving ART at the time of their diagnosis, we recommend ART be initiated within two weeks of PCP treatment. Early ART (versus starting therapy after PCP treatment) can reduce the risk of AIDS progression and death in patients presenting with PCP.

Sax, P.E. (2013). Clinical presentation and diagnosis of Pneumocystis pulmonary infection in HIV-infected patients. UptoDate. Retrieved 9/22/2016 from:  
[http://www.uptodate.com/contents/clinical-presentation-and-diagnosis-of-pneumocystis-pulmonary-infection-in-hiv-infected-patients?source=related\\_link](http://www.uptodate.com/contents/clinical-presentation-and-diagnosis-of-pneumocystis-pulmonary-infection-in-hiv-infected-patients?source=related_link)



## Appendix

### Appeals Form

#### Appeals Instructions

All appeals must be forwarded via email to \_\_\_\_\_ within 24 hours of the completion of the IPLH session.

#### Purposes of the appeals process:

1. Clarify uncertainty about your understanding of the concepts.
2. Give additional recognition and credit when “missing” a question was caused by:
  - Ambiguity in the reading material.
  - Disagreement between the reading material and our choice of the “correct” answer.
  - Ambiguity in the wording of the question.

#### Guidelines for preparing successful appeals:

Appeals are granted when they demonstrate that you understood the concept(s) but missed the question anyway or that your confusion was due to inadequacies in either the question or the reading material.

If the appeal is based on ambiguity in the question, you should:

1. Identify the source of ambiguity in the question and,
2. Offer an alternative wording that would have helped you to avoid the problem.

If the appeal is based on either inadequacies in the reading material or disagreement with the answer you should:

1. State the reason(s) for disagreeing with our answer and,
2. Provide specific references from the reading material to support your point of view.

#### Impact of appeals on test scores:

When an appeal is accepted on a question that a team has missed (no individual appeals):

1. It “counts” i.e., the points missed will be added to:
  - their team score.
  - the score of any individual in the team who answered the same way as the team.
  - only those teams that appeal.
2. Team member(s) who had the “original” correct answer will continue to receive credit on the question.

## RCA Primer

Root cause analysis (RCA) is a structured method used to analyze serious adverse events. Initially developed to analyze industrial accidents, RCA is now widely deployed as an error analysis tool in health care. A central tenet of RCA is to identify underlying problems that increase the likelihood of errors while avoiding the trap of focusing on mistakes by individuals. RCA thus uses the systems approach to identify both active errors (errors occurring at the point of interface between humans and a complex system) and latent errors (the hidden problems within health care systems that contribute to adverse events). It is one of the most widely used retrospective methods for detecting safety hazards.

RCAs should generally follow a prespecified protocol that begins with data collection and reconstruction of the event in question through record review and participant interviews. An interprofessional team should then analyze the sequence of events leading to the error, with the goals of identifying how the event occurred (through identification of active errors) and why the event occurred (through systematic identification and analysis of latent errors) (Table). The ultimate goal of RCA, of course, is to prevent future harm by eliminating the latent errors that so often underlie adverse events.

<b>Table. Factors That May Lead to Latent Errors</b>	
<b>Type of Factor</b>	<b>Example</b>
Institutional/regulatory	A patient on anticoagulants received an intramuscular pneumococcal vaccination, resulting in a hematoma and prolonged hospitalization. The hospital was under regulatory pressure to improve its pneumococcal vaccination rates.

Organizational/management	A nurse detected a medication error, but the physician discouraged her from reporting it.
Work environment	Lacking the appropriate equipment to perform hysteroscopy, operating room staff improvised using equipment from other sets. During the procedure, the patient suffered an air embolism.
Team environment	A surgeon completed an operation despite being informed by a nurse and the anesthesiologist that the suction catheter tip was missing. The tip was subsequently found inside the patient, requiring reoperation.
Staffing	An overworked nurse mistakenly administered insulin instead of an antinausea medication, resulting in hypoglycemic coma.
Task-related	An intern incorrectly calculated the equivalent dose of long-acting MS Contin for a patient who had been receiving Vicodin. The patient experienced an opiate overdose and aspiration pneumonia, resulting in a prolonged ICU course.
Patient characteristics	The parents of a young boy misread the instructions on a bottle of acetaminophen, causing their child to experience liver damage.

As an example, a patient who underwent a cardiac procedure intended for another, similarly named patient. A traditional analysis might have focused on assigning individual blame, perhaps to the individual who sent the patient for the procedure despite the lack of a consent form. However, the subsequent RCA revealed 17 distinct errors ranging from organizational factors (the cardiology department used a homegrown, error-prone scheduling system that identified patients by name rather than by medical record number) to work environment factors (a neurosurgery resident who suspected the mistake did not challenge the cardiologists because the

procedure was at a technically delicate juncture). This led the hospital to implement a series of systematic changes to reduce the likelihood of a similar error in the future.

## ROOT CAUSE ANALYSIS REPORT FORM

<b>1.</b>	<b>THE EVENT</b> – <i>Describe what happened and any harm that resulted. Identify the proximate cause, if known.</i>	<b>RCA Team Members:</b>          <b>Team Number:</b> <b>Team Leader:</b>	
<b>2.</b>	<b>BACKGROUND &amp; FACTORS SUMMARY</b> – <i>Answer the following questions (brief summary only).</i>		
2.1	What was the sequence of events that was expected to take place?	Description:	
2.2	Was there a deviation from the expected sequence?	<input type="checkbox"/> Yes <input type="checkbox"/> No	If YES, describe the deviation
2.3	Was any deviation from the expected sequence likely to have led to or contributed to the adverse event?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NK	If YES, describe with causal statement.
2.4	Does the expected sequence or process meet regulatory requirements and/or practice standards?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NK	If NO, describe deviation from requirements/standards.

2.5	Did human action or inaction appear to contribute to the adverse event?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NK	If YES, describe the actions and how they contributed.
2.6	Did a defect, malfunction, misuse of, or absence of equipment appear to contribute to the event?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NK	If YES, describe what equipment and how it appeared to contribute.
2.7	Was the procedure or activity involved in the event being carried out in the usual location?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NK	If NO, describe where and why a different location was utilized.
2.8	Was the procedure or activity being carried out by regular staff familiar with the consumer and activity?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NK	If NO, describe who was carrying out the activity and why regular staff were not involved.

2.9	Were involved staff credentialed/skilled to carry out the tasks expected of them?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NK	If NO, describe the perceived inadequacy.
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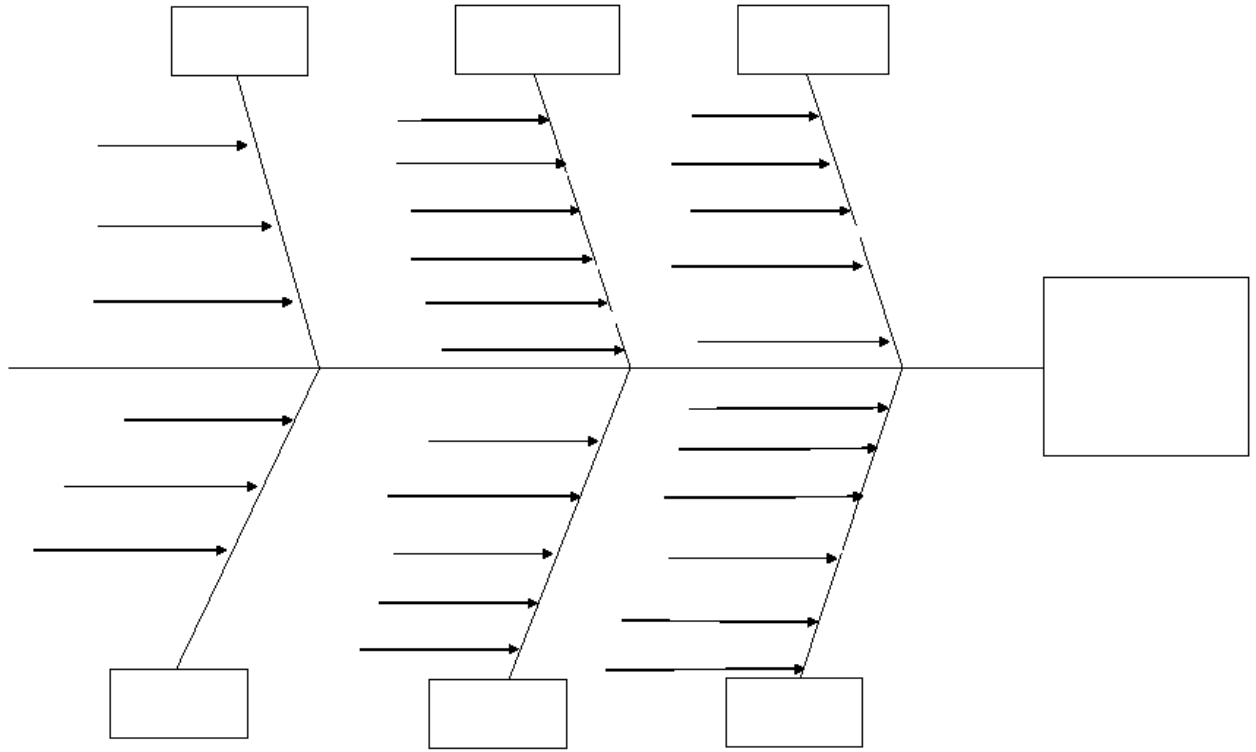
2.10	Were staff trained to carry out their respective responsibilities?	<input type="checkbox"/> Yes  <input type="checkbox"/> No  <input type="checkbox"/> NK	If NO, describe the perceived inadequacy.
2.11	Were staffing levels considered to have been adequate at the time of the incident?	<input type="checkbox"/> Yes  <input type="checkbox"/> No  <input type="checkbox"/> NK	If NO, describe why.
2.12	Were there other staffing factors identified as responsible for or contributing to the adverse event?	<input type="checkbox"/> Yes  <input type="checkbox"/> No  <input type="checkbox"/> NK	If YES, describe those factors.
2.13	Did inaccurate or ambiguous information contribute to or cause the adverse event?	<input type="checkbox"/> Yes  <input type="checkbox"/> No  <input type="checkbox"/> NK	If YES, describe what information and how it contributed.
2.14	Did a lack of communication or incomplete communication contribute to or cause the adverse event?	<input type="checkbox"/> Yes  <input type="checkbox"/> No	If YES, describe who and what and how it contributed.



		<input type="checkbox"/> NK	
2.15	Did any environmental factors contribute to or cause the adverse event?	<input type="checkbox"/> Yes  <input type="checkbox"/> No  <input type="checkbox"/> NK	If YES, describe what factors and how they contributed.
2.16	Did any organizational or leadership factors contribute to or cause the adverse event.	<input type="checkbox"/> Yes  <input type="checkbox"/> No  <input type="checkbox"/> NK	If YES, describe what factors and how they contributed.
2.17	What other factors are considered relevant to the adverse event?	Describe:	

2.28	Rank order the factors considered responsible for the adverse event, beginning with the proximate cause, followed by the most important to less important contributory factors. Attach Contributory Factors Diagram (Fishbone)	
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<b>4.</b>	<b>PREVENTION STRATEGIES</b> – List from highest priority to lowest priority the recommended actions designed to prevent a future occurrence of the adverse event. Begin with a rank of 1 (highest). For each strategy or action provide an estimated cost, if known, and any additional considerations or recommendations for implementing the strategy (e.g., phase-in, immediate need, triage by risk).
<b>Rank</b>	<b>Strategy</b>
1	
2	
3	
4	
5	
6	
7	



## WHAT IS THE NATIONAL HIV/AIDS STRATEGY?

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The National HIV/AIDS Strategy is a five-year plan that details principles, priorities, and actions to guide our collective national response to the HIV epidemic.

First released by President Obama on July 13, 2010, the Strategy identified a set of priorities and strategic action steps tied to measurable outcomes for moving the Nation forward in addressing the domestic HIV epidemic. In July 2015, the White House released the [National HIV/AIDS Strategy for the United States: Updated to 2020](#). This Update reflects the work accomplished and the new scientific developments since 2010 and charts a course for collective action across the Federal government and all sectors of society to move us close to the Strategy's vision.

## STRATEGY VISION

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The United States will become a place where new HIV infections are rare and when they do occur, every person regardless of age, gender, race/ethnicity, sexual orientation, gender identity or socio-economic circumstance, will have unfettered access to high quality, life-extending care, free from stigma and discrimination.

## STRATEGY GOALS

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1. **Reduce New Infections**
2. **Increase Access to Care and Improve Health Outcomes for People Living with HIV**
3. **Reduce HIV-Related Health Disparities and Health Inequities**
4. **Achieve a More Coordinated National Response to the HIV Epidemic**

## INDICATORS OF PROGRESS

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The following indicators of progress are identified in the National HIV/AIDS Strategy: Updated to 2020:

### INDICATOR 1

Increase the percentage of people living with HIV who know their serostatus to at least 90 percent.

#### INDICATOR 2

Reduce the number of new diagnoses by at least 25 percent.

#### INDICATOR 3

Reduce the percentage of young gay and bisexual men who have engaged in HIV-risk behaviors by at least 10 percent.

#### INDICATOR 4

Increase the percentage of newly diagnosed persons linked to HIV medical care within one month of their HIV diagnosis to at least 85 percent.

#### INDICATOR 5

Increase the percentage of persons with diagnosed HIV infection who are retained in HIV medical care to at least 90 percent.

#### INDICATOR 6

Increase the percentage of persons with diagnosed HIV infection who are virally suppressed to at least 80 percent.

#### INDICATOR 7

Reduce the percentage of persons in HIV medical care who are homeless to no more than 5 percent.

#### INDICATOR 8

Reduce the death rate among persons with diagnosed HIV infection by at least 33 percent.

#### INDICATOR 9

Reduce disparities in the rate of new diagnoses by at least 15 percent in the following groups: gay and bisexual men, young Black gay and bisexual men, Black females, and persons living in the Southern United States.

#### INDICATOR 10

Increase the percentage of youth and persons who inject drugs with diagnosed HIV infection who are virally suppressed to at least 80 percent.

# Understanding the HIV Care Continuum

JULY 2016

## Overview

Recent scientific advances have shown that antiretroviral therapy (ART) not only preserves the health of people living with HIV, but also dramatically lowers their risk of transmitting HIV to others by reducing the amount of virus in the body. These developments have transformed the nation's approach to HIV prevention. By ensuring that everyone with HIV is aware of their infection and receiving the treatment they need, we can sharply reduce new infections in the United States.

This vision is central to the [National HIV/AIDS Strategy](#), the nation's roadmap for addressing HIV (see sidebar) in the United States. It is also a core focus of CDC's [high-impact HIV prevention](#) strategy, which aims to achieve the greatest possible reductions in HIV infections by making sure that resources go to the regions, populations and prevention strategies where they will have the greatest impact. And it is backed by the [HIV Care Continuum Initiative](#), an effort launched by President Obama in 2013 to increase the impact of HIV diagnosis and care efforts.

To direct HIV prevention resources most effectively, CDC tracks the "HIV care continuum." The continuum is the series of steps from the time a person is diagnosed with HIV through the successful treatment of their infection with HIV medications. This fact sheet explains the various approaches and data used to develop the HIV care continuum, how it is used to improve outcomes for people living with HIV in the United States and how it helps guide the nation's response to HIV.

## What is the HIV Care Continuum?

The ultimate goal of HIV treatment is to achieve viral suppression, meaning the amount of HIV in the body is very low or undetectable. This is important for people with HIV to stay healthy, live longer and reduce their chances of passing HIV to others. Yet today in the United States, fewer than a third of people living with HIV have their virus suppressed.

*The HIV care continuum consists of several steps required to achieve viral suppression. Specifically, CDC tracks the proportion of people with HIV who are:*

- *Diagnosed with HIV infection*
- *Linked to care\**, meaning they visited a health care provider within:
  - 90 days after learning they were HIV positive (original NHAS measure)
  - 30 days after learning they were HIV positive (current NHAS 2020 measure)
- *Engaged or retained in care\*\**, meaning they received medical care for HIV infection
- *Virally suppressed*, meaning that their HIV "viral load" – the amount of HIV in the blood – is at a very low level

\* Linked to care is calculated differently from other steps in the continuum, and cannot be directly compared to other steps. See Table 1 on page 4 for details. \*\* Based on the different ways to monitor the continuum, people with HIV in care are measured either as those "engaged in care" or "retained in care." See Table 1 on page 4 for details.

## National HIV Prevention Objectives on HIV Diagnosis and Care

The National HIV/AIDS Strategy, released in 2010 and updated to 2020, includes several specific indicators related to early HIV diagnosis and effective care, including:

- Increasing the number of HIV-positive individuals aware of their status
- Increasing the proportion of newly diagnosed individuals who are linked to care within one month
- Increasing the proportion of HIV-diagnosed individuals whose virus is effectively suppressed

National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention  
Division of HIV/AIDS Prevention



## Two Ways to Monitor the Continuum

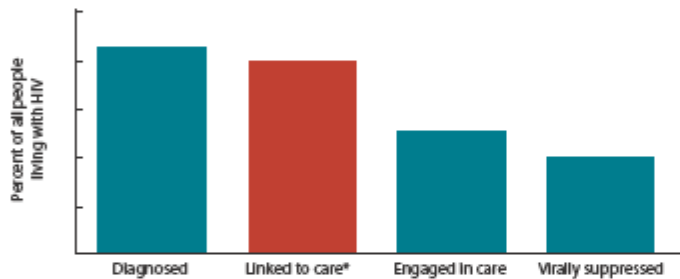
CDC currently uses two different approaches to monitor the HIV care continuum. The two approaches are used for different purposes, but both are essential to monitor the nation's progress and identify key HIV prevention and care needs.

The major difference between the two approaches is that they have different denominators. That is, they measure progress among different groups of people living with HIV:

*The **prevalence-based HIV care continuum** describes the number of people who are at each step of the continuum as a percentage of the total number of people living with HIV (known as HIV prevalence). Prevalence includes both people whose infection has been diagnosed and those who are infected but don't know it.*

This approach is used to examine the care continuum among all Americans living with HIV. For illustrative purposes, see Figure 1. It can also monitor outcomes for broad populations, such as African Americans or men who have sex with men (MSM). However, because of certain statistical limitations, this continuum does not provide more segmented analyses within those populations, such as young black MSM.

**Figure 1: Illustration of a Prevalence-Based HIV Care Continuum**

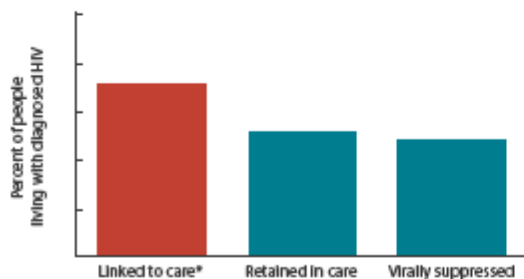


\* Linkage to care is calculated differently from other steps in the continuum, and cannot be directly compared to other steps. See Table 1 on page 4 for details.

*The **diagnosis-based HIV care continuum** shows each step as a percentage of the number of people living with diagnosed HIV.*

This approach gives us more detailed information about persons who are diagnosed with HIV and provides a way to look at the continuum within subgroups of affected populations, for example young black MSM. For illustrative purposes, see Figure 2.

**Figure 2: Illustration of a Diagnosis-Based HIV Care Continuum**



\* Linkage to care is calculated differently from other steps in the continuum, and cannot be directly compared to other steps. See Table 1 on page 4 for details.



## How CDC Develops the Continuum

The data for both the prevalence- and diagnosis-based continuum of care approaches come primarily from two CDC HIV surveillance systems:

- **The National HIV Surveillance System (NHSS)** provides a range of information on people who are diagnosed or have died with HIV from every U.S. state and territory and the District of Columbia (D.C.), including race, route of transmission and age. The data are reported to CDC by state and local health departments. This is the source of data for both the prevalence and diagnosis denominators. Data from the states and D.C. that have complete laboratory reporting can also be used to calculate some measures of the continuum.
- **The Medical Monitoring Project (MMP)** is a CDC partnership with state and local health departments to gather information about the experiences of people receiving HIV care and the outcomes of their treatment. It offers data on the number of people receiving care, the number prescribed ART, the number who are virally suppressed, and other useful information.

Different steps, or “bars,” within a single continuum come from different sources of data. Also, not all steps in the care continuum are necessarily dependent on the previous step. For additional details on how these data sources are used in the two continuum approaches, see Table 1 below. A third approach, called “The Selected National HIV Prevention and Care Outcomes,” is an approach that is used to monitor progress toward the goals of NHAS 2020. For more information, please see <http://www.cdc.gov/hiv/pdf/library/factsheets/cdc-hiv-national-hiv-care-outcomes.pdf>. Ways of presenting HIV care outcomes will continue to evolve over time as better and more complete data become available.

### Different Approaches for Different Needs

While CDC’s current approaches draw on the best data available, **there is no single way** to develop the HIV care continuum.

To select the right data sources and decide how to present them, it is **important to know how the continuum will be used**. For example, some federal agencies focus primarily on the later steps of the continuum; for them, it can be useful to examine those steps as a proportion of people in care for HIV infection.

Ways of presenting the continuum will also **continue to evolve over time**, as better and more complete data become available.

## How the Continuum Is Used to Monitor Progress and Identify Needs

CDC is undertaking many initiatives to improve outcomes at every stage of the HIV care continuum, including:

- **Directly funding health departments and community-based organizations (CBOs)** – to increase HIV testing, improve linkages to care and increase treatment for communities bearing the greatest HIV burden.
- **Providing technical assistance** – to help CBOs develop the tools and skills to successfully implement effective HIV prevention activities for people living with HIV in their communities.
- **Improving surveillance capability and technology** – to leverage advances in HIV treatment and care and improve HIV care continuum outcomes at the state and local levels, and to assist states with improving completeness of laboratory data that are needed to assess some of the steps in the HIV Care Continuum and the Selected National HIV Prevention and Care Outcomes.
- **Researching new approaches** – including studies of clinical, behavioral and structural interventions to help people with HIV stay in care and adhere to their medications.
- **Developing guidelines** – to support training for health care providers on HIV testing, care, treatment, and prevention.
- **Launching educational campaigns** – to help health care providers integrate simple prevention approaches into routine care for people living with HIV.

**Table 1: Calculating the Continuum: CDC's Current Data Sources, Step by Step**

Continuum Step	Data Sources & Definitions	
	Prevalence-Based Continuum	Diagnosis-Based Continuum
<b>HIV Prevalence</b> <i>(denominator for prevalence-based continuum)</i>	CDC estimates the total number of people living with HIV – whether diagnosed or not – through statistical modeling using NHSS data from all U.S. states and the District of Columbia.	Prevalence data not included.
<b>Diagnosed with HIV Infection</b> <i>(denominator for diagnosis-based continuum)</i>	Calculated as part of the HIV prevalence estimate above.	NHSS data are used to estimate the number of people currently diagnosed and living with HIV.
<b>Linked to Care</b>	<p>Measures the percentage of people <i>diagnosed with HIV in a given calendar year</i> who had one or more documented viral load or CD4 test <i>within 90 days of diagnosis</i>. Calculated using NHSS data from states and D.C. that have complete laboratory reporting. The NHAS 2020 indicator has changed to linkage within 30 days of diagnosis; consequently, the 30 day linkage measure is the linkage measure that will be monitored.</p> <p>Because this measure is limited to people diagnosed only in a single year, it cannot be directly compared to other steps in the continuum. It is also important to note that an individual who enters care more than 90 days after diagnosis may still be included in subsequent steps of the continuum, but would not be counted as "linked to care."</p>	
<b>Engaged or Retained in Care</b>	MMP data are used to estimate those "engaged in care," measured as the percentage of people living with HIV who had at least one HIV medical care visit during the survey's sampling period. NHSS data from states and D.C. that have complete laboratory reporting can also be used to determine "in care" and "retained in care."	NHSS data from states and D.C. with complete reporting of CD4 and viral load test results are used to estimate those "retained in care," measured as the percentage of diagnosed individuals who had two or more documented viral load or CD4+ tests, performed at least three months apart.
<b>Viral Suppression</b>	MMP data are used to estimate the number and percentage of people receiving medical care and whose most recent HIV viral load was less than 200 copies/mL. NHSS data from states and D.C. that have complete laboratory reporting can also be used to determine viral suppression.	

Figure 2



2016 Florida Statue 381.004 HIV Testing

(1) DEFINITIONS.—As used in this section:

(a) “Health care setting” means a setting devoted to the diagnosis and care of persons or the provision of medical services to persons, such as county health department clinics, hospitals, urgent care clinics, substance abuse treatment clinics, primary care settings, community clinics, blood banks, mobile medical clinics, and correctional health care facilities.

(b) “HIV test” means a test ordered after July 6, 1988, to determine the presence of the antibody or antigen to human immunodeficiency virus or the presence of human immunodeficiency virus infection.

(c) “HIV test result” means a laboratory report of a human immunodeficiency virus test result entered into a medical record on or after July 6, 1988, or any report or notation in a medical record of a laboratory report of a human immunodeficiency virus test. The term does not include test results reported to a health care provider by a patient.

(d) “Nonhealth care setting” means a site that conducts HIV testing for the sole purpose of identifying HIV infection. Such setting does not provide medical treatment but may include community-based organizations, outreach settings, county health department HIV testing programs, and mobile vans.

(e) “Preliminary HIV test” means an antibody or antibody-antigen screening test, such as the immunosorbent assays (IA), or a rapid test approved by the United States Food and Drug Administration.

(f) “Significant exposure” means:

1. Exposure to blood or body fluids through needlestick, instruments, or sharps;
2. Exposure of mucous membranes to visible blood or body fluids to which universal precautions apply according to the National Centers for Disease Control and Prevention, including, without limitations, the following body fluids:

- a. Blood.
- b. Semen.
- c. Vaginal secretions.

- d. Cerebrospinal fluid (CSF).
- e. Synovial fluid.
- f. Pleural fluid.
- g. Peritoneal fluid.
- h. Pericardial fluid.
- i. Amniotic fluid.
- j. Laboratory specimens that contain HIV (e.g., suspensions of concentrated virus); or

3. Exposure of skin to visible blood or body fluids, especially when the exposed skin is chapped, abraded, or afflicted with dermatitis or the contact is prolonged or involving an extensive area.

(g) “Test subject” or “subject of the test” means the person upon whom an HIV test is performed, or the person who has legal authority to make health care decisions for the test subject.

**(2) HUMAN IMMUNODEFICIENCY VIRUS TESTING; INFORMED CONSENT; RESULTS; COUNSELING; CONFIDENTIALITY.—**

(a) Before performing an HIV test:

1. In a health care setting, the person to be tested shall be notified orally or in writing that the test is planned and that he or she has the right to decline the test. If the person to be tested declines the test, such decision shall be documented in the medical record. A person who has signed a general consent form for medical care is not required to sign or otherwise provide a separate consent for an HIV test during the period in which the general consent form is in effect.

2. In a nonhealth care setting, a provider shall obtain the informed consent of the person upon whom the test is to be performed. Informed consent shall be preceded by an explanation of the right to confidential treatment of information identifying the subject of the test and the results of the test as provided by law.

The test subject shall also be informed that a positive HIV test result will be reported to the county health department with sufficient information to identify the test subject and of the availability and location of sites at which anonymous testing is performed. As required in paragraph (3)(c), each county health department shall maintain a list of sites at which anonymous testing is performed, including the locations, telephone numbers, and hours of operation of the sites.



(b) Except as provided in paragraph (h), informed consent must be obtained from a legal guardian or other person authorized by law if the person:

1. Is not competent, is incapacitated, or is otherwise unable to make an informed judgment; or
2. Has not reached the age of majority, except as provided in s. [384.30](#).

(c) The person ordering the test or that person's designee shall ensure that all reasonable efforts are made to notify the test subject of his or her test result. Notification of a person with a positive test result shall include information on the availability of appropriate medical and support services, on the importance of notifying partners who may have been exposed, and on preventing transmission of HIV. Notification of a person with a negative test result shall include, as appropriate, information on preventing the transmission of HIV. When testing occurs in a hospital emergency department, detention facility, or other facility and the test subject has been released before being notified of positive test results, informing the county health department for that department to notify the test subject fulfills this responsibility.

(d) A positive preliminary test result may not be revealed to any person except in the following situations:

1. Preliminary test results may be released to licensed physicians or the medical or nonmedical personnel subject to the significant exposure for purposes of subparagraphs (h)10., 11., and 12.
2. Preliminary test results may be released to health care providers and to the person tested when decisions about medical care or treatment of, or recommendation to, the person tested and, in the case of an intrapartum or postpartum woman, when care, treatment, or recommendations regarding her newborn, cannot await the results of confirmatory testing. Positive preliminary HIV test results may not be characterized to the patient as a diagnosis of HIV infection. Justification for the use of preliminary test results must be documented in the medical record by the health care provider who ordered the test.
3. The results of rapid testing technologies shall be considered preliminary and may be released in accordance with the manufacturer's instructions as approved by the federal Food and Drug Administration.
4. Corroborating or confirmatory testing must be conducted as followup to a positive preliminary test. Results shall be communicated to the patient according to statute regardless of

the outcome. Except as provided in this section, test results are confidential and exempt from the provisions of s.[119.07](#)(1).

(e) Except as provided in this section, the identity of any person upon whom a test has been performed and test results are confidential and exempt from the provisions of s. [119.07](#)(1). No person who has obtained or has knowledge of a test result pursuant to this section may disclose or be compelled to disclose the identity of any person upon whom a test is performed, or the results of such a test in a manner which permits identification of the subject of the test, except to the following persons:

1. The subject of the test or the subject's legally authorized representative.
2. Any person, including third-party payors, designated in a legally effective release of the test results executed prior to or after the test by the subject of the test or the subject's legally authorized representative. The test subject may in writing authorize the disclosure of the test subject's HIV test results to third party payors, who need not be specifically identified, and to other persons to whom the test subject subsequently issues a general release of medical information. A general release without such prior written authorization is not sufficient to release HIV test results.
3. An authorized agent or employee of a health facility or health care provider if the health facility or health care provider itself is authorized to obtain the test results, the agent or employee participates in the administration or provision of patient care or handles or processes specimens of body fluids or tissues, and the agent or employee has a need to know such information. The department shall adopt a rule defining which persons have a need to know pursuant to this subparagraph.
4. Health care providers consulting between themselves or with health care facilities to determine diagnosis and treatment. For purposes of this subparagraph, health care providers shall include licensed health care professionals employed by or associated with state, county, or municipal detention facilities when such health care professionals are acting exclusively for the purpose of providing diagnoses or treatment of persons in the custody of such facilities.
5. The department, in accordance with rules for reporting and controlling the spread of disease, as otherwise provided by state law.
6. A health facility or health care provider which procures, processes, distributes, or uses:
  - a. A human body part from a deceased person, with respect to medical information regarding that person; or

- b. Semen provided prior to July 6, 1988, for the purpose of artificial insemination.
7. Health facility staff committees, for the purposes of conducting program monitoring, program evaluation, or service reviews pursuant to chapters 395 and 766.
8. Authorized medical or epidemiological researchers who may not further disclose any identifying characteristics or information.
9. A person allowed access by a court order which is issued in compliance with the following provisions:
  - a. No court of this state shall issue such order unless the court finds that the person seeking the test results has demonstrated a compelling need for the test results which cannot be accommodated by other means. In assessing compelling need, the court shall weigh the need for disclosure against the privacy interest of the test subject and the public interest which may be disserved by disclosure which deters blood, organ, and semen donation and future human immunodeficiency virus-related testing or which may lead to discrimination. This paragraph shall not apply to blood bank donor records.
  - b. Pleadings pertaining to disclosure of test results shall substitute a pseudonym for the true name of the subject of the test. The disclosure to the parties of the subject's true name shall be communicated confidentially in documents not filed with the court.
  - c. Before granting any such order, the court shall provide the individual whose test result is in question with notice and a reasonable opportunity to participate in the proceedings if he or she is not already a party.
  - d. Court proceedings as to disclosure of test results shall be conducted in camera, unless the subject of the test agrees to a hearing in open court or unless the court determines that a public hearing is necessary to the public interest and the proper administration of justice.
  - e. Upon the issuance of an order to disclose test results, the court shall impose appropriate safeguards against unauthorized disclosure which shall specify the persons who may have access to the information, the purposes for which the information shall be used, and appropriate prohibitions on future disclosure.
10. A person allowed access by order of a judge of compensation claims of the Division of Administrative Hearings. A judge of compensation claims shall not issue such order unless he or she finds that the person seeking the test results has demonstrated a compelling need for the test results which cannot be accommodated by other means.



11. Those employees of the department or of child-placing or child-caring agencies or of family foster homes, licensed pursuant to s. [409.175](#), who are directly involved in the placement, care, control, or custody of such test subject and who have a need to know such information; adoptive parents of such test subject; or any adult custodian, any adult relative, or any person responsible for the child's welfare, if the test subject was not tested under subparagraph (b)2. and if a reasonable attempt has been made to locate and inform the legal guardian of a test result. The department shall adopt a rule to implement this subparagraph.

12. Those employees of residential facilities or of community-based care programs that care for developmentally disabled persons, pursuant to chapter 393, who are directly involved in the care, control, or custody of such test subject and who have a need to know such information.

13. A health care provider involved in the delivery of a child can note the mother's HIV test results in the child's medical record.

14. Medical personnel or nonmedical personnel who have been subject to a significant exposure during the course of medical practice or in the performance of professional duties, or individuals who are the subject of the significant exposure as provided in subparagraphs (h)10.-12.

15. The medical examiner shall disclose positive HIV test results to the department in accordance with rules for reporting and controlling the spread of disease.

(f) Except as provided in this section, the identity of a person upon whom a test has been performed is confidential and exempt from the provisions of s. [119.07\(1\)](#). No person to whom the results of a test have been disclosed may disclose the test results to another person except as authorized by this subsection and by ss. [951.27](#) and [960.003](#). Whenever disclosure is made pursuant to this subsection, it shall be accompanied by a statement in writing which includes the following or substantially similar language: "This information has been disclosed to you from records whose confidentiality is protected by state law. State law prohibits you from making any further disclosure of such information without the specific written consent of the person to whom such information pertains, or as otherwise permitted by state law. A general authorization for the release of medical or other information is NOT sufficient for this purpose." An oral disclosure shall be accompanied by oral notice and followed by a written notice within 10 days, except that this notice shall not be required for disclosures made pursuant to subparagraphs (e)3. and 4.

(g) Human immunodeficiency virus test results contained in the medical records of a hospital licensed under chapter 395 may be released in accordance with s. [395.3025](#) without being subject to subparagraph (e)2., subparagraph (e)9., or paragraph (f).

(h) Paragraph (a) does not apply:

1. When testing for sexually transmissible diseases is required by state or federal law, or by rule, including the following situations:

a. HIV testing pursuant to s. [796.08](#) of persons convicted of prostitution or of procuring another to commit prostitution.

b. HIV testing of inmates pursuant to s. [945.355](#) before their release from prison by reason of parole, accumulation of gain-time credits, or expiration of sentence.

c. Testing for HIV by a medical examiner in accordance with s. [406.11](#).

d. HIV testing of pregnant women pursuant to s. [384.31](#).

2. To those exceptions provided for blood, plasma, organs, skin, semen, or other human tissue pursuant to s. [381.0041](#).

3. For the performance of an HIV-related test by licensed medical personnel in bona fide medical emergencies if the test results are necessary for medical diagnostic purposes to provide appropriate emergency care or treatment to the person being tested and the patient is unable to consent, as supported by documentation in the medical record. Notification of test results in accordance with paragraph (c) is required.

4. For the performance of an HIV-related test by licensed medical personnel for medical diagnosis of acute illness where, in the opinion of the attending physician, providing notification would be detrimental to the patient, as supported by documentation in the medical record, and the test results are necessary for medical diagnostic purposes to provide appropriate care or treatment to the person being tested. Notification of test results in accordance with paragraph (c) is required if it would not be detrimental to the patient. This subparagraph does not authorize the routine testing of patients for HIV infection without notification.

5. If HIV testing is performed as part of an autopsy for which consent was obtained pursuant to s. [872.04](#).

6. For the performance of an HIV test upon a defendant pursuant to the victim's request in a prosecution for any type of sexual battery where a blood sample is taken from the defendant voluntarily, pursuant to court order for any purpose, or pursuant to s. [775.0877](#), s. [951.27](#), or

s. [960.003](#); however, the results of an HIV test performed shall be disclosed solely to the victim and the defendant, except as provided in ss. [775.0877](#), [951.27](#), and [960.003](#).

7. If an HIV test is mandated by court order.

8. For epidemiological research pursuant to s. [381.0031](#), for research consistent with institutional review boards created by 45 C.F.R. part 46, or for the performance of an HIV-related test for the purpose of research, if the testing is performed in a manner by which the identity of the test subject is not known and may not be retrieved by the researcher.

9. If human tissue is collected lawfully without the consent of the donor for corneal removal as authorized by s. [765.5185](#) or enucleation of the eyes as authorized by s. [765.519](#).

10. For the performance of an HIV test upon an individual who comes into contact with medical personnel in such a way that a significant exposure has occurred during the course of employment, within the scope of practice, or during the course of providing emergency medical assistance to the individual. The term “medical personnel” includes a licensed or certified health care professional; an employee of a health care professional or health care facility; employees of a laboratory licensed under chapter 483; personnel of a blood bank or plasma center; a medical student or other student who is receiving training as a health care professional at a health care facility; and a paramedic or emergency medical technician certified by the department to perform life-support procedures under s. [401.23](#).

a. The occurrence of a significant exposure shall be documented by medical personnel under the supervision of a licensed physician and recorded only in the personnel record of the medical personnel.

b. Costs of an HIV test shall be borne by the medical personnel or the employer of the medical personnel. However, costs of testing or treatment not directly related to the initial HIV tests or costs of subsequent testing or treatment may not be borne by the medical personnel or the employer of the medical personnel.

c. In order to use the provisions of this subparagraph, the medical personnel must be tested for HIV pursuant to this section or provide the results of an HIV test taken within 6 months before the significant exposure if such test results are negative.

d. A person who receives the results of an HIV test pursuant to this subparagraph shall maintain the confidentiality of the information received and of the persons tested. Such confidential information is exempt from s. [119.07](#)(1).

e. If the source of the exposure is not available and will not voluntarily present himself or herself to a health facility to be tested for HIV, the medical personnel or the employer of such person acting on behalf of the employee may seek a court order directing the source of the exposure to submit to HIV testing. A sworn statement by a physician licensed under chapter 458 or chapter 459 that a significant exposure has occurred and that, in the physician's medical judgment, testing is medically necessary to determine the course of treatment constitutes probable cause for the issuance of an order by the court. The results of the test shall be released to the source of the exposure and to the person who experienced the exposure.

11. For the performance of an HIV test upon an individual who comes into contact with nonmedical personnel in such a way that a significant exposure has occurred while the nonmedical personnel provides emergency medical assistance during a medical emergency. For the purposes of this subparagraph, a medical emergency means an emergency medical condition outside of a hospital or health care facility that provides physician care. The test may be performed only during the course of treatment for the medical emergency.

a. The occurrence of a significant exposure shall be documented by medical personnel under the supervision of a licensed physician and recorded in the medical record of the nonmedical personnel.

b. Costs of any HIV test shall be borne by the nonmedical personnel or the employer of the nonmedical personnel. However, costs of testing or treatment not directly related to the initial HIV tests or costs of subsequent testing or treatment may not be borne by the nonmedical personnel or the employer of the nonmedical personnel.

c. In order to use the provisions of this subparagraph, the nonmedical personnel shall be tested for HIV pursuant to this section or shall provide the results of an HIV test taken within 6 months before the significant exposure if such test results are negative.

d. A person who receives the results of an HIV test pursuant to this subparagraph shall maintain the confidentiality of the information received and of the persons tested. Such confidential information is exempt from s. [119.07\(1\)](#).

e. If the source of the exposure is not available and will not voluntarily present himself or herself to a health facility to be tested for HIV, the nonmedical personnel or the employer of the nonmedical personnel acting on behalf of the employee may seek a court order directing the source of the exposure to submit to HIV testing. A sworn statement by a physician licensed under chapter 458 or chapter 459 that a significant exposure has occurred and that, in the physician's medical judgment, testing is medically necessary to determine the course of

treatment constitutes probable cause for the issuance of an order by the court. The results of the test shall be released to the source of the exposure and to the person who experienced the exposure.

12. For the performance of an HIV test by the medical examiner or attending physician upon an individual who expired or could not be resuscitated while receiving emergency medical assistance or care and who was the source of a significant exposure to medical or nonmedical personnel providing such assistance or care.

a. HIV testing may be conducted only after appropriate medical personnel under the supervision of a licensed physician documents in the medical record of the medical personnel or nonmedical personnel that there has been a significant exposure and that, in accordance with the written protocols based on the National Centers for Disease Control and Prevention guidelines on HIV postexposure prophylaxis and in the physician's medical judgment, the information is medically necessary to determine the course of treatment for the medical personnel or nonmedical personnel.

b. Costs of an HIV test performed under this subparagraph may not be charged to the deceased or to the family of the deceased person.

c. For this subparagraph to be applicable, the medical personnel or nonmedical personnel must be tested for HIV under this section or must provide the results of an HIV test taken within 6 months before the significant exposure if such test results are negative.

d. A person who receives the results of an HIV test pursuant to this subparagraph shall comply with paragraph (e).

13. For the performance of an HIV-related test medically indicated by licensed medical personnel for medical diagnosis of a hospitalized infant as necessary to provide appropriate care and treatment of the infant if, after a reasonable attempt, a parent cannot be contacted to provide consent. The medical records of the infant must reflect the reason consent of the parent was not initially obtained. Test results shall be provided to the parent when the parent is located.

14. For the performance of HIV testing conducted to monitor the clinical progress of a patient previously diagnosed to be HIV positive.

15. For the performance of repeated HIV testing conducted to monitor possible conversion from a significant exposure.

(3) COUNTY HEALTH DEPARTMENT NETWORK OF VOLUNTARY HUMAN IMMUNODEFICIENCY VIRUS TESTING PROGRAMS.—

(a) The Department of Health shall establish a network of voluntary human immunodeficiency virus testing programs in every county in the state. These programs shall be conducted in each health department established under the provisions of part I of chapter 154. Additional programs may be contracted to other private providers to the extent that finances permit and local circumstances dictate.

(b) Each county health department shall have the ability to provide counseling and testing for human immunodeficiency virus to each patient who receives services and shall offer such testing on a voluntary basis to each patient who presents himself or herself for services in a public health program designated by the State Health Officer by rule.

(c) Each county health department shall provide a program of counseling and testing for human immunodeficiency virus infection, on both an anonymous and confidential basis. Counseling provided to a patient tested on both an anonymous and confidential basis shall include informing the patient of the availability of partner-notification services, the benefits of such services, and the confidentiality protections available as part of such services. The Department of Health or its designated agent shall continue to provide for anonymous testing through an alternative testing site program with sites throughout all areas of the state. Each county health department shall maintain a list of anonymous testing sites. The list shall include the locations, phone numbers, and hours of operation of the sites and shall be disseminated to all persons and programs offering human immunodeficiency virus testing within the service area of the county health department, including physicians licensed under chapter 458 or chapter 459. Except as provided in this section, the identity of a person upon whom a test has been performed and test results are confidential and exempt from the provisions of s. [119.07](#)(1).

(d) The result of a serologic test conducted under the auspices of the Department of Health shall not be used to determine if a person may be insured for disability, health, or life insurance or to screen or determine suitability for, or to discharge a person from, employment. Any person who violates the provisions of this subsection is guilty of a misdemeanor of the first degree, punishable as provided in s. [775.082](#) or s. [775.083](#).

(4) HUMAN IMMUNODEFICIENCY VIRUS TESTING REQUIREMENTS; REGISTRATION WITH THE DEPARTMENT OF HEALTH; EXEMPTIONS FROM REGISTRATION.—No county health department and no other person in this state shall conduct or hold themselves out to the public as conducting a testing program for acquired immune

deficiency syndrome or human immunodeficiency virus status without first registering with the Department of Health, reregistering each year, complying with all other applicable provisions of state law, and meeting the following requirements:

(a) The program must be directed by a person with a minimum number of contact hours of experience in the counseling of persons with acquired immune deficiency syndrome or human immunodeficiency virus infection, as established by the Department of Health by rule.

(b) The program must have all medical care supervised by a physician licensed under the provisions of chapter 458 or chapter 459.

(c) The program shall have all laboratory procedures performed in a laboratory licensed under the provisions of chapter 483.

(d) The program must meet all of the requirements in subsection (2).

(e) The program must provide the opportunity for pretest counseling on the meaning of a test for human immunodeficiency virus, including medical indications for the test; the possibility of false positive or false negative results; the potential need for confirmatory testing; the potential social, medical, and economic consequences of a positive test result; and the need to eliminate high-risk behavior.

(f) The program must provide supplemental corroborative testing on all positive test results before the results of any positive test are provided to the patient. Except as provided in this section, the identity of any person upon whom a test has been performed and test results are confidential and exempt from the provisions of s. [119.07](#)(1).

(g) The program must provide the opportunity for face-to-face posttest counseling on the meaning of the test results; the possible need for additional testing; the social, medical, and economic consequences of a positive test result; and the need to eliminate behavior which might spread the disease to others.

(h) Each person providing posttest counseling to a patient with a positive test result shall receive specialized training, to be specified by rule of the department, about the special needs of persons with positive results, including recognition of possible suicidal behavior, and shall refer the patient for further health and social services as appropriate.

(i) When services are provided for a charge during pretest counseling, testing, supplemental testing, and posttest counseling, the program must provide a complete list of all such charges to the patient and the Department of Health.

(j) Nothing in this subsection shall be construed to require a facility licensed under chapter 395 or chapter 483 or a person licensed under the provisions of chapter 457, chapter 458, chapter 459, chapter 460, chapter 461, chapter 466, or chapter 467 to register with the Department of Health and comply with the requirements of this subsection if the testing program is part of routine medical care or if the facility or person does not advertise to the general public that the facility or person conducts testing programs for human immunodeficiency virus infection or specializes in such testing.

(k) The department shall deny, suspend, or revoke the registration of any person or agency that violates this section, or any rule adopted under this section, constituting an emergency affecting the immediate health, safety, and welfare of a person receiving service.

(5) PENALTIES.—

(a) Any violation of this section by a facility or licensed health care provider shall be a ground for disciplinary action contained in the facility's or professional's respective licensing chapter.

(b) Any person who violates the confidentiality provisions of this section and s. [951.27](#) commits a misdemeanor of the first degree, punishable as provided in s. [775.082](#) or s. [775.083](#).

(c) Any person who obtains information that identifies an individual who has a sexually transmissible disease including human immunodeficiency virus or acquired immunodeficiency syndrome, who knew or should have known the nature of the information and maliciously, or for monetary gain, disseminates this information or otherwise makes this information known to any other person, except by providing it either to a physician or nurse employed by the department or to a law enforcement agency, commits a felony of the third degree, punishable as provided in s. [775.082](#) or s. [775.083](#).

(6) EXEMPTIONS.—Except as provided in paragraph (3)(d) and ss. [627.429](#) and [641.3007](#), insurers and others participating in activities related to the insurance application and underwriting process shall be exempt from this section.

(7) MODEL PROTOCOL FOR COUNSELING AND TESTING FOR HUMAN IMMUNODEFICIENCY VIRUS.—The Department of Health shall develop, by rule, a model protocol consistent with the provisions of this section for counseling and testing persons for the human immunodeficiency virus. The protocol shall include criteria for evaluating a patient's risk for human immunodeficiency virus infection and for offering human immunodeficiency virus



testing, on a voluntary basis, as a routine part of primary health care or admission to a health care facility. The Department of Health shall ensure that the protocols developed under this section are made available to health care providers.

(8) FEES.—

(a) Each person or private organization registered as an AIDS or HIV testing site shall pay the department a fee which shall be set by rule of the department.

(b) Fees established pursuant to paragraph (a) shall be an amount sufficient to meet all costs incurred by the department in carrying out its registration, data collection, complaint monitoring, and administrative responsibilities under this section, for all private AIDS or HIV testing sites, but shall not exceed \$100.

(c) No other fees shall be charged by other governmental agencies for these purposes.

(9) RULES.—The Department of Health may adopt rules to implement this section, including definitions of terms, procedures for accessing confidential information, requirements for testing, and requirements for registered testing sites.

(10) TESTING AS A CONDITION OF TREATMENT OR ADMISSION.—

(a) It is unlawful for any facility the operation of which, or for any person engaged in an occupation the practice of which, requires a license by the Agency for Health Care Administration, the Department of Health, or the Department of Business and Professional Regulation, to require any person to take or submit to a human immunodeficiency virus-related test as a condition of admission to any such facility or as a condition of purchasing or obtaining any service or product for which the license is required. This subsection shall not be construed to prohibit any physician in good faith from declining to provide a particular treatment requested by a patient if the appropriateness of that treatment can only be determined through a human immunodeficiency virus-related test.

(b) The Agency for Health Care Administration, the Department of Health, and the Department of Business and Professional Regulation shall adopt rules implementing this subsection.

(c) Any violation of this subsection or the rules implementing it shall be punishable as provided in subsection (5).

## **Table of Contents**

Purpose .....	
Objectives .....	
Conceptual Background .....	
Learner Preparation .....	
Facilitation Schema .....	
Readiness Assurance Test (RAT)	
Facilitation Guide.....	
RAT Items.....	
Application Exercise	
Application Exercise Question.....	
Facilitation Guide .....	
Discussion Points .....	
Appendix:	
Team-Based Learning Handout.....	
Appeals Form .....	

### **Purpose**

After preparatory readings, health professions students from multiple health colleges will actively engage in inter-professional dialogue related to contemporary issues associated with HIV/AIDS in the United States.

### **Objectives**

4. Given a problem scenario, individuals will collaborate as an interdisciplinary team to identify and examine the healthcare ecology of an HIV+ individual;
5. Teams will collaborate to analyze, evaluate and problem-solve within a specific patientcare scenario;
6. Teams will collaboratively appraise and justify approaches to enhancing patient-centered care associated with a specific patientcare scenario.

### **Conceptual Background**

We designed this team learning experience as a component of a large, required longitudinal interprofessional learning activity for first and second year students at University of Florida. An adapted team-based learning methodology was adopted as an instructional method based on its ability to promote discourse and involvement and to accommodate the limited number of faculty facilitators at our disposal. Team-Based Learning is a highly prescriptive process that must be implemented in a formulaic manner. A Team Based Learning Exercise consists of several components (Sibley & Spiridonoff, ND):

7. Pre-readings or assignments: Background materials foundational to the topic or subject associated with the learning experience.
8. Individual Readiness Assurance Test (IRAT): A graded multiple choice test or quiz that is taken individually, this test or quiz holds students accountable for the foundational knowledge associated with the pre-readings or assignments.
9. Team Readiness Assurance Test (TRAT): The same graded multiple choice test or quiz as the IRAT, this time taken as a team. An Immediate Feedback Assessment Technique (IF-AT) is used to score this component.
10. Appeals: Following the TRAT the facilitator encourages teams to appeal questions to which they did not receive full credit. This process encourages students to reengage with the pre-readings or assignments, reinforcing material that they may have found difficult.
11. Mini-Lecture/Review: A very brief review of basic concepts that were difficult for students.
12. Application Activity: This is where the majority of the time associated with this learning experience is focused. The activity is built in a manner that provides opportunities to provide feedback and reflection to each other, while engaging with each other and understanding diverse perspectives around the same problem or issue.

We strongly encourage individuals who have limited experience with Team-Based Learning to take the time to familiarize themselves with the method. More information, including instructional videos, on team-based learning can be found via the Team-Based Learning Collaborative (<http://www.teambasedlearning.org>).

### **Learner Preparation**

Prior to engagement in this activity, learners should be provided the following materials. A complete resource can be accessed here:

### **Facilitation Schema**

This material was developed as a three-hour learning experience; it is the two of three interprofessional learning experiences during the academic year. Each session will maintain a common theme: HIV/AIDS.

The IRAT consists of multiple choice questions answered on a quiz sheet. The TRAT consists of the same multiple choice questions. These questions should be answered on an IF-AT card

(Epstein Educational Enterprises). The Application Exercise consists of multiple interactive problem solving questions.

Rooms will be organized for the event prior to your arrival. In some instances, rooms may not be ideal for collaborative learning. We ask that facilitators understand and be creative.

#### Example Schedule of Events:

- 1:00 PM 15 min Welcome, overview of objectives, TBL and agenda
- 1:15 PM 10 min Individual Readiness Assurance Test
- 1:25 PM 15 min Group Readiness Assurance Test
- 1:40 PM 5 min Discussion of appeals process
- 1:50 PM 10 min Introduce application activity
- 2:00 PM 45 min Teams work through application activity
- 2:45 PM 20 min Discussion of application activity
- 3:05 PM 15 min Summary, review of objectives, open questions and answer

#### Implementation Advice Based on Lessons Learned:

7. Provide name tags for learners.
8. Implement an interactive icebreaker activity prior to beginning the “application exercise” (e.g., name their team). This is particularly useful when students have not worked together prior to this experience.
9. Specific instruction should be given to students to eliminate working ahead, or as an alternative, release each application exercise question as they are discussed. One method of doing this would be to print each application exercise question on a different colored sheet of paper.
10. Establish a website or learning management system (LMS) course shell for the experience. Host pre-reading materials and information about the exercise on the LMS. For learners who may be new to team-based learning, we recommend including links to the Team Based Learning Collaborative website and two helpful videos:  
<http://www.teambasedlearning.org>

<http://www.utexas.edu/academic/ctl/largeclasses/#tbl>

<http://www.youtube.com/watch?v=BIVPLYGdBLg>

11. Suggested talking points to introduce the activity:

Welcome: This is a collaborative, interprofessional team-based learning exercise that includes students from across the health science center.

Teams: Healthcare is delivered in interprofessional teams. The purpose of this experience is to allow you to work together as an interdisciplinary team to make decisions about complex problems related to healthcare.

Format: This experience will employ aspects of Team Based Learning. We will begin our learning experience by taking an individual readiness assurance test, followed by a team readiness assurance test. Both of these tests are based upon the pre-reading assignments. After we have completed these tests we will move to our application exercises.

### **Readiness Assurance Test**

#### **Readiness Assurance Test - Facilitation Guide**

The RAT is currently formatted for Epstein Education IF-AT form # B024.

IRAT instructions to learners: Learners will have a specific answer sheet to hand in, but should mark their answers on the question sheet as well, which they will keep. Having their answers in hand after turning in the official answer sheet will facilitate discussion during the TRAT portion below. Individuals should select the single BEST answer. At the end of the IRAT, one student from each team should collect all team answer sheets and take to the front of the room and place them in the manila envelope; all IRAT scores from the room will go in that one envelope. Once done, the team may begin the TRAT using the scratch-off sheet (15 minutes).

TRAT instructions to learners: The questions for the TRAT are exactly the same questions as the IRAT but are answered after discussion among the team. This is one way to introduce the scratch-offs to the students:

“Your next assignment is to discuss each question, one at a time, within your team and decide which one is the best answer. We are going to use the scratch off card to record your answer. If your team thinks A is the best answer scratch off A. If you scratch off A and find the star

(sometimes it is in the middle, other times it is on the right or left) your team receives 4 points. If you do not find a star and it is blank, discuss the answer again and choose another answer. If you scratch it off and find a star your team will receive 2 points. If you do not find a star discuss again and scratch off another answer. If you find a star you will receive 1 point. If you scratch off all the answers to find the star you will receive no points. Everyone on the team gets the same score on this test. This is still a closed book test. Does anyone have any questions?" Following the TRAT, a team member must bring the TRAT answer sheet to the front of the room where it should be placed in the same single manila envelope as the IRAT scores. We usually ask the teams how they scored, but there is not time to go into this in detail.

Questions about the correct answers should NOT be discussed in class; rather, we strongly recommend encouraging appeals. Following the collection of TRAT forms, facilitators can briefly introduce the appeals process, one way of phrasing it might be: "If you want to appeal an answer to a question, a detailed instruction sheet was given to you. The correct answers are based on the literature and readings assigned but if you feel it is incorrect after re-reading the assigned prereadings, please fill out the appeal sheet (Appendix). Please site your source and provide evidence from the literature to support your team answer. This is a team-based appeal."

Following the appeals process, it may be appropriate to conduct a mini-discussion to emphasize the concepts that are most problematic for students. Determining which concepts were difficult can be accomplished by grading quizzes while students are working on the TRAT or querying students as to which questions they struggled with both as individuals and as a group. It is highly recommended that this discussion be student-centered.

Please collect all of the IRAT and TRAT answer sheets from students. These answer sheets should be placed in the box that is at the front your room.

## **Individual and Team Readiness Assessment Test – GNV – B023**

### **Questions for IPLH Session 2 – BBDBDAACDBCAAB**

#### **To be determined**

#### **Last Time – Just in Case You Forgot About Morgan**

Morgan Rivera is a 29-year-old woman who presents to the Academic Health Center emergency room for a nonproductive cough, progressive shortness of breath (dyspnea) with exertion and fever of 101.6 for the last week. She is admitted to the hospital with a diagnosis of *Pneumocystis jirovecii* pneumonia (PCP).

The documentation in her medical record indicates she was hospitalized at the Academic Health Center four months ago for a compound (open) right radius and ulna fracture in her dominant arm/hand that required open reduction and internal fixation (ORIF) surgery. The note indicates her injury was a result of a “fall off her porch after several hours of partying with her friends.” A urine drug screen at the time of that hospitalization was positive for marijuana and cocaine. The chart does not indicate discussion regarding her drug use occurred in the hospital. It is written that Morgan was diagnosed with HIV infection at the time of her hospitalization because she was noted to have white plaques on her buccal mucosa (lining of her cheeks) consistent with oral candidiasis (thrush) during intubation for the surgical repair of her arm fracture. The chart also indicates large carious lesions in her back teeth and broken tooth; a referral to dentistry is suggested. Her lab workup at that time showed her CD4 count was 98 and HIV viral load was 78,000 (a ‘normal’ CD4 count for an individual who is not HIV+ is between 500 and 1600 cells/mm<sup>3</sup>, a CD4 count below 200 is indicative of significant risk for developing serious illness).

The chart notes antiretrovirals were not started in the hospital because Morgan lacked insurance and there was concern for how she would access these medications after discharge. Morgan was started on fluconazole for the thrush and oxycodone for pain from the surgery for the fracture. It appears she was not started on trimethoprim/sulfamethoxazole (Bactrim), a medication used to prevent PCP when CD4 counts are less than 200 or the patient presents with thrush. The patient care team associated with this hospitalization did not consult with the infectious disease team.

The discharge summary states that Morgan was discharged home with verbal and written instructions to call the local health department to initiate HIV care. Post-operative appointments with orthopedics were scheduled at the time and written on her discharge paperwork. There was no written referral to occupational and physical therapy for continued rehabilitation following the surgery on her dominant arm/hand.

At the time of hospitalization for PCP, the care team obtains additional past medical history from Morgan. She claims her health has been “pretty good” until recently. She reports she drinks four to five beers per day, “but I don’t touch that hard stuff”, smokes one to two blunts of marijuana per day and uses cocaine regularly. When pressed about the cocaine use, she states “about 1 rock about every other day – depends when I can get some.” When asked about her mental health, she responds that she has a longstanding history of depression – “I had a rough childhood and that’s been hard. My mama raised me by myself and she was addicted to crack

and had all sorts of bad boyfriends; they did some bad things to me.” When asked about the “bad things,” Morgan states that one of them raped her when she was nine, but “my mama didn’t believe me and said I must have led him on.” Morgan has three children, with her first pregnancy at age 14. “The kids spend most of the time with my grandmother; I’ve gotten in trouble with the kids because of my cocaine use.” Morgan tells the team she has no real income but sometimes gets money by selling cocaine and through prostitution.

The care team learns that Morgan kept her post-operative appointments with orthopedics, but she complains to the team she has trouble making a fist in her right hand. “It hurts and doesn’t seem very strong.” When asked to make a fist, the physician assistant on the care team notes that she has poor grip strength in that hand. The physician assistant asks if she has seen any one for occupational and physical therapy and Morgan shakes her head “no.” Morgan’s chart in the EMR indicates that she had multiple no-shows for scheduled appointments. When asked about these visits, Morgan explains that she doesn’t have reliable transportation, instead, relying on a friend who will sometimes let her use his car.

## **Case 2: Retention in Care**

Morgan Rivera was discharged from her second hospitalization with a letter of eligibility for Ryan White Services and to receive medications for the prevention of opportunistic infections and treatment of her HIV through Ryan White funded AIDS Drug Assistance Program (ADAP). She was referred to an interprofessional care team at a local private clinic specializing in HIV care and attended that visit. During the visit, she consented to and was started on a single tablet combination pill (Triumeq one tablet daily) for her HIV infection and was continued on chronic maintenance therapy (Bactrim) to prevent recurrence of PCP pneumonia that was started during her recent hospitalization. Because of the weakness and poor grip strength in her hand, the care team’s PT and OT members conducted an evaluation and proposed a treatment plan. A brief dental history at the time indicated she had not received dental care for nearly five years and an appointment was made for a dental exam.

Morgan returned for a follow-up appointment four weeks after starting the drug regimen. Her HIV viral load had decreased to 4,800 copies/mL which indicated acceptable initial response to treatment (1 log drop in HIV viral load). She was provided an appointment to return for labs in four weeks and return to clinic in six weeks. At that time, her viral load would be expected to be undetectable.

### **Instructions:**

Your interprofessional team is now meeting to discuss patients for the day’s clinic, including Morgan. As a team member, each of you has specific information about Morgan you have



learned from your care interactions with her. Please share your information with the team and as a team, please:

- 1) Complete the retention readiness document.
- 2) Write an SBAR (Situation, Background, Assessment, Recommendation) statement regarding Morgan based on the information you have and the plan you have developed.
- 3) Map Morgan's ecological factors using the CDC Ecological Model

### **Application Exercise - Facilitation Guide**

This application exercise was developed using Michaelson's 2008 Essential Elements of Team Based Learning as a framework, therefore it emphasizes the 4 S's: Significant, Same problem, Specific choice, Simultaneous report. We encourage the user to familiarize themselves with methods for Team Based Learning via the Team Based Learning Collaborative (<http://www.teambasedlearning.org>).

Following the brief discussion of appeals, students should be told to open the second folder and remove and distribute the activity instructions. Students should work in teams to complete their transitions worksheet and other materials. It would be reasonable to review the worksheet with your room after providing teams appropriate time to engage each other and answer questions to the best of their ability. A suggested sequence would be to explore where Morgan is succeeding and where there are challenges, it may be important to keep the HIV Care Continuum model in mind.

6. Diagnosis
7. Linkage to care
8. Engaged or retained in care
9. Prescribed antiretroviral treatment
10. Suppressed viral load

Reviewing and understanding students' priorities for Morgan's care would also be another opportunity for discussion. It is recommended that a discussion about patient-centered care be incorporated into the discussion. For example, discussing how patient-centered a care conference is without the patients' presence.

Students' ideas and solutions may be unfeasible or impractical, that is ok...the point is to get them to think about the disease and social determinants. Once completed each team's sheet should be turned in to you, the materials should be brought back to H5, or turned over to the IPE Office.

## **Facilitator Information**

Prior to coming to this IPLH session students, at random, each student in each team was provided some specific information about Morgan. Each student was only provided one piece of information. Student were not instructed on what to do with this information, they were only informed that Morgan shared the following with them:

**Student 1:** You know that Morgan did not show for her recent lab appointment which was scheduled two weeks prior to today. You are concerned about whether she has a suppressed viral load or is even taking her medications; you also have concerns regarding her overall health status.

**Student 2:** You learned that Morgan picked up her antiretroviral therapy once during the last two months. When you initially consented her for therapy, you asked her if she understood the importance of taking the medications and how to take them, and she replied “yes.”

**Student 3:** You know that Morgan did not show for her scheduled dental exam and cleaning appointment that was arranged by her case manager. You recall she had been very anxious about the appearance of her teeth at her first clinic appointment. She is afraid of dentists and knows she will likely need to have some teeth pulled.

**Student 4:** Morgan confided to you at her last clinic visit that she is having a very hard time dealing with her HIV diagnosis. She feels this is proof she has no value and she is being punished for the “bad stuff” she has been through in her life, starting with the rape at age nine by her mother’s boyfriend.

**Student 5:** You noticed during her last visit with you, Morgan had bruising on her arms and some on her face, covered up by make-up. When questioned about this, she insisted she just bumped into a door.

**Student 6:** Morgan told you during your last session together that her boyfriend has a “really bad temper” and acknowledged that sometimes their fights become physical. “Last month he punched me so hard I couldn’t hear well for a long time. My eyes got all blurry and I could barely walk. My ear still rings all the time.”

**Student 7:** Morgan states that she has lost five pounds because she is having a hard time preparing food due to her hand weakness. She is anxious about this but really doesn't want to ask for help because she is trying hard to be independent and strong.

**Student 8:** Morgan was quite excited and animated. She talked about the great relationship she has with her boyfriend who says he is thinking of buying her a car.

You'll note that some of the information related to Morgan's significant other is conflicting, this is purposeful. We want students to explore the complexities associated with domestic violence. You'll also note, based upon some of the information communicated, that there are some specific avenues that may be pursued or considered to enhance care and the relationship between patient and providers:

- Morgan had a difficult time picking up her ART medications, the provider querying her understanding of the importance of adherence accepted a yes/no response. Perhaps teach-back could have been incorporated? Perhaps there is a need for more comprehensive teaching about medication adherence?
- Morgan did not show up for her dental appointment and has revealed anxiety about going to the dentist. Could this have been anticipated?
- Exploration of Morgan's history of sexual trauma, approaching from a trauma-informed perspective.
- Exploration of disclosure/non-disclosure of domestic violence.
- Tinitis/hearing issues related to domestic violence issue.
- Weightloss and activities of daily living associated with loss of hand function.
- Self-perceptions as a "strong, independent" individual and self-care. How can we encourage Morgan to ask for assistance while still allowing her to maintain her independence?

### **Retention Readiness**

**IPLH Team Number:** \_\_\_\_\_

### **IPLH Team Members:**

Instructions: This Retention Readiness Indicator can be used by the HIV Treatment Team member for each new patient during or after the first visit to determine the patient's risk of falling out of care as well as the critical elements that may affect that patient's ability to remain in care. The tool can help identify in-depth assessments that should be completed, strategies that

the HIV Treatment Team may incorporate to support adherence to appointments, medication, and auxiliary services.

- Step 1: Identify the Treatment Team’s primary goals for this patient. These goals may depend on life circumstance, disease stage, experience in treatment, and anti-retroviral therapy (ART) use.
- Step 2: Identify the clinic procedures, programs, or protocols that would be most appropriate to implement with this patient – and those that might become potential barriers to patient retention.
- Step 3: Review your treatment plan and determine which individual factors need to be assessed more fully and addressed in the patient’s treatment plan. Determine if these issues are already assessed in existing intake forms or treatment questionnaires/documents administered by various providers working with the patient or if a full assessment should be conducted (e.g. a CES-D Scale, CAGE tool, or environmental assessment).
- Step 4: Identify priority steps to take with the patient to increase retention.

**I. Identify clinician’s current goals for patient “...poor engagement in care is associated with poor health outcomes, including increased mortality.”<sup>1</sup>**

<b>Desired Outcomes</b>	<b>Patient Has Achieved Outcome</b>	<b>Top Priority</b>	<b>Medium Priority</b>	<b>Low Priority</b>
Establish connection to HIV clinic				
Increase HIV care specific appointment adherence				
Increase secondary/co-occurring (e.g. non-HIV) appointment adherence				
Consent to and initiate ART				
Enhance ART adherence				
Reduce transmission risk acts				
Increase CD4 count (immune reconstitution)				
Viral load suppression				

Opportunistic infections management/prevention				
Other: (please describe)				

<sup>8</sup>Gardner, EM, McLees, MP, Steiner, JF, Del Rio, C, Burman, WJ. The Spectrum of Engagement in HIV Care and its Relevance to Test and Treat Strategies for Prevention of HIV Infection. Clinical Infection Disease 2011; 52(6): 793-800

**Write a concise statement that describes your goals for Ms. Rivera:**

**II. Determine the strategies relevant for patient to engage and remain in care:** “Participants who reported receiving any program service and feeling respected at their site of HIV care were significantly less likely to miss a visit.” <sup>2</sup>

<b>Components</b>	<b>Need to Try</b>	<b>Using Now</b>	<b>Implementation Could Result in a Potential Barrier</b>
<b>Clinic-Based Structures</b>			
Promote cultural competency framework			
Utilize appointment setting system			
Staff diversity mirrors patient diversity			
Access to healthcare interpreters			
Appointment reminders / contact between visits			
Obtain regular updates to patient contact information			
Provide convenient appointment times			

Initiate contact during time from initial call to first appointment				
Measure and track patient retention rates				
<b>Provider Approaches</b>				
Involve interprofessional team				
Utilize cross cultural communication strategies				
Identify individual health belief model of illness				
Identify potential health cross-cultural differences				
Provide follow-up written materials				
Have non-physician staff follow-up to answer questions				
Identify emotional barriers to care				
Identify circumstantial/contextual barriers care				
<b>Auxiliary Approaches</b>				
Case management				
Peer navigators				
Outreach				
Linkage to support services				
Support groups				
Peer educators				

<sup>2</sup> Christopoulos, KA, Das, M, Colfax, GN. Linkage and Retention in HIV Care among Men Who Have Sex with Men in the United States. Clinical Infection Disease 2011; 52(S2): S214-S222

**III. Culturally Competent Treatment Planning - Identify issues relevant to the patient retention:** “A successful connection to the HIV clinic must occur before patients can be retained in care over time. Patients may demonstrate cyclical pattern of being in and out of care.”<sup>3</sup>

<b>Components</b>	<b>Need to Address</b>	<b>Currently Addressed</b>	<b>Not an Issue</b>	<b>Comments</b>

<b>Personal</b>				
Social support system				
Coping/self-efficacy skills				
Emotional barriers to treatment				
Misconceptions about HIV and/or Treatment				
Lack of trust in health care system				
Lack of trust in healthcare providers				
Acceptance of HIV+ diagnosis				
Perception of HIV+ stigma				
Experiences with HIV+ stigma				
Perception of HIV risk				
Perception of sexism				
Perception of racism				
Perception of homophobia				
Language barriers				
Domestic abuse history				
Trauma history				
Incarceration history				
Immigration/migration status				
<b>Financial</b>				
Employment status				
Insurance status				
Transportation				
Child care				
Housing situation				

<b>Medical</b>				
Self-perceived health status				
Symptoms				
Viral load				
Disease stage				
Anti-retroviral therapy (ART)				
Multiple providers/Clinics				
<b>Co-existing conditions</b>				
Mental health				
Substance use				
Other sexually transmitted infection (STI)				
Other chronic disease				
Other prescription drugs				

**VI. Using the goals and checklists you have created in Steps I, II and III, identify three priority steps to take with Ms. Rivera in order to better retain her in care. Identify which professional, from amongst the members of your team, will be responsible for leading each of the identified steps and why this team member is best qualified to lead: “The quality of the patient-provider relationship may be one of the most important predictors of adherence, particularly among minority patients and women with HIV.”<sup>4</sup>**

1.

2.



3.

4 Stone, VE. Optimizing the Care of Minority Patients with HIV/AIDS. *Clinical Infection Disease* 2004; 38: 400-4

**Situation, Background, Assessment, Recommendation and Recommendation (SBAR):**

SBAR is a technique for communicating critical information that requires immediate attention and action and non-urgent attention and action concerning a patient, for example:

**Situation**—What is going on with the patient?

*"I am calling about Mrs. Jones in room 151. Her chief complaint is shortness of breath of new onset."*

**Background**—What is the clinical background or context?

*"Patient is a 62 year old female post-op day one from abdominal surgery. She has no prior history of cardiac or lung disease."*

**Assessment**—What do I think the problem is?

*"Breath sounds are decreased on the left side with acknowledgement of pain that is 7 out of 10. I would like to rule-out pneumothorax."*

**Recommendation and Request**—What would I do to correct it?

*"I think the patient should be assessed now. Can you come to room 151?"*

And, in this example, a non-acute SBAR:

**Situation**—What is going on with the patient?

*Mrs. Jones, a 62 year old patient is calling because she is coughing at night and cannot sleep because of the cough. Apart from a runny nose, the cough and being tired, she says she feels okay.*

**Background**—What is the clinical background or context?

*Mrs. Jones has a history of asthma and seasonal allergies, she was also recently widowed and has expressed concerns about living alone. During the last month she has been calling the clinic on a daily basis with concerns about her health.*

**Assessment**—What do I think the problem is?

*I think Mrs. Jones should come to the office to check her lung function.*

**Recommendation and Request**—What would I do to correct it?

In addition, I think we should try to find some community or mental/behavioral health resources to assist Ms. Jones, it is possible that she is frequently calling the clinic because she is grieving and lonely.

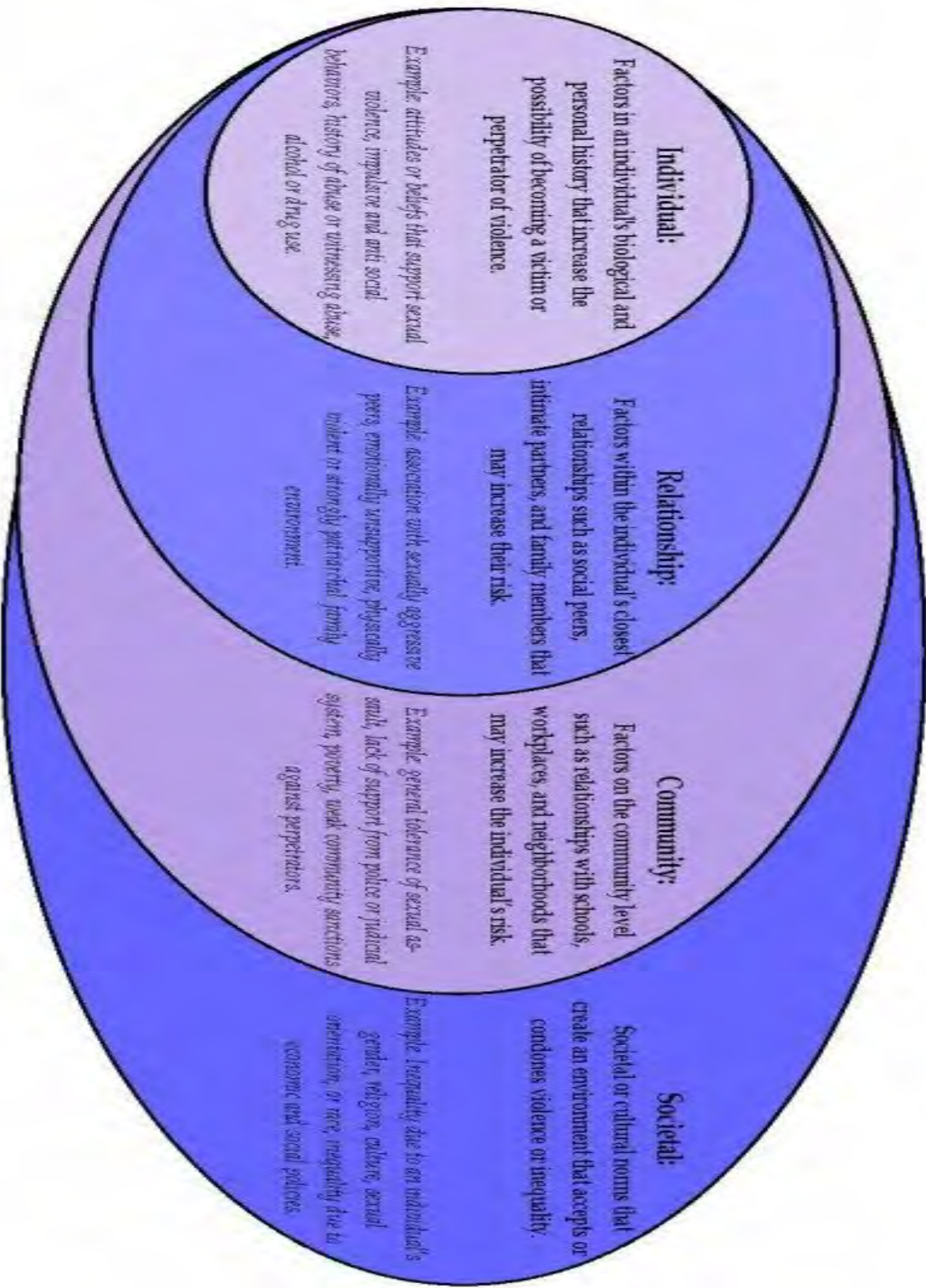
**Your second task is to write an SBAR for Ms. Rivera based upon your team's assessment, recommendation and request:**

**Situation:**

**Background:**

**Assessment: Recommendation:**

**CDC Ecological Model**



**Your final task is to describe Morgan Rivera's ecological environment**

Individual factors:

Relationship factors:

Community factors:

Societal factors:

## **APPENDIX**

### ***Pneumocystis pneumonia***

*Pneumocystis pneumonia* (PCP) is a potentially life-threatening infection that occurs in immunocompromised individuals, especially in those with HIV, but also in hematopoietic cell and solid organ transplant recipients; those with cancer (particularly hematologic malignancies); and those receiving glucocorticoids, chemotherapeutic agents, and other immunosuppressive medications.

The most significant risk factors for PCP in patients without HIV infection are glucocorticoids combined with other immunosuppressive therapies (eg, cyclophosphamide) and other defects in cell-mediated immunity.

In patients without HIV infection, PCP typically presents as fulminant respiratory failure associated with fever and dry cough. This is in contrast to PCP in HIV-infected patients, in whom the infection is usually indolent.

The typical radiographic features of PCP in HIV-uninfected patients are diffuse, bilateral, interstitial infiltrates, but other patterns may be seen.

The diagnosis of PCP should be considered in patients with risk factors for PCP who present with pneumonia. PCP is most commonly diagnosed by microscopy with staining of an induced sputum specimen or bronchoalveolar lavage fluid.

An induced sputum sample is usually the initial procedure for the diagnosis of PCP. If PCP is not identified by this modality, then bronchoscopy with bronchoalveolar lavage should be performed. *PCP* is the most common opportunistic respiratory infection in patients infected with AIDS. It typically occurs in HIV-infected patients with a CD4 count <200 cells/microL who are not receiving antiretroviral therapy or appropriate prophylaxis.

Antimicrobial therapy directed against *P. jirovecii* is the mainstay of treatment for PCP. In addition, some patients will require adjunctive corticosteroids. Antiretroviral therapy (ART) should be initiated or resumed to restore cellular immunity. For patients with severe disease, we recommend treatment with intravenous (IV) trimethoprim-sulfamethoxazole (TMP-SMX) rather than IV pentamidine. For individuals with mild to moderate disease, we suggest treatment with oral trimethoprim-sulfamethoxazole.

Patients should be monitored for adverse events related to their treatment regimen. Several of the antimicrobial regimens used to treat PCP are associated with significant side effects. A change in regimen may be needed for patients who develop severe adverse reactions (eg, Stevens-Johnson syndrome with TMP-SMX, pancreatitis).

Patients who do not show any improvement (eg, tachypnea, hypoxemia) after four to eight days of therapy are considered treatment failures. Treatment failure may be due to the severity of disease at the time of diagnosis or to a concurrent infection that was not previously identified. Although the impact of drug resistance on treatment outcomes has not been established, we modify the treatment regimen for patients failing therapy, especially those with severe disease and those who do not improve after eight days.

For patients with PCP who are not receiving ART at the time of their diagnosis, we recommend ART be initiated within two weeks of PCP treatment. Early ART (versus starting therapy after PCP treatment) can reduce the risk of AIDS progression and death in patients presenting with PCP.

Sax, P.E. (2013). Clinical presentation and diagnosis of Pneumocystis pulmonary infection in HIV-infected patients. UptoDate. Retrieved 9/22/2016 from:  
[http://www.uptodate.com/contents/clinical-presentation-and-diagnosis-of-pneumocystis-pulmonary-infection-in-hiv-infected-patients?source=related\\_link](http://www.uptodate.com/contents/clinical-presentation-and-diagnosis-of-pneumocystis-pulmonary-infection-in-hiv-infected-patients?source=related_link)

## **Appendix**

## Appeals Form

### Appeals Instructions

All appeals must be forwarded via email to \_\_\_\_\_ within 24 hours of the completion of the IPLH session.

#### Purposes of the appeals process:

1. Clarify uncertainty about your understanding of the concepts.
2. Give additional recognition and credit when “missing” a question was caused by:
  - Ambiguity in the reading material.
  - Disagreement between the reading material and our choice of the “correct” answer.
  - Ambiguity in the wording of the question.

#### Guidelines for preparing successful appeals:

Appeals are granted when they demonstrate that you understood the concept(s) but missed the question anyway or that your confusion was due to inadequacies in either the question or the reading material.

If the appeal is based on ambiguity in the question, you should:

1. Identify the source of ambiguity in the question and,
2. Offer an alternative wording that would have helped you to avoid the problem.

If the appeal is based on either inadequacies in the reading material or disagreement with the answer you should:

1. State the reason(s) for disagreeing with our answer and,
2. Provide specific references from the reading material to support your point of view.

#### Impact of appeals on test scores:

When an appeal is accepted on a question that a team has missed (no individual appeals):

1. It “counts” i.e., the points missed will be added to:
  - their team score.
  - the score of any individual in the team who answered the same way as the team.
  - only those teams that appeal.
2. Team member(s) who had the “original” correct answer will continue to receive credit on the question.

## **An Interdisciplinary Team-Based Learning Experience in Community Intervention**

### **Purpose**

After preparatory readings, health professions students from multiple health colleges will actively engage in interprofessional dialogue about community interventions, apply collaborative discussion and work strategies to propose interventions that may impact the health of specific populations and geographies.

### **Objectives**

1. Engage in problem solving related to pressing public health issues.
2. Work as a team to design and develop solutions related to a public health concern.
3. Begin to understand the importance of community interventions for health behavior change.

### **Conceptual Background**

This team-based learning experience was designed and implemented as a component of a large, required longitudinal interprofessional learning activity for first and second year students at a large Southeastern US Academic Health Science Center. Team-based learning was adopted as an instructional method based on its ability to promote discourse and involvement and to accommodate the limited number of faculty facilitators at our disposal. Team-Based Learning is a highly prescriptive process that must be implemented in a formulaic manner. A Team Based Learning Exercise consists of several components (Sibley & Spiridonoff, ND):

13. Pre-readings or assignments: Background materials foundational to the topic or subject associated with the learning experience.
14. Individual Readiness Assurance Test (IRAT): A graded multiple choice test or quiz that is taken individually, this test or quiz holds students accountable for the foundational knowledge associated with the pre-readings or assignments.



15. Team Readiness Assurance Test (TRAT): The same graded multiple choice test or quiz as the IRAT, this time taken as a team. An Immediate Feedback Assessment Technique (IF-AT) is used to score this component.
16. Appeals: Following the TRAT the facilitator encourages teams to appeal questions to which they did not receive full credit. This process encourages students to reengage with the pre-readings or assignments, reinforcing material that they may have found difficult.
17. Mini-Lecture/Review: A very brief review of basic concepts that were difficult for students.
18. Application Activity: This is where the majority of the time associated with this learning experience is focused. The activity is built in a manner that provides the entire class to provide feedback and reflection to each other, while engaging with each other and understanding diverse perspectives around the same problem or issue.

We strongly encourage individuals who have limited experience with Team-Based Learning to take the time to familiarize themselves with the method. A brief overview is provided in Appendix A: Team-Based Learning Handout. More information, including instructional videos, on team-based learning can be found via the Team-Based Learning Collaborative (<http://www.teambasedlearning.org>).

### **Learner Preparation**

Prior to engagement in this activity, learners should be provided the following materials. A complete resource can be accessed here:

<https://secure.php.ufl.edu/user/dmg4130/Amy%20Blue/MI%20for%20IBE/MI%20for%20IBE.html>

### **Facilitation Schema**

This material was developed as a three-hour learning experience, which was the second of three interprofessional learning experiences during the academic year. The prior session addressed ambulatory patient safety and the subsequent session focused on health systems & inequalities.

The IRAT consists of multiple choice questions answered on a Scantron or other quiz sheet. The TRAT consists of the same multiple choice questions. These questions should be answered on an IF-AT card (Epstein Educational Enterprises, N.D.). The Application Exercise consists of multiple interactive problem solving questions. To facilitate inter-team discussion, a set of four answer cards (A-D, printed on cardboard of four different colors), was used for simultaneous reporting of team answers on multiple choice discussion questions.

We recommend that two or more facilitators should be assigned to this activity, with one designated as primary facilitator. Students should be assigned to enumerated tables prior to the session. Ideally, each table will have either six or seven students. There should be two different colored folders on each table at the beginning of each session. The first folder (*e.g.*, red) will

contain an IRAT for each student; IRAT answer sheets for each student; a single IF-AT form for the TRAT; and a sheet that has a description of the appeals process if a group wants to challenge one of RAT questions. The second folder (*e.g.*, blue) will hold a copy of the Case, a series of patient narratives that will be incorporated into this activity, for each student; a set of colored cards (labeled A through D); and a set of seven Application Exercise Questions. Each application exercise question should be printed on a separate sheet of paper. These folders should be explicitly colored for easy identification. Extra copies of all materials, including the individual answer sheets and IF-AT forms, should be on hand.

### Example Schedule of Events:

1:00 PM	15 min	Welcome, overview of objectives, TBL and agenda
1:15 PM	10 min	Individual Readiness Assurance Test
1:25 PM	15 min	Group Readiness Assurance Test
1:40 PM	5 min	Discussion of appeals process
1:45 PM	20 min	Introduce Application Activity
2:05 PM	35 min	Allow students to work on Application Activity
2:40 PM	20 min	Gallery walk (if applicable)
3:00 PM	20 min	Discuss results of gallery walk
3:20 PM	15 min	Summary, review of objectives, open questions and answer

### **Individual and Team Readiness Assessment Test – GNV – B024**

There is no IRAT or TRAT associated with this session

Students will need to sign the the attendance sheet included in their folders. Please collect these attendance sheets and place them in the cardboard box in your room.

### **Application Exercise**

#### **Application Exercise**

It is important to review the background information with students. The information below provides clear definitions around terminology that was associated with the readings and will potentially be incorporated into the student artifacts.

#### **Background Information:**

Over the course of the last several months, Morgan Rivera has experienced some successes. With the encouragement and assistance of her Interprofessional care team, she is regularly attending scheduled appointments and has demonstrated a clear understanding of the importance of adherence to her antiretroviral therapy. With her improved health literacy and self-care, she has increasing confidence in her ability to maintain these positive health behaviors. Labs done one week ago indicated that her CD4 count was 220 cells/mm<sup>3</sup> and her viral load was < 20 copies/mL (undetectable), providing Morgan with objective measures of her success. With the help of a caring dental team, she has been able to begin the process of repairing her teeth. Morgan has also remarked on her success with physical and occupational therapy, she feels like her arm and hand are stronger and she is now able to do more at home.

At the same time, Morgan has also continued to encounter challenges. She maintains involvement with her long-term boyfriend who has continued to physically and psychologically abuse her. Morgan has indicated she is not ready to address this relationship with care team members right now. Morgan describes her life as “messed up” and continues to present symptoms of depression despite the positive changes in her physical health status. She remains unemployed and continues to exchange sex for money, though she claims that she “nearly always practices safe sex”. During the last few months Morgan has had more frequent contact with her biological children, stopping in after they return from school and occasionally visiting for dinner. The children remain in the custody of Morgan’s mother and Morgan has acknowledged this is “for the best” right now. Finally, Morgan has continued to abuse crack cocaine and excessively consume alcohol, though she reports that her incidence of use has greatly decreased.

### **Student Instructions – Part A: 1:15 – 2:15 pm**

Throughout IPLH you’ve gotten to know a little bit about Morgan Rivera, an individual with very complex physical, psychological and social healthcare and wellness needs. There are many individuals like Morgan in communities throughout the United States. Historically, the US healthcare system’s approach to addressing healthcare and wellness concerns has involved a secondary and/or tertiary approach to care; continuing this strategy is unsustainable from a cost and outcomes perspective. The US healthcare system must evolve and increase its emphasis on prevention as a primary method for promoting health and wellness. Community-based interventions are one method that can be used to promote health and wellness. During the last IPLH session you created a comprehensive list of the ecological factors that impacted Morgan’s health and wellness. Now, we would like to focus on addressing some of the social deterministic factors. It is your team’s job to design a targeted community intervention that:

1. Has the potential to mobilize and empower individuals within the community

2. Effectively engages both males and females
3. Has an effective and succinct tag line
4. Can be implemented in a manner that will maximize exposure for individuals within the designated community
5. Incorporates both education and training while also raising awareness and outreach
6. Includes conceptualization for how to measure the success of the intervention(s)

You are tasked with targeting one of these four specific deterministic factors; please locate the slip of paper with your team's assigned factor in your folder:

1. Healthy relationships and sexual health
2. Healthy relationships and trauma/intimate partner violence
3. Behavioral Health/Substance use disorder treatment and care
4. Mental Health/Depression treatment and care

Recall, Morgan Rivera represents your 'sentinel event', a term used in healthcare safety and quality to describe a specific instance in which adverse events occurred. When we investigate safety and quality issues we try to understand causal factors related to the sentinel event to prevent future occurrence to someone else. Your team will be developing an intervention whose goal is to promote the health and well-being of individuals who may have experienced life events/circumstances similar to Morgan.

Reporting: You will need to organize and disseminate your intervention using one piece of large sticky backed paper. Make sure you are able to concisely communicate the components of your intervention. When completed, students will hang their paper around the room, it may be helpful to organize them by the group's assigned deterministic factor (e.g. Healthy relationships and sexual health on North wall, Mental Health/Depression treatment and care on South...).

Viewing: We will be using a 'gallery walk' format for students to view and evaluate each other's work. Teams will collaboratively determine whose intervention is the best from each of the four categories (they can vote for their own). Each team will have four sticky notes used to designate their top choice by placing the note on the winning posters. One vote per team, one vote per factor.

Important Considerations for Teams to Consider During Development of their Intervention:

1. What will the focus of the intervention be? Are you targeting specific attitudes, trying to change social norms, etc.?
2. What types of programs/interventions are you going to use to deliver your messages? For example, will you create innovative brochures and PSAs, hold group discussions, public awareness events, etc.?
3. Who are you targeting with your programs, e.g. men, women, both? Or will you target high risk groups instead?
4. Morgan has HIV infection. Will your outreach be exclusively to individuals with HIV infection?
5. How will you measure attitude and behavior changes in participants?

#### Characteristics of Effective Strategies of Effective Interventional Strategies:

1. Comprehensive prevention strategies that use several modes of delivery
2. Evidence and/or theory based
3. Process to systematically design, implement and evaluate strategies
4. Strategic and targeted efforts
5. Multidimensional strategies that convey the same messages in different formats
6. Utilize community partnerships and collaborations

#### **Discussion Points for Faculty**

When promoting discourse after the gallery walk, it may be helpful to use the following questions to guide student responses:

- What were similarities among interventions?
- What were differences?
- Was there a key intervention that stood out among the proposals?
- Which intervention would be most feasible to implement in the community?
- How did an Interprofessional perspective aid in the formulation of your intervention? Do you see any differences among teams regarding their Interprofessional approach?
- What sort of training have you had to prepare you to assist individuals who are at risk for intimate partner violence?

Additionally, it may be helpful to challenge our public health students (or others) to describe some of the theoretical thinking that may (or may not) have guided their choice of intervention.

For those who are interested in digging a bit deeper, I have extracted some specific information about theory and different types of health interventions from Cismaru and Lavack (2011). The full-text article can be accessed via the internet (it is approximately 45 pages):

<http://bit.ly/1yV7feR>

There are multiple theoretical perspectives associated with campaigns that target perpetrators of domestic violence: The Social-Ecological Model, The Transtheoretical Model (Stages of Change) and the Protection Motivation Theory. We will briefly discuss them all, but it may be easiest to focus on the social-ecological model in the context of this case.

### **Part B – Motivational Interviewing: (2:15 PM – 3:30 PM...you may end early, that’s ok)**

For the final portion of this session, students will review and practice basic motivational interviewing skills in the context of Morgan’s case.

1) Play the video “Effective Motivational Interviewing” presenting Deborah Cestaro-Seifer, MS, RN. In this video, Ms. Cestaro-Seifer demonstrates effective techniques for motivating patients with complex health problems to engage in healthier behaviors. Following the video, ask students for their observations about the interview and the techniques used to positively help the patient engage in better health behavior. (20 minutes). We will provide a link and a USB drive of the video for each room. The video can be viewed here:

<https://secure.php.ufl.edu/user/dmg4130/Amy%20Blue/HIV%20Q-A/HIV%20Q-A.html>

2) Following the video presentation and your demonstration, ask students in their groups to pair up to role-play. For the first role-play, students are to apply motivational interviewing to move Morgan towards engaging in more positive behavior around the deterministic factor the students’ group was assigned for the previous exercise. For the second role-play (students will swap roles), the focus of the behavior change can be on a deterministic factor other than that the group discussed. Each student pair should have about 5 minutes for each of their role-play turns as the interviewer. (15 minutes total)

3) Students have copies of a Motivational Interviewing card from the Case Western Reserve Center for Evidence-Based Practices in their folders (one for each student). Students should use this card to guide their motivational interviewing experience and as a formative evaluation tool for each other. A copy of the MI card is in the appendix.

3) Debrief with students about the role-play, asking them questions like, “what made it easy and what made it difficult to engage with their “patient” and help them want to improve their health?”

### **Additional Resources:**

Transtheoretical Model: Five stages of change

1. Pre-contemplative
2. Contemplative
3. Preparation
4. Action
5. Maintenance

*“The Transtheoretical Model (Prochaska et al., 1992; Prochaska et al., 1994) recognizes that individuals may pass through several stages of change when they are trying to modify their behavior: (1) pre-contemplation, (2) contemplation, (3) preparation, (4) action, (5) maintenance, (6) termination, and (7) relapse. In general, social marketing campaigns tend to concentrate on the first 5 of these phases, up to and including maintenance of the behavioral change.”*

**Protection Motivation Theory**

1. Severity
2. Vulnerability
3. Response Efficacy
4. Self-Efficacy
5. Costs

*“Protection Motivation Theory (Rogers, 1983), on the other hand, suggests that there are five important variables that influence a person’s decision to adopt a particular recommended behavior. These variables are: (a) vulnerability, (b) severity, (c) response efficacy, (d) self-efficacy, and (e) costs. Vulnerability refers to a person’s subjective perception of the risk of negative consequences, while severity refers to the seriousness of the negative consequences. Response efficacy refers to the person’s belief that the recommended behaviors will be effective in reducing or eliminating the danger. Self-efficacy refers to the person’s belief that he has the ability to abstain from violence. Costs represent the sum of all barriers to engaging in the recommended behavior, including non-monetary costs such as effort, inconvenience, and discomfort (Ho, 1998). The motivation to abstain from violence arises from the person’s expectation that the action can reduce the likelihood or severity of negative consequences (Weinstein, 1993)”*

These two theories can be linked to determine which Protection Motivation Theories are most efficacious at specific stages in the Transtheoretical Model:

**Table 1- Linking Transtheoretical Model with Protection Motivation Theory**

TTM Stages	Protection Motivation Theory				
	Severity	Vulnerability	Response Efficacy	Self-Efficacy	Cost
<b>Precontemplation</b>	X	X			
<b>Contemplation</b>	X			X	X
<b>Preparation</b>			X	X	
<b>Action</b>			X	X	X
<b>Maintenance</b>	X	X			X

Cismaru & Lavack (2011)

The examples included below are abstracted from specific intimate partner violence campaigns; the table below provides a description, lists components, and provides an indication of the theoretical basis for the interventions.



**Transtheoretical Model: Stages of Change**

PC = Pre-Contemplation  
 C = Contemplation  
 Pr = Preparation  
 A = Action  
 M = Maintenance

**Protection Motivation Theory**

S = Severity  
 V = Vulnerability  
 RE = Response Efficacy  
 SE = Self-efficacy  
 C = Costs

Campaign / Initiator	Campaign Objectives and Web Address	Campaign Components	Evaluation report available on-line	Transtheoretical Model: Stages of Change					Protection Motivation Theory							
				P C	C	P r	A	M	S	V	R E	S E	C			
<b>International</b>																
<b>Men Can Stop Rape's Strength Campaign</b> by Men Can Stop Rape Inc.	Embraces men as vital allies with the will and character to make healthy choices and foster safe, equitable relationships. <a href="http://www.mencanstoprape.org/info-url2696/info-url.htm">http://www.mencanstoprape.org/info-url2696/info-url.htm</a>	Posters, educational handouts, PSA's on buses, magazines, movie theatres, public health clinics, and campuses, press kit, billboards, training and workshops, events, club, website (facebook, twitter, youtube, change.org), e-newsletter.	No						X						X	X
<b>Safe – Stop Abuse for Everyone</b> by Stop Abuse for Everyone – A Human Rights Agency	Provides services, publications, and training to serve straight men, GLBT victims, teens, and the elderly. Promotes accountability for all perpetrators. <a href="http://www.safe4all.org/">http://www.safe4all.org/</a>	Help guide, brochures, flyers, on-line support groups, support and discussion forums, blog, training and presentations, store, website.	No		X	X	X				X					

Campaign / Initiator	Campaign Objectives and Web Address	Campaign Components	Evaluation report available on-line	Transtheoretical Model: Stages of Change					Protection Motivation Theory							
				P C	C	P r	A	M	S	V	R E	S E	C			
<b>White Ribbon Day</b> by a handful of Canadian men	Encourages men who want to address behaviors that impact negatively upon their relationships to seek help. The campaign calls for men to speak out and take an oath ("and swear never to commit, excuse or remain silent about violence against women"). <a href="http://theinspirationroom.com/daily/2005/white-ribbon-day-tv-ads/">http://theinspirationroom.com/daily/2005/white-ribbon-day-tv-ads/</a> <a href="http://www.whiteribbonday.org.au/">http://www.whiteribbonday.org.au/</a>	Events, fact sheets, posters, school action kit, and media campaign, swear jar, virtual white ribbons, website with help lines (facebook, twitter).	No		X	X	X		X	X						X
<b>U.S.A.</b>																
<b>Men Make Choices</b> by Texas Council on Family Violence	Facilitates and supports the involvement of men and boys in addressing the root causes of men's violence against women. <a href="http://www.tcfv.org/prevention/promoting-innovative-prevention-strategies/mens-nonviolence-project/">http://www.tcfv.org/prevention/promoting-innovative-prevention-strategies/mens-nonviolence-project/</a>	Radio and TV ads, posters, flyers, envelope stuffers, palm cards, guides, inserts, brochures, national domestic violence hotline, website.	No	X	X	X	X		X	X	X	X				
<b>Canada</b>																
<b>Kanawayhitowin: Taking Care of Each Other's Spirit</b> by Ontario Government and others	Aims to support Aboriginal male perpetrators. Emphasizes the empowerment of Aboriginal men to take responsibility and make change. <a href="http://www.kanawayhitowin.ca/index.php">http://www.kanawayhitowin.ca/index.php</a>	TV and radio PSA's, healing lodge, anger management, materials, training video, Cd ROM, guestbook, website (Youtube).	No	X	X	X			X	X						
<b>U.K.</b>																

Campaign / Initiator	Campaign Objectives and Web Address	Campaign Components	Evaluation report available on-line	Transtheoretical Model: Stages of Change					Protection Motivation Theory					
				P C	C	P r	A	M	S	V	R E	S E	C	
<b>Everymen Project</b> by Porticus UK and others	Aims to help men to change their angry, violent, or abusive behavior with respect and dignity for every man, woman, or child. National helpline for everyone concerned about violence. Counselling service for violent men who want to change. <a href="http://www.everymanproject.co.uk/">http://www.everymanproject.co.uk/</a>	Self help strategies, counselling programs, advice line.	No		X	X	X						X	X
<b>Hitting Home Campaign</b> by BBC and Women's Aid	Raises awareness of domestic violence as a problem within society. Targets the general audience, victims and perpetrators. <a href="http://www.womensaid.org.uk/page.asp?section=0001000100100004">http://www.womensaid.org.uk/page.asp?section=0001000100100004</a>	Programs on BBC TV, radio, and online, including testimonials, documentaries, celebrity interviews, and dramas.	No	X	X	X	X	X	X	X	X	X	X	X
<b>London Metropolitan Police Domestic Violence Campaign</b> by London Metropolitan Police	Targets domestic violence offenders with the serious message that police will seek out men who abuse their partners and arrest them, even if the victim refuses to make a statement or give evidence in court. Includes materials targeting lesbian, gay, bisexual, and transgender perpetrators. <a href="http://www.met.police.uk/campaigns/domestic_violence_2010/index.htm">http://www.met.police.uk/campaigns/domestic_violence_2010/index.htm</a>	Print, radio, and TV ads, billboards, posters, beer mats, website.	No	X	X	X		X	X	X				X
<b>Move Ireland Men Overcoming Violence</b> by Move Ireland	Facilitates men in a weekly group process that involves them taking responsibility for their violence and changing their attitudes and behavior. <a href="http://www.moveireland.ie/">http://www.moveireland.ie/</a>	Weekly group sessions, newsletters, brochures, website.	No					X				X		

Campaign / Initiator	Campaign Objectives and Web Address	Campaign Components	Evaluation report available on-line	Transtheoretical Model: Stages of Change					Protection Motivation Theory					
				P C	C	P r	A	M	S	V	R E	S E	C	
<b>Respect by Respect</b>	Key focus is on promoting, supporting, delivering, and developing effective interventions with male and female perpetrators. <a href="http://www.respectphoneline.org.uk/pages/help-and-advice.html">http://www.respectphoneline.org.uk/pages/help-and-advice.html</a>	Websites, phone line, e-mail line, leaflets, booklet, toolkit, research articles, events, research report	Forthcoming evaluation research project available in 2012.	X	X	X	X		X	X				X
<b>Women's Aid – Act Until Women and Children Are Safe</b> by Women's Aid, Department of Health	Aims at influencing laws, policy, and practice; also raising public awareness and developing education programs and providing services needed to help abused women and children. Targets a general audience, victims, and perpetrators. <a href="http://www.womensaid.org.uk/">http://www.womensaid.org.uk/</a> <a href="http://www.womensaid.org.uk/landing_page.asp?section=000100010010&amp;sectionTitle=Our+campaigns">http://www.womensaid.org.uk/landing_page.asp?section=000100010010&amp;sectionTitle=Our+campaigns</a>	Website, fact sheets, e-mail newsletter, posters, leaflets and other resources such as educational toolkits, numerous publications, and media campaigns. Website, fact sheets, e-mail newsletter, posters, leaflets and other resources such as educational toolkits, numerous publications, and media campaigns.	No	X	X	X	X		X	X	X			
<b>Australia</b>														
<b>Domestic and Family Violence: See the Signs. Be the Solution</b> by Queensland Government	Encourages male perpetrators to see the warning signs of domestic violence and seek advice. <a href="http://www.communityservices.qld.gov.au/violenceprevention/aboutdfv/about.html">http://www.communityservices.qld.gov.au/violenceprevention/aboutdfv/about.html</a>	TV ad, help-line, posters, help cards, booklets, safety plans, legislation, forms (protection orders etc.), scholarly publications, website.	No	X	X	X	X		X	X				X
<b>Freedom From Fear</b> by The Western Australian Government	Encourages male perpetrators to accept responsibility for their behavior and take action to end the abuse. Based on extensive research, won numerous awards. <a href="http://www.freedomfromfear.wa.gov.au/">http://www.freedomfromfear.wa.gov.au/</a>	Self-help booklet, media advertising on television, radio and in the press, help-line, website.	Evaluation report available on-line.	X	X	X	X	X	X	X	X	X	X	X



Campaign / Initiator	Campaign Objectives and Web Address	Campaign Components	Evaluation report available on-line	Transtheoretical Model: Stages of Change					Protection Motivation Theory					
				P C	C	P r	A	M	S	V	R E	S E	C	
<b>Violence Against Women – Australia Says NO</b> by Australian Government Office for Women	Provides professional consultation (via help-line) to perpetrators. <a href="http://www.ofw.facs.gov.au/womens_safety_agenda/australia_says_no.htm">http://www.ofw.facs.gov.au/womens_safety_agenda/australia_says_no.htm</a> ; <a href="http://www.australiasaysno.gov.au/">http://www.australiasaysno.gov.au/</a>	Television ads, help-line, publications, brochure, poster, website.	An evaluation has been conducted but the results are not available on-line (Donovan and Vlasis, 2005).	X	X	X	X		X	X				X
<b>Violence Against Women, It's Against All the Rules</b> by Violence Against Women Specialist Unit	Increases men's willingness to discuss violence against women issues among their peers, and to reduce the use of violence against women. <a href="http://www.lawlink.nsw.gov.au/lawlink/vaw/ll_vaw.nsf/vwPrint1/vaw_vaw_jaatrc">http://www.lawlink.nsw.gov.au/lawlink/vaw/ll_vaw.nsf/vwPrint1/vaw_vaw_jaatrc</a> campaign	Cards, coasters, posters (e.g., on buses), radio ad, website	Evaluation report available on-line.	X					X	X				X
<b>New Zealand</b>														
<b>Family Violence Is Not OK</b> by Government of New Zealand	Community awareness campaign aiming to increase the understanding of family violence and promote changes in violent behaviours. Targets male perpetrators. <a href="http://www.areyouok.org.nz/home.php">http://www.areyouok.org.nz/home.php</a>	TV ads, videos, help-line, posters and balloons, information line, toolkits for community action, businesses, and local governments, research and evaluation programs.	Evaluation report available on-line.	X	X	X	X	X	X	X	X	X	X	X

## **Student Instructions**

### **Background Information:**

Over the course of the last several months, Morgan Rivera has experienced some successes. With the encouragement and assistance of her Interprofessional care team, she is regularly attending scheduled appointments and has demonstrated a clear understanding of the importance of adherence to her antiretroviral therapy. With her improved health literacy and self-care, she has increasing confidence in her ability to maintain these positive health behaviors. Labs done one week ago indicated that her CD4 count was 220 cells/mm<sup>3</sup> and her viral load was < 20 copies/mL (undetectable), providing Morgan with objective measures of her success. With the help of a caring dental team, she has been able to begin the process of repairing her teeth. Morgan has also remarked on her success with physical and occupational therapy, she feels like her arm and hand are stronger and she is now able to do more at home.

At the same time, Morgan has also continued to encounter challenges. She maintains involvement with her long-term boyfriend who has continued to physically and psychologically abuse her. Morgan has indicated she is not ready to address this relationship with care team members right now. Morgan describes her life as “messed up” and continues to present symptoms of depression despite the positive changes in her physical health status. She remains unemployed and continues to exchange sex for money, though she claims that she “nearly always practices safe sex”. During the last few months, Morgan has had more frequent contact with her biological children, stopping in after they return from school and occasionally visiting for dinner. The children remain in the custody of Morgan’s mother and Morgan has acknowledged this is “for the best” right now. Finally, Morgan has continued to abuse crack cocaine and excessively consume alcohol, though she reports that her incidence of use has greatly decreased.

## **Student Instructions**

### **Part A – Community Interventions:**

Throughout IPLH you’ve gotten to know a little bit about Morgan Rivera, an individual with very complex physical, psychological and social healthcare and wellness needs. There are many individuals like Morgan in communities throughout the United States. Historically, the US healthcare system’s approach to addressing healthcare and wellness concerns has involved a secondary and/or tertiary approach to care; continuing this strategy is unsustainable from a cost and outcomes perspective. The US healthcare system must evolve and increase its emphasis on prevention as a primary method for promoting health and wellness. Community-based interventions are one method that can be used to promote health and wellness. During the last IPLH session, you created a comprehensive list of the ecological factors that influenced Morgan’s health and wellness. Now, we would like to focus on addressing some of the social deterministic factors. It is your team’s job to design a targeted community intervention that:

1. Has the potential to mobilize and empower individuals within the community
2. Effectively engages both males and females

3. Has an effective and succinct tag line
4. Can be implemented in a manner that will maximize exposure for individuals within the designated community
5. Incorporates both education and training while also raising awareness and outreach
6. Includes conceptualization for how to measure the success of the intervention(s)

You are tasked with targeting one of these four specific deterministic factors; please locate the slip of paper with your team's assigned factor in your folder:

1. Healthy relationships and sexual health
2. Healthy relationships and trauma/intimate partner violence
3. Behavioral Health/Substance use disorder treatment and care
4. Mental Health/Depression treatment and care

Recall, Morgan Rivera represents your 'sentinel event', a term used in healthcare safety and quality to describe a specific instance in which adverse events occurred. When we investigate safety and quality issues we try to understand causal factors related to the sentinel event to prevent future occurrence to someone else. Your team will be developing an intervention whose goal is to promote the health and well-being of individuals who may have experienced life events/circumstances similar to Morgan.

Reporting: You will need to organize and disseminate your intervention using one piece of large sticky backed paper. Make sure you are able to concisely communicate the components of your intervention. When completed, students will hang their paper around the room, it may be helpful to organize them by the group's assigned deterministic factor (e.g. Healthy relationships and sexual health on North wall, Mental Health/Depression treatment and care on South...).

Viewing: We will be using a 'gallery walk' format for students to view and evaluate each other's work. Teams will collaboratively determine whose intervention is the best from each of the four categories (they can vote for their own). Each team will have four sticky notes used to designate their top choice by placing the note on the winning posters. One vote per team, one vote per factor.

Important Considerations for Teams to Consider During Development of their Intervention:

1. What will the focus of the intervention be? Are you targeting specific attitudes, trying to change social norms, etc.?
2. What types of programs/interventions are you going to use to deliver your messages? For example, will you create innovative brochures and PSAs, hold group discussions, public awareness events, etc.?
3. Who are you targeting with your programs, e.g. men, women, both? Or will you target high risk groups instead?

4. Morgan has HIV infection. Will your outreach be exclusively to individuals with HIV infection?
5. How will you measure attitude and behavior changes in participants?

Characteristics of Effective Strategies of Effective Interventional Strategies:

1. Comprehensive prevention strategies that use several modes of delivery
2. Evidence and/or theory based
3. Process to systematically design, implement and evaluate strategies
4. Strategic and targeted efforts
5. Multidimensional strategies that convey the same messages in different formats
6. Utilize community partnerships and collaborations

**Part B – Motivational Interviewing:**

For the final portion of this session, students will review and practice basic motivational interviewing skills in the context of Morgan’s case.

- 1) Play the video “Effective Motivational Interviewing” presenting Deborah Cestaro-Seifer, MS, RN. In this video, Ms. Cestaro-Seifer demonstrates effective techniques for motivating patients with complex health problems to engage in healthier behaviors. Following the video, ask students for their observations about the interview and the techniques used to positively help the patient engage in better health behavior. (20 minutes)
- 2) Following the video presentation and your demonstration, ask students in their groups to pair up to role-play. For the first role-play, students are to apply motivational interviewing to move Morgan towards engaging in more positive behavior around the deterministic factor the students’ group was assigned for the previous exercise. For the second role-play (students will swap roles), the focus of the behavior change can be on a deterministic factor other than that the group discussed. Each student pair should have about 5 minutes for each of their role-play turns as the interviewer. (15 minutes total)
- 3) Students have copies of a Motivational Interviewing card from the Case Western Reserve Center for Evidence-Based Practices in their folders (one for each student). Students should use this card to guide their motivational interviewing experience and as a formative evaluation tool for each other. A copy of the MI card is in the appendix.
- 3) Debrief with students about the role-play, asking them what made it easy and what made it difficult to engage with their “patient” and help them want to improve their health. (10 minutes)

# APPENDIX A



has the students progress through **Remembering**, **Understanding**, and into the simple **Applying** level of Bloom's taxonomy. The Application Activities can take students through the higher Bloom's levels of **Analyzing**, **Evaluating**, and **Creating**.

The whole class discussions following the simultaneous report in the Application Activities give the students the opportunity to articulate and examine their own thinking to explore a variety of different perspectives, and finally arrive at a socially verified version of the "right" or optimal solution.

### Teams outperform best member

By reviewing student performance post-try through the semester you can send a powerful message about the effectiveness of team work.

In the past 20 years over 99.95% of the teams have outperformed their best member by an average of nearly 14%. In fact, the worst team typically outperforms the best student in the class!

Mitchener et al. 1999

### Attention focuses on harder concepts

As students progress through the Readiness Assurance Process, there is a natural shift in instructional focus to the harder, more difficult concepts. This shift is caused by the underlying structure in the Readiness Assurance Process. The differential attention on more difficult concepts begins in

effective it was. TBL is now routinely used in large classes (up to 400) but more typically 120 - 150. Students with a single facilitator and is even possible in difficult classroom spaces (ie. tiered lecture theaters). Edition three is - give students something compelling enough to work on and they will ignore the limitations of the room.

### Can Large Classes Be an Asset?

What was the impact of the large class size on what you gained from taking the course?

Helped more than I hurt	49%
Helped and hurt	18%
Neutral	24%
Hurt more than I helped	7%
Hurt a great deal	2%

Mackenzie, Knight, Shaw, 2002

In the TBL process, students acquire their initial exposure to the content through readings and are held accountable for their preparation using a Readiness Assurance Process (RAP). Following the RAP, the bulk of class time is used to practice applying content in a series of team application exercises. The components of TBL are very adaptable to many situations, disciplines and classroom types.

### Four Key TBL Design Principles

- **Large teams** are required (5-7); teams should be diverse and permanent.
- **Accountability** for student pre-class preparation and contributing to team success.
- **Students make complex decisions** that require the use of the course concepts that can be reported in simple form.
- **Frequent and timely feedback** must be given to students.

### Typical TBL Module



Traditional	Knowledge Acquisition	Lecture	Application Activities
TBL	Application and Knowledge-Solving	Content Memorization	

In a traditional course when a student team completes an application assignment, the instructor often only gets to view the final product and therefore has limited opportunity to provide students with timely feedback as their application assignment progresses. By contrast, since TBL application activities occur in the classroom, there are opportunities for rich and detailed feedback from both peers and the instructor.

## Readiness Assurance

### 1 Pre-Readings

Readings typically consist of 20-50 pages (textbooks, monographs, reports and papers). It can be worthwhile to provide a reading guide if the students are new to reading the literature of the discipline. "Less is More" with readings. Students tend to do no reading at all when page counts get too high. They seemingly devote a fixed length of time to reading, no matter the length or complexity of the readings, so use their attention wisely.

### 2 Individual Readiness Assurance

The Individual Readiness Assurance Process Test (IRAT) typically consists of 15-20 multiple-choice questions. The IRAT holds students accountable for acquiring important foundational knowledge from the readings that will ready them to begin problem-solving in subsequent class sessions. The questions are typically written at Bloom's levels: remembering, understanding and simple applying. The test is normally administered using scantron, but a scanner is not required.

### 3 Team Readiness Assurance

The Team Readiness Assurance Process Test (TRAT) is completed in teams using the same test as the IRAT.

If the team does not discover a star, they continue to discuss the question and sequentially select other choices. Every student leaves this test knowing the correct answer to every question!

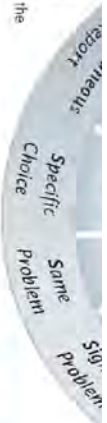
### 4 Appeals

During the closing of the team test, the instructor circulates around the room and encourages teams to appeal questions they got incorrect. This forces students back into the reading material exactly where they are having difficulty; the team then researches the "right" answer and may choose to complete the appeals form with their rationale and defense for their answer. The instructor collects these forms and considers them after class.

### 5 Mini-lecture

To conclude the Readiness Assurance Process, the instructor reviews the team analysis from the individual tests and focuses a short mini-lecture on the concepts that are most problematic for the students. In the words of Bob Phillips at South University, "TBL helps me understand the 10-15% of the course material I really need to talk to the students about."

Following the Readiness Assurance Process, the bulk of class time is spent with students working in teams applying course concepts and solving problems.



## In-Class Activities (4 Ss)

- **Significant Problems.** Teams work on a relevant, significant problem.
- **Same Problem.** Teams work on the same problem.
- **Specific Choice.** Teams required to make a specific choice.
- **Simultaneous Report.** Teams report simultaneously.

In the TBL classroom, the bulk of class time is spent having student teams solve and discuss relevant, significant problems. Structuring the problems around the TBL-4Ss lets you leverage the power of team processing without many of the problems (like social loafing) that are inherent in other forms of small-group work learning. The structure of the TBL activities gives individuals, teams and the whole class many opportunities to reflect and get feedback on the specifics of their thinking and their process for arriving at their answer. The activity reporting allows students to engage with a diverse set of perspectives and approaches to problem solving.

### C Specific Choice

*Each team must make a Specific Choice*

Open-ended questions have long been the hallmark of our efforts to foster critical thinking in our students, but complex, open-ended questions might be too challenging for the novice learner. The most significant drawback in using open-ended questions is the difficulty in efficiently letting students report their answers and the difficulty in comparing their answers with their peers. This opportunity for comparability of decisions is one of the major strengths of the TBL reporting process.

### D Simultaneous Report

*Teams Simultaneously Report their decision*

Simultaneous reporting can be accomplished with the simple holding up of a card indicating a particular choice. When a particular team sees that another team has made a different decision, they naturally want to challenge the other team's decision. In the ensuing conversation, the teams challenge each other and defend their own thinking. The reporting requires teams to articulate their thinking to other teams – putting their thoughts into words. This helps cognitively with the process of creating enduring, deep understanding. The feedback from their peers is very immediate and focused on "how did you arrive at your decision" and not "which is the right answer."





**MOTIVATIONAL INTERVIEWING**  
*an evidence-based treatment*



Encouraging Motivation to Change

## Am I Doing this Right?

Motivational Interviewing encourages you to help people in a variety of service settings discover their interest in considering and making a change in their lives (e.g., to manage symptoms of mental illness, substance abuse, other chronic illnesses such as diabetes and heart disease).

**REMIND ME**  
Use the back of this card to build self-awareness about your **attitudes, thoughts, and communication style** as you conduct your work. Keep your attention centered on the people you serve. Encourage *their* motivation to change.

**CENTER FOR EVIDENCE-BASED PRACTICES**

Build Trust  
Improve Outcomes  
Promote Recovery

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Encouraging Motivation to Change

## Am I Doing this Right?

- 1.** ✓ **Do I listen more than I talk?**  
✗ Or am I talking more than I listen?
- 2.** ✓ **Do I keep myself sensitive and open to this person's issues, whatever they may be?**  
✗ Or am I talking about what I think the problem is?
- 3.** ✓ **Do I invite this person to talk about and explore his/her own ideas for change?**  
✗ Or am I jumping to conclusions and possible solutions?
- 4.** ✓ **Do I encourage this person to talk about his/her reasons for *not* changing?**  
✗ Or am I forcing him/her to talk only about change?
- 5.** ✓ **Do I ask permission to give my feedback?**  
✗ Or am I presuming that my ideas are what he/she really needs to hear?
- 6.** ✓ **Do I reassure this person that ambivalence to change is normal?**  
✗ Or am I telling him/her to take action and push ahead for a solution?
- 7.** ✓ **Do I help this person identify successes and challenges from his/her past *and* relate them to present change efforts?**  
✗ Or am I encouraging him/her to ignore or get stuck on old stories?
- 8.** ✓ **Do I seek to understand this person?**  
✗ Or am I spending a lot of time trying to convince him/her to understand me and my ideas?
- 9.** ✓ **Do I summarize for this person what I am hearing?**  
✗ Or am I just summarizing what I think?
- 10.** ✓ **Do I value this person's opinion more than my own?**  
✗ Or am I giving more value to my viewpoint?
- 11.** ✓ **Do I remind myself that this person is capable of making his/her own choices?**  
✗ Or am I assuming that he/she is not capable of making good choices?

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## Appeals Form

### Appeals Instructions

All appeals must be forwarded via email to \_\_\_\_\_ within 24 hours of the completion of the IPLH session.

#### Purposes of the appeals process:

1. Clarify uncertainty about your understanding of the concepts.
2. Give additional recognition and credit when “missing” a question was caused by:
  - Ambiguity in the reading material.
  - Disagreement between the reading material and our choice of the “correct” answer.
  - Ambiguity in the wording of the question.

#### Guidelines for preparing successful appeals:

Appeals are granted when they demonstrate that you understood the concept(s) but missed the question anyway or that your confusion was due to inadequacies in either the question or the reading material.

If the appeal is based on ambiguity in the question, you should:

1. Identify the source of ambiguity in the question and,
2. Offer an alternative wording that would have helped you to avoid the problem.

If the appeal is based on either inadequacies in the reading material or disagreement with the answer you should:

1. State the reason(s) for disagreeing with our answer and,
2. Provide specific references from the reading material to support your point of view.

#### Impact of appeals on test scores:

When an appeal is accepted on a question that a team has missed (no individual appeals):

1. It “counts” i.e., the points missed will be added to:
  - their team score.
  - the score of any individual in the team who answered the same way as the team.
  - only those teams that appeal.
2. Team member(s) who had the “original” correct answer will continue to receive credit on the question.