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To: Carrie Hessler-Radelet, Director
Daljit Bains, Chief Compliance Officer

From: Kathy A. Buller, Inspector General

Date: November 17, 2014

Subject: Investigative Review of the Circumstances Surrounding the Death of a Volunteer in Peace Corps/China

Transmitted for your information is our final investigative review on the death of PCV Nicholas Castle. As part of the investigative review we have outlined management considerations, including recommendations, which we propose to track through our corrective action process.

We are requesting your response to the review, including management considerations, within 45 days of the date of this memorandum. Please provide us with an electronic copy of your signed cover memo and your response. Your response should provide your concurrence or non-concurrence with each recommendation. In addition, please use TeamCentral to document any actions addressing the recommendation to document any actions planned or implemented to address the recommendations. This will help close the recommendations and may preclude the need for the chief compliance officer to follow up or request documentation. If you require additional time, please send a request in writing.

This report may contain sensitive information, including medical and law enforcement details, and the names of Peace Corps Volunteers and non-Peace Corps staff. Please handle accordingly and restrict distribution as appropriate.

cc: Laura Chambers, Chief of Staff
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Peace Corps
Office of Inspector General

INVESTIGATIVE REVIEW OF THE CIRCUMSTANCES SURROUNDING THE DEATH OF A VOLUNTEER IN PEACE CORPS/CHINA

I-13-020 ♦ November 2014

SYNOPSIS

The Peace Corps Office of Inspector (OIG) opened a preliminary inquiry (PI) on June 11, 2013, into the Peace Corps' response to the February 7, 2013, death of Peace Corps/China Volunteer Nicholas Castle (PCV Castle) to monitor the Peace Corps' response to the death. OIG's monitoring activities included a review of records provided by the Peace Corps Office of Health Services (OHS) including PCV Castle's medical chart, the agency's sentinel report,[1] a report by a medical expert on emergency care hired by the agency, and the autopsy report performed by the Armed Forces Medical Examiner System. The medical examiner's final diagnosis was viral gastroenteritis, and he opined that PCV Castle's cause of death was most probably viral gastroenteritis that "resulted in severe dehydration, multi-organ failure and ended with cerebral edema and acute pneumonia."

On April 23, 2014, OIG initiated its own investigative review of the facts and circumstances surrounding PCV Castle's death after receiving information from PCV Castle's parents. His parents provided OIG with an email between their son and Peace Corps Medical Officer, Dr. Gao Jin (PCMO Gao), dated November 27, 2012, in which PCV Castle advised PCMO Gao that he had not gained back the weight he lost after a gastrointestinal illness in October 2012. He asked PCMO Gao what foods he could eat to help him gain back the weight and stay healthy and requested a heater. The email was not a part of agency records.

OIG sent an investigative team to China to gather information and hired an independent medical professional[2] to undertake a full investigative review. OIG interviewed more than a dozen Peace Corps staff, Volunteers, and host country medical professionals. OIG's review was based on interviews conducted, the assessment of an independent medical expert, the medical documentation, and other available facts.

PCMO Gao provided care for PCV Castle on the morning and in the afternoon of January 28, 2013, in response to PCV Castle's complaints of symptoms typical of gastroenteritis. PCMO Gao dealt with a highly unusual rapid decline in PCV Castle's health, which was uncommon in an otherwise young, healthy individual. The PCMOs were also treating five or six other Volunteers who were attending training along with PCV Castle, staying at the same hotel, and who also reported having gastrointestinal illnesses, but with milder symptoms.

On the morning of January 28 PCV Castle told PCMO Gao on the phone that he had experienced eight episodes of vomiting and had three episodes of watery stools over a two day period. PCV Castle further noted feeling feverish the day before, with mild abdominal bloating and heartburn

[1] The Peace Corps established a sentinel event process, which includes a root cause analysis, after OIG recommended in its 2010 report Peace Corps/Morocco Assessment of Medical Care that the agency set up a process to gather relevant facts regarding a Volunteer death. The process helps to identify and learn from contributory factors and root causes, systems and processes that require improvement, and strategies to prevent or minimize risks of future recurrence of serious and sentinel events.

[2] OIG's medical assessment is based on the opinion of a medical expert whose services were independently retained by OIG.

and that his "urine output was decreased and dark." During a subsequent physical examination of PCV Castle at 9:30 a.m., PCMO Gao determined he was not in any acute distress, he was alert, awake, responsive, and oriented to name, place, time and purpose.

PCV Castle was at an increased risk of clinical deterioration given: (1) his history of gastroenteritis illness resulting in weight loss and requiring he receive intravenous (IV) fluids at a hospital three months earlier; (2) his history of ciprofloxacin intolerance resulting in vomiting; (3) his fatigue; (4) his decreased urine output; and (5) his extensive vomiting over several hours in the early morning of January 28.[3] PCMO Gao documented PCV Castle's lips were dry and he appeared fatigued, but there is no indication she considered he was at an increased risk or that she conducted additional assessments to determine the presence of dehydration/hypovolemia[4] such as examining his skin turgor (skin is less elastic when dehydrated), or taking his orthostatic blood pressure (BP) and pulse.[5] Had she done so, she may have recognized the severity of his dehydration/hypovolemia and sent him to the hospital or the Peace Corps office for an IV that morning, or at least instructed someone to observe his fluid intake over the next four hours given his significant vomiting.

Instead, PCMO Gao treated PCV Castle for mild dehydration by prescribing an oral antibiotic (ciprofloxacin), anti-nausea/vomiting medication, and increased fluids intake using oral rehydration salts (ORS) and other fluids.

One of the relevant algorithms for treating adults with acute viral gastroenteritis calls for a provider to "reassess the patient regularly during the first six hours."[6] However, no on-going monitoring of PCV Castle was documented. To the contrary, the evidence indicates PCMO Gao left PCV Castle's hotel room at approximately 10:30 a.m. and did not return until 2:30 p.m. after she learned PCV Castle had vomited. OIG's review concluded that PCMO Gao failed to use prudent judgment in her treatment of PCV Castle in the morning of January 28 because, although she properly ordered ORS and fluids, she failed to reassess PCV Castle during the next four hours and there is no indication she considered PCV Castle was at a higher risk of clinical deterioration or conducted further tests to assess his dehydration.

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[3] "Clinical features or alarm symptoms and signs ("red flags") (table 1) that identify patients [diagnosed with acute gastroenteritis] who may need hospitalization or evaluation for other causes include: Severe volume depletion/dehydration and hospitalization or antibiotic use in the past three to six months." According to table 1, alarm signs and symptoms of severe volume depletion/dehydration include dry mucous membranes (dry mouth); weakness, fatigue; and, decreased urine output, concentrated urine (deep yellow or amber color). *UptoDate*; Acute Viral Gastroenteritis in Adults, Irene Alexandraki, MD, MPH and Gerald W. Smetana, accessed November 4, 2014, http://www.uptodate.com/contents/acute-viral-gastroenteritis-in-adults. (Hereafter cited in text as *Gastroenteritis in Adults*).

[4] There are physiologic differences between hypovolemia (volume depletion) and dehydration resulting from different types of fluid loss.

[5] Orthostatic blood pressure and pulse are usually measured to identify orthostatic hypotension in a patient, a common consequence of dehydration. Orthostatic hypotension is defined as a decrease in systolic blood pressure of 20 mm Hg or a decrease in diastolic blood pressure of 10 mm Hg within three minutes of standing when compared with blood pressure from the sitting or supine position. *American Family Physician*; "Evaluation and Management of Orthostatic Hypotension," accessed October 14, 2014, http://www.aafp.org/afp/2011/0901/p527.html. (Hereafter cited in text as *Orthostatic Hypotension*).

[6] *Gastroenteritis in Adults.*

OIG's review concluded that in the afternoon of January 28 there were cascading failures and delays in the treatment of PCV Castle. Upon entering PCV Castle's room, PCMO Gao did not recognize the situation was critical. PCMO Gao did not immediately call for an ambulance despite learning from the hotel cleaning lady that PCV Castle had been vomiting, and finding that his pulse was 120 beats per minute and his respiratory rate was 19–signs of hypovolemia. When she was unable to detect PCV Castle's BP on an electric BP cuff, she called the post for a replacement cuff presuming equipment failure rather than perhaps a BP too low to detect. PCMO Gao did not call for an ambulance even after her colleague, a cardiologist, told her PCV Castle needed an IV "in 30 minutes or he is going to die." Rather, she asked another PCMO to come to the hotel, for IV fluids to be brought from the post medical unit, and for a post driver to transport the IV to the hotel, without informing the driver that it was an emergency situation. When PCMO Gao finally called for an ambulance, she failed to convey his critical condition, telling the first responders that PCV Castle needed to go to the hospital because he had had diarrhea for several days.

OIG's review also determined there were significant failures with the care provided by the Chinese ambulance emergency medical technicians (EMTs).[7] At the time of PCV Castle's transportation, he required his airway to be protected, adequate oxygenation, and a significant amount of IV fluids. The EMTs failed to control the situation both in the hotel room and in the ambulance. Our review found that the EMTs likely did not intubate PCV Castle or use a laryngeal mask airway on the scene or in the ambulance. The EMTs focused on starting an IV while the PCMOs focused on positioning PCV Castle on his left side to protect his airway from obstruction. This conflict interfered with the response and continued in the ambulance as the EMTs attempted to start an IV. OIG's review concluded PCV Castle probably succumbed to insufficiently treated hypovolemic shock and dehydration resulting in cardiac arrest that was associated with viral gastroenteritis fluid volume loss from vomiting and diarrhea.

OIG's review also uncovered additional information, which while not contributing to PCV Castle's death, did indicate PCMO Gao failed to adhere to several Peace Corps guidelines regarding medical chart record-keeping, including:

- documenting all clinical contacts with PCV Castle in the medical chart,
- preserving an email sent to her by PCV Castle concerning his weight in his medical chart, and
- preserving and translating medical records concerning an earlier emergency room (ER) visit at his site.

OIG also uncovered that PCMO Gao altered PCV Castle's in-service notes after submitting them to Peace Corps headquarters for review.

PCMO Gao resigned from her position on September 5, 2014.

[7] The EMT team consisted of a physician and a nurse.

Finally, our review includes management considerations for the Peace Corps to assess whether it needs to make overall or post specific changes to policies, procedures, guidelines, staff training, or level of available resources.

RELEVANT LAW, REGULATION, OR AGENCY POLICY

Peace Corps Technical Guideline 210, "Health Records"

2. BACKGROUND
It is extremely important that a complete, accurate, and legible medical record exist for each Volunteer, documenting decisions made during his/her medical screening and Peace Corps service. The Peace Corps health record documents chronologically all health services provided to the Volunteer... .

3. HEALTH RECORD FORMAT AND ORGANIZATION
The health record has eight dividers, four on each side. The sections created by the dividers facilitate access to medical information by organizing the documented information chronologically and by type.

Section 5: In-Service Notes
This section contains documentation of all clinical care and other related contacts between the Peace Corps Medical Officer (PCMO) and the Volunteer during his/her service....

Section 6: In-Service Communications
This section contains all clinical faxes, field consults, correspondence (including emails and texts to and from the PVCs) generated while in country or on medevac status....

7. DOCUMENTATION OF CLINICAL CARE
The PCMO provides and authorizes health care service to Volunteers. The PCMO is responsible for managing and for documenting the decisions made in providing the care. Clinical care documentation should provide a chronological record of decisions made, actions taken, and resolutions reached....

- Corrections: Corrections may only be made by crossing out the material to be corrected with a single line and inserting the corrected copy. Each change must be dated and initialed. Correctional fluid or tape ("white-out") must never be used in the health record.

- Translations: All reports, consults, and lab results must be translated into English....

Peace Corps Technical Guideline 216, "Telephone Triage"

3. TELEPHONE TRIAGE PROCEDURE
- Institute a daily call log (telephone log book) to capture each communication between PCMO and Volunteer. This log will be used during on and off hours.

- Collect as much clinical information as possible related to the complaint. If the Volunteer makes reference to a life-threatening or emergency condition, refer them to the nearest emergency provider.

- Document call and intervention in the Volunteer health record... All notes should be dated for the time it is actually written in addition to the name of person documenting. Document the date and time of the call within the note.

INVESTIGATIVE ACTIVITY

OIG opened a PI on June 11, 2013 into Peace Corps' response to the February 7, 2013 death of PCV Castle to monitor the Peace Corps' response to the death. Monitoring activities included a review of records provided by the Office of Health Services including PCV Castle's medical chart, the sentinel report, a report by a medical expert on emergency care hired by the agency , and the autopsy report performed by the Armed Forces Medical Examiner System (see Exhibit 1). As a result of additional information provided to OIG on April 23, 2014, by PCV Castle's parents, OIG decided to initiate its own investigative review of the facts and circumstances surrounding PCV Castle's death.

OIG conducted 13 interviews with Peace Corps staff, Volunteers, and host country medical professionals. A review of the medical records indicates that PCV Castle was treated by PCMO Gao on two occasions for gastroenteritis. The first instance began on October 25, 2012, when PCV Castle, who was at his site in Tongren, China, complained of a diarrheal illness, vomiting, and fever. PCMO Gao treated PCV Castle with oral ciprofloxacin, an antibiotic. PCV Castle reported that he vomited after taking the medication. On October 26, 2012, PCMO Gao sent PCV Castle to a hospital ER where he was given IV fluids. On October 31, 2012, PCMO Gao determined he had recovered from the illness.

The second occurrence began on January 25, 2013, when PCV Castle, who was at the Kehua Yuan Hotel (the hotel) in Chengdu, China, for the Peace Corps' in-service training (IST) event, first reported feeling ill and subsequently began vomiting. On January 28, 2013, after the onset of symptoms, PCV Castle's roommate at IST called PCMO Gao to tell her that PCV Castle was ill. PCMO Gao treated PCV Castle with oral ciprofloxacin, ORS, other fluids, oral Tigan (timethobenzamide, an anti-nausea medicine), and told him to follow a "BRAT" diet.[8] She also told him she would see him sometime in the afternoon. Sometime between 2:15 p.m. and 2:30 p.m., PCMO Gao arrived at the hotel after receiving a call that PCV Castle vomited a lot on his bed. Around 3:45 p.m. PCMO Gao and PCMO Christian escorted PCV Castle via ambulance to an ER for treatment. They arrived to the ER sometime between 4:08 p.m. and 4:22 p.m.[9] PCV Castle was not breathing when they arrived and had to be resuscitated and placed on life support.

On February 7, 2013, PCV Castle's parents consented to the removal of PCV Castle's life support and he was declared dead. The medical examiner's final diagnosis was viral gastroenteritis, and opined that PCV Castle's cause of death was most probably viral gastroenteritis that "resulted in severe dehydration, multi-organ failure and ended with cerebral edema and acute pneumonia."

[8] The BRAT acronym stands for bananas, rice, apple sauce, and toast. The BRAT diet is a bland diet prescribed for patients with gastroenteritis.

[9] The hospital and ambulance records disagree on the exact time at which the ambulance arrived at the hospital.

Information Received from PCV Castle's Parents

On April 23, 2014, the parents of PCV Castle advised OIG that they had reviewed all the information that the Peace Corps had in its possession regarding the death of their son (see Exhibit 2). The Castles stated that they believe PCV Castle's death was preventable, and that he died as a result of incompetence and medical negligence.

The Castles stated that when PCV Castle became sick in late January and early February 2013, PCMO Gao failed to recognize how sick he was. PCMO Gao was notified on the Sunday preceding his hospitalization that he was sick, but did not go to see him. They allege she saw him the following day after a delay, but only at the behest of PCV Castle's roommate. The Castles alleged that PCMO Gao delayed requesting medical assistance. They said PCV Castle stopped breathing on the way to the hospital, and was essentially dead for 12-15 minutes, while PCMOs Gao and Christian were in the ambulance. The Castles noted that the Peace Corps said in its report that "CPR [cardiopulmonary resuscitation] was not coordinated," but in fact no CPR was provided to him on the way to the hospital.

The Castles said that PCV Castle was previously treated in October 2012 for a similar illness. Students at the university took him to a hospital where he was given 12 units of IV fluid over eight hours. PCV Castle called his mother about the incident. Later, in November 2012, PCV Castle sent an email to PCMO Gao indicating that he had lost weight. The Castles stated that he had lost 11 percent of his body weight. According to the Castles, PCMO Gao's response was basically to "eat more."

REVIEW OF OCTOBER 2012 INCIDENT

OIG reviewed the details of the October 2012 incident, which occurred in Tongren, a city in Guizhou province, approximately 800 miles southeast of the Peace Corps post in Chengdu.

PCV Castle's Chart

OIG reviewed PCV Castle's Peace Corps Medical Record. A copy of the medical record will be maintained separately in the case file. The review disclosed the following timeline, in relevant part.

October 25, 2012

10:00 p.m.: PCV Castle called PCMO Gao and complained of diarrhea, nausea, headache, and fever. PCMO Gao prescribed oral ciprofloxacin and ORS.

October 26, 2012

9:00 a.m.: PCV Castle called PCMO Hu Bingshuang (who no longer works for the Peace Corps), and advised that he vomited after taking oral ciprofloxacin.

12:30 p.m.: PCV Castle called PCMO Gao and stated he had vomited five times, felt weak, and had abdominal pain, dry mouth, and a fever. He also stated having 6-7 episodes of green or dark brown loose stool. PCMO Gao indicated she would ask PCV Castle's counterpart to take him to the hospital.

2:00 p.m.: PCMO Gao indicated she spoke with [redacted] the physician at the ER, who provided PCV Castle's BP and other vital signs, and said he planned to give PCV Castle an IV, as well as other medication. PCMO Gao indicated she "approved." [Agent's Note: The chart did not contain any records from the hospitalization.]

October 30, 2012

9:00 a.m., PCMO Gao called PCV Castle, with no response. She later received an email that he was regaining his appetite. [Agent's Note: A copy of the email was included in his chart.]

October 31, 2012

2:00 p.m., PCMO Gao received a telephone call from PCV Castle, who indicated that he was better, but still got tired "after walking around for some time." PCMO Gao indicated the illness was "resolved."

PCV Castle's Site in Tongren, China

OIG investigators visited PCV Castle's site and took photographs of Tongren University where he taught English, as well as the exterior of his apartment, located on the campus grounds (see Exhibit 3).

[redacted]

OIG interviewed [redacted] who was assigned to Tongren University where she and PCV Castle were English teachers (see Exhibit 4). [redacted] stated that in the Peace Corps' Pre-Service Training, which trainees attend before they are sworn-in, Volunteers are told by the PCMOs that they should only call about gastrointestinal issues if they have diarrhea three times per day and have a temperature. She said that the message was for Volunteers to handle it themselves first. She said PCV Castle was intensely private and did not complain or share his personal business with others. However, she recalled when PCV Castle became extremely ill in October 2012. She said that he was vomiting violently and missed a day of class. PCV Castle had eaten at the school café beforehand; however, [redacted] did not recall anyone else getting sick at the café. PCV Castle called PCMO Gao and, one or two days later, PCMO Gao asked the Foreign Affairs Office at the University (referred to as the "Waiban") to take PCV Castle to the hospital. PCV Castle was at the hospital for about a day, received an IV, and was released. She recalled that PCMO Gao checked in on PCV Castle for about a week after that. •

[redacted]

OIG interviewed PCV Castle's assigned counterpart, [redacted] with the Foreign Affairs Office at Tongren University (see Exhibit 5). She stated that PCV Castle was in "okay" health while in Tongren, but was thin/weak. None of PCV Castle's students reported that he had health problems. In October 2012, she received notification from the director of the Foreign Affairs Office that the Peace Corps post in Chengdu, China, was requesting help to provide care to PCV Castle. [redacted] stated that she called PCMO Gao, who told [redacted] that PCV Castle was sick and needed to go to the hospital.

At approximately 2:00 or 3:00 p.m., [redacted] took PCV Castle to the Tongren Peoples' Hospital via taxi. The ER doctor evaluated PCV Castle and gave him oral medication. [redacted] could not recall the ER doctor's name, if the doctor took PCV Castle's BP, or if the doctor spoke with PCMO Gao on the telephone. [redacted] said that she herself spoke with PCMO Gao on the telephone from the ER. PCV Castle was released at approximately 10:00 or 11:00 p.m. Following the ER visit, [redacted] recalled that approximately two days later PCMO Gao called her to follow-up on PCV Castle's health.

[redacted] sent images of the hospital treatment records, and the hospital bill via email to PCMO Gao's personal email account as well as PCMO Gao's Peace Corps email account, and the main medical unit email address. [Agent's Note: none of the aforementioned records were in PCV Castle's medical file.]

[redacted] stated that PCMO Gao acknowledged receipt of the records in a telephone call, and sent reimbursement for the hospital expenses to [redacted] account. [redacted] provided a copy of the email she sent to PCMO Gao.

[redacted] said that neither she nor the director of the Foreign Affairs Office have been contacted by anyone from the Peace Corps who was reviewing PCV Castle's medical care or the circumstances surrounding his death.

[redacted]

OIG interviewed China's Tongren Peoples' Hospital Chief of Emergency [redacted] (see Exhibit 6). [redacted] reviewed the records provided to OIG by [redacted] and verified that the Tongren Peoples' Hospital treated PCV Castle for dehydration on October 25, 2012. He stated that the records were the only documents related to the case in the hospital's possession.

He reviewed the signature at the bottom of the treatment record and stated that the treating physician was [redacted]. [Agent's Note: PCMO Gao indicated in her treatment notes that the treating physician was "[redacted] said that a male doctor named [redacted] used to work in the ER in the past.

[redacted] stated that according to the treatment record, PCV Castle was suffering from gastroenteritis. The hospital did not take PCV Castle's BP. [Agent's Note: PCMO Gao indicated in her treatment notes that the patient's BP was 120/75.]

PCV Castle's temperature was recorded as 36.2 degrees centigrade (97.16 Fahrenheit). The hospital administered 60 mg of Pantoprazole (a drug that inhibits gastric secretion), 400 mg of ciprofloxacin and 2000 ml of saline. [Agent's Note: PCMO Gao indicated in her treatment notes that the hospital planned to administer 40 mg of Pantaprazole.]

[redacted] stated that at the time of OIG's interview [redacted] was completing a year of training outside of Tongren. In the presence of interviewing investigators, he placed a telephone call to [redacted]

In a telephone interview, [redacted] recalled PCV Castle's case and said that he was the treating physician. He said that no one from the Peace Corps called during his evaluation. [redacted] stated that PCV Castle's BP was not taken.

PCMO Gao

On June 16, 2014, OIG interviewed PCMO Gao (see Exhibit 7). PCMO Gao has been with the Peace Corps since 2005. Previously, she worked in obstetrics and gynecology for 12 years, and also did research work in gynecology-oncology. In a sworn statement, she verified that she prepared the notes in PCV Castle's medical chart. She said PCV Castle had diarrhea and vomiting. She decided to send PCV Castle to the hospital for an IV after PCV Castle was unable to hold down oral ciprofloxacin, had made no sign of improvement, and showed signs of dehydration. When PCMO Gao was asked to explain the absence of the hospital record from the chart, she replied, "I thought we put it in there in February 2013…I thought I translated it and put it in there. I thought I put the original in there too but I am not sure." [Agent's Note: February 2013 was after PCV Castle's death.]

PCMO Gao was shown the hospital record and was asked who the treating physician was. She claimed, "It looks…like [redacted] something like that," then when confronted with the fact that the treating physician was actually [redacted] she claimed "sometimes it's hard to read a signature." She said she prepared her notes from the hospital record, but then vacillated saying she prepared them before receiving the record.

When asked how she knew PCV Castle's BP when none was apparently taken, she conceded that she asked [redacted] to have a nurse take it an hour after PCV Castle had been treated with an IV. When PCMO Gao was asked about other discrepancies between the chart and the hospital record in the types and amounts of medication PCV Castle was provided, she said "Maybe [there was] some mistake."

INTERIM PERIOD BETWEEN PCV CASTLE'S TWO MEDICAL INCIDENTS

OIG reviewed PCV Castle's reported health during the interim between his two incidents of gastroenteritis.

[redacted] said that after PCV Castle's first incident of gastrointestinal distress, he never gained back the weight he lost when he was ill. He was weak and tired for a few weeks following the incident. [redacted] said he was "so thin" but he was still able to do things. She said that PCV Castle typically never complained about things, even those things people should complain about.

[redacted] said that while having dinner with PCV Castle some time later, she asked him if the doctors had figured out what the illness was. PCV Castle replied, "No, they said it was just a stomach infection. People get sick."

Peace Corps' Volunteer Information Database Application (VIDA) Records

OIG reviewed the communications tracking log in VIDA[10] pertaining to PCV Castle (see Exhibit 8). The log indicated that on November 30, 2012, [redacted] made a notation following a site visit, indicating, "He is sick a lot, lose lots of weight but doing better now...."

[redacted]

OIG interviewed [redacted] stated that she has worked at Peace Corps/China for approximately eight years, and is the program manager for Guizhou Province, where PCV Castle was assigned. She visited PCV Castle at his site at Tongren University only one time, as he was only assigned to that location for one semester. [redacted] said that there were four Volunteers assigned to Tongren including PCV Castle. [redacted] stated that the visit was routine, as she visits all first-year Volunteers, and tries to see those Volunteers serving in remote areas first. She said he was mature and never complained, except for one occasion when he discussed his need for a heater.

[redacted] reviewed the record in VIDA and determined that she visited him on or about November 28, 2012. She stated that the notes in VIDA indicated that PCV Castle told her that he was sick a lot, and that he was losing a lot of weight. She said that PCV Castle asked for a heater because his room was cold. [redacted] said that the temperature at the time in the region was 3 to 5 degrees Centigrade (approximately 40 degrees Fahrenheit). [redacted] said that the post purchased him a heater.

When asked how PCV Castle appeared, [redacted] stated that PCV Castle was a very nice person, who was quiet, thoughtful, and liked Buddhism. She said that he had lost a lot of weight during Pre-Service Training, as many male Volunteers do, but that he lost more than others. He told her that he had been at a hospital for one or two weeks for an IV, and that he had mentioned it to the PCMOs. [Agent's Note: Records indicate he was hospitalized for one day.]

[10] VIDA is not a medical documentation system, and a PCMO would likely not have reviewed the VIDA system for medical information.

[redacted] returned to Chengdu and discussed his health and the hospitalization at the next staff meeting, which is held every Monday. She believed that the meeting occurred in mid-December 2012. She said that the PCMOs acknowledged that they were aware of PCV Castle's hospitalization. [redacted] stated that she believed PCMO Christian was present at the meeting.

PCV Castle's Email to PCMO Gao

On April 23, 2014, Sue Castle sent OIG an email string between PCV Castle and PCMO Gao (see Exhibit 10). [Agent's Note: There is no record of this correspondence in PCV Castle's medical chart]. OIG reviewed PCMO Gao's email and located PCV Castle's email, but not PCMO Gao's reply.

OIG's review of the email string indicated that on November 27, 2012, PCV Castle requested a heater because of the cold, and advised PCMO Gao that he had not gained back the weight he lost when he was sick. He stated that he weighed 54 Kilograms (119 pounds). PCMO Gao replied that his Body Mass Index (BMI) was 18.6, "low normal," and sent him a link to a website with information on diets for medical disorders. [Agent's Note: There is a discrepancy between PCV Castle's height as reported in his pre-service physical (5'7") versus his visa application physical (5'8"). When BMI is calculated using a height of 5'8", the result is BMI 18.1, which is "underweight."]

PCMO Gao

During her interview, PCMO Gao at first denied that she had any contact with PCV Castle until January 2013. She denied receiving an email from him in November 2012 about health concerns, and denied that [redacted] told her that PCV Castle had not returned to full health. When confronted with the email string between her and PCV Castle, at first she stated, "Right, it's about a heater reimbursement..." Then after conceding that PCV Castle had raised the issue of his weight, she stated that "maybe [she] forgot" to put the email in his chart as required.

On the matter of PCV Castle's weight, PCMO Gao said that she would not have considered PCV Castle's weight to be a concern even if his BMI was 18.1, as long as he had no persistent diarrhea or other symptoms. PCMO Gao said that many other Volunteers were underweight too. But she said that if no improvement had been reported she might have considered lab tests to see if his metabolism was normal.

PCMO Gao stated that she sent PCV Castle's chart to the quality improvement (QI) staff in the Office of Health Services at Peace Corps headquarters for review on December 7, 2012. [Agent's Note: This was approximately 10 days after her email exchange with PCV Castle.] PCMO Gao said that she did not include the email exchange in the review, claiming it was not required, because it was "not correlated to the October 31 notes" regarding PCV Castle's hospitalization. [Agent's Note: In fact, all documents in the chart including notes, hospital records, and communications are required to be sent to QI staff.]

REVIEW OF JANUARY 2013 INCIDENT

OIG reviewed the circumstances surrounding the January 2013 incident.

PCV Castle's Chart

OIG reviewed PCV Castle's Peace Corps Medical Record. The review disclosed the following timeline, in relevant part.

January 28, 2013

8:00 a.m.: PCMO Gao spoke with PCV Castle, who reported that he vomited four to five times on January 26, and three times on January 27. He also reported three episodes of watery stools, that his urine output was decreased and dark, and that he felt feverish the day before. PCMO Gao prescribed one liter of ORS, two liters of other fluids, and a bland diet of low fiber foods (referred to as a "BRAT" diet). [Agent's Note: There is no mention in the chart of a previous report from PCV Castle's roommate that PCV Castle was sick.]

9:30 a.m.: PCMO Gao examined PCV Castle at the hotel. She indicated he got up and opened his door to meet her, then returned to bed. PCMO Gao observed PCV Castle tolerate 250 ml of ORS. She indicated that he did not appear to be in acute distress, and looked alert, awake, and oriented. His lips were dry, he looked fatigued, and he had decreased bowel sounds. His BP was recorded as 95/62 and pulse as 59. [Agent's Note: According to the Mayo Clinic's website, a normal adult's resting heart rate ranges between 60 and 100 beats per minute.] PCMO Gao prescribed 500 mg of oral ciprofloxacin twice daily, 300 mg of trimethobenzamide (an anti-nausea medication) three times a day, and to continue with one liter of ORS, two liters of other fluids, and a BRAT diet.

Approximately 2:00 p.m.: [Agent's Note: no further time annotations were made in the chart notes]. The training manager advised PCMO Gao that the cleaning woman at the hotel reported that PCV had just vomited a lot. PCMO Gao returned to the hotel and observed greenish vomit on PCV Castle's sheets. PCV Castle moved to the other bed as his sheets were changed, and moved back afterward. PCMO Gao indicated that he looked alert, awake, and oriented. His lips were dry, he was fatigued, and had inactive bowel sounds. His BP could not be detected using the cuff that PCMO Gao had. His pulse was 120. PCMO Gao called [redacted] and asked her to bring a second cuff to the hotel, which PCMO Bing Ziyi brought from the Peace Corps post. [Agent's Note: The Peace Corps post is located 1.4 miles from the hotel.]

Upon PCMO Bing's arrival, his pulse was noted as 120 and BP was 80/40. His hands were cold. PCMO Gao indicated that she realized it was a critical situation, and that she called [redacted] "to bring IV fluid and call the office driver to pick up the patient to [go to the] hospital. Call [PCMO Christian] to come to the hotel ASAP."

Upon PCMO Christian's arrival, PCV Castle's pulse was noted as 100, his BP was not detectable, and a decision was made to call an ambulance immediately. PCMO Gao noted that PCV Castle was lying on his back, and then expelled a large amount of vomit. PCV Castle sat up, gasped for breath, then collapsed and became less responsive.

The ambulance arrived and PCV Castle was transported by stretcher to the vehicle. In the ambulance, PCMO Gao noted the PCMOs "struggled to keep his airway open by turning him on his side. The ambulance physician and nurse were fighting the position because they were intent on starting an IV and getting the BP cuff in place" (see Exhibit 7). On arrival to the ER, PCV Castle was not breathing and pulseless. [Agent's Note: According to records he arrived either at 4:08 p.m. or 4:22 p.m.] CPR was started but IV access was delayed for a few minutes until a bore needle was placed in his carotid artery. Approximately 15 minutes later, PCV Castle's heartbeat was restored.

QI Supervisor Geri Kelly

OIG interviewed QI Supervisor Geri Kelly (Supervisor Kelly) regarding PCV Castle's QI chart review performed on December 7, 2012 (see Exhibit 11). Supervisor Kelly said that each PCMO selects 10 patient medical charts and sends for QI review all records from each chart encompassing a three-month period. The charts include patient encounters, follow-up, laboratory reports, and consultant notes.

She said that PCMO Gao forwarded a copy of PCV Castle's chart, including notes, for review by QI on December 7, 2012. [Agent's Note: Tongren Hospital records and PCV Castle's email of November 27, 2012, were not included in the submission and were absent from PCV Castle's chart.]

At OIG's request, Supervisor Kelly reviewed the submission and compared the PCMO's notes in the submission to the PCMO's notes in PCV Castle's actual chart. Many alterations or deletions were noted. All notes from October 26, 2012, at 9:00 p.m. through October 28, 2012, at 2:00 p.m. were missing, and references to "acute gastroenteritis, bacterial" were apparently changed to reflect "acute gastroenteritis." Supervisor Kelly stated that medical staff knows that notes may be amended by subsequent entries, but notes must not be altered.

Kehua Yuan Hotel

OIG visited and photographed the hotel, Chengdu, where PCV Castle was housed during IST (see Exhibit 12).

OIG reviewed maps of the local area (see Exhibit 13). The hotel is located on the edge of the Sichuan University Campus, along a busy thoroughfare. The Peace Corps Office, which is also on the Sichuan University campus, is located approximately 1.4 miles away from the hotel.

The Huaxi hospital (where PCV Castle was ultimately sent) is located approximately 2.4 miles away from the hotel.

[redacted] was interviewed by OIG (see Exhibit 14). During IST in January 2013, [redacted] was assigned as PCV Castle's roommate during their stay at the hotel.

[redacted] said that when IST started, all of the PCVs arrived on the same day. PCV Castle had been in Chengdu with his host family prior to the start of training. The Volunteers had one week of training together.

[redacted] recalled that the Volunteers enjoyed a talent show and "pizza night" on Friday night (January 25, 2013). After the talent show, PCV Castle said he was starting to feel sick. He went out with the group for beers and then went back to the hotel early.

On Saturday (January 26, 2013), PCV Castle went to a half-day session at IST. Later that day, PCV Castle told [redacted] that he was not feeling well. He told [redacted] that he went shopping after training with other Volunteers and got sick. [redacted] said that PCV Castle never wanted to talk too much about what was wrong. He also did not drink that much.

That evening, PCV Castle threw up a few times. It seemed to [redacted] like "a food thing." [redacted] said that other PCVs at the hotel were ill too. [redacted] asked PCV Castle if he wanted him to get him some water. PCV Castle said no. [redacted] went to the store anyway and brought back some water for him. PCV Castle slept through the night.

On Sunday morning (January 27, 2013), PCV Castle woke up and told [redacted] that he was not feeling that great. [redacted] got PCV Castle water and bread. [redacted] told PCV Castle he should call the PCMOs. That morning [redacted] went to the campus of the Sichuan University. Sometime before lunch, he saw PCMO Gao near the Peace Corps office. [redacted] told her that PCV Castle was sick. In [redacted] presence, PCMO Gao tried to call PCV Castle using her cell phone. There was no answer. PCMO Gao told [redacted] to have PCV Castle call her. [Agent's Note: This information was obtained through interviews; PCMO Gao did not reference this contact in PCV Castle's chart.]

When [redacted] returned to the hotel room, he saw PCV Castle watching TV on his laptop. He told PCV Castle to call PCMO Gao. He did not see PCV Castle make the call. [redacted] said that PCV Castle was reluctant to call the PCMOs because he was the kind of person who did not want to burden people.

That night, while [redacted] was sleeping, at about 2 a.m. or 3 a.m., PCV Castle started throwing up "really bad." [redacted] said that it was more severe than typical vomiting, and looked like very severe food poisoning. He said PCV Castle was vomiting a lot. He said it was not just retching, as there was still fluid coming out. It looked greenish after a while. He threw up in the bathroom, and then lay in bed, throwing up in a trashcan. PCV Castle stopped vomiting around 6:30 or 7:00 a.m. Monday morning (January 28, 2013).

That morning, [redacted] called the PCMO medical line (a duty phone). He was not sure which PCMO answered the call. He handed PCV Castle the telephone. He overheard PCV Castle

answering questions about what he had eaten. This led [redacted] believe that PCV Castle had not called the PCMOs the night before. PCV Castle told the PCMO that he had been sick or nauseous for a couple of days.

[redacted] went out, and brought water and steamed bread from breakfast for PCV Castle. He said PCV Castle seemed worse, like someone who had the flu. He had low energy. PCV Castle talked, but looked "really not in good shape."
[redacted] went to training and then came back to the room to check on PCV Castle at about 10:00 a.m. PCMO Gao was in the room and had just finishing checking on PCV Castle. There were paper medicine packets of the type that nonprescription drugs come in on the nightstand. PCMO Gao recommended that PCV Castle take ORS and drink water and a Chinese version of Gatorade. PCV Castle was sitting up on the bed. [redacted] left.

[redacted] came back to the room after lunch at approximately 12:30 or 1:00 p.m. to drop off bread for PCV Castle. He believed that PCV Castle might have been sleeping. [redacted] did not see PCV Castle after that.

PCMO Gao

PCMO Gao said that on Sunday, January 27, 2013, she was at the Peace Corps office on her way to lunch when [redacted] told her that PCV Castle was sick with diarrhea and vomiting. She called PCV Castle, but received no answer. She called [redacted] and asked him to tell PCV Castle to call her if he needed help. PCMO Gao did not receive a call from PCV Castle.

The next morning, on Monday, January 28, 2013, PCMO Gao received a call at 8:00 a.m. from [redacted] who said PCV Castle wanted to talk to her. PCV Castle took the phone and told her that he had been having nausea and vomiting since Saturday, January 26, 2013, and had diarrhea since Sunday, January 27, 2013. PCMO Gao came to the office to pick up a "go bag" including the oral antibiotics ciprofloxacin, Augmentin, and azithromycin, as well as other medicines, and an electric, battery-powered BP cuff. PCMO Gao said that, at the time, the go-bag did not contain IV fluids, but that it did now. PCMO Gao said that she did not consider bringing IV fluids for PCV Castle, because if a Volunteer needs fluids they would be brought to the office.

PCMO Gao said that she went to the hotel. PCV Castle opened the door to his room and lay on the bed. PCMO Gao asked him questions and checked his vitals and BP using the electric cuff. PCV Castle said that he had vomited eight times over the last two days. His lips looked dry and he looked fatigued, with decreased bowel sounds. She said his vitals were normal, including a BP of 95/62, and a pulse of 59. [Agent's Note: A normal adult's resting pulse ranges between 60 and 100.] PCMO Gao said she believed PCV Castle had gastroenteritis, so she prescribed oral ciprofloxacin. PCMO Gao said that she watched PCV Castle take the medicine and remained with him for 30 to 40 minutes. PCV Castle did not vomit. PCV Gao said that PCV Castle was exhibiting signs of dehydration, so she prescribed ORS and one to two liters of fluids. She said he drank some water in front of her. PCMO Gao told PCV Castle that she would see him later that afternoon.

PCMO Gao treated two other sick Volunteers at the hotel and went back to the office at about 11:30 a.m. At approximately 2:00 p.m., PCMO Gao was writing a note about PCV Castle when she received a call from the training manager, who said that the cleaning lady said that PCV Castle vomited a lot on his bed. PCMO Gao got a vial of Fenogan (promethazine, an anti-nausea medicine) and took an office vehicle to the hotel. The driver was assigned to take some samples to the hospital, and dropped PCMO Gao off at the hotel along the way. She again did not take IV fluids because she thought that if he needed fluids she could bring him to the Peace Corps office. PCMO Gao said that when she arrived at the hotel, the cleaning lady was changing his bed sheets. PCV Castle was lying on [redacted] bed. PCV Gao said that after his sheets were changed, PCV Castle climbed back onto his bed without difficulty. PCMO Gao asked PCV Castle what happened. He said that he vomited two times after PCMO Gao left that morning. PCMO Gao checked his vital signs, and his pulse was 120, which was rapid. She attempted to use the electric cuff to take his BP, but the machine did not function. PCMO Gao said that she called [redacted] and asked her to send a manual BP cuff to the hotel. [redacted] said she would send PCMO Bing with one. PCMO Gao said that she did not consider an IV because she did not know PCV Castle's BP.

PCMO Bing arrived with a manual BP cuff. PCMO Gao said that the reading was low, 80/40. PCMO Bing said that PCV Castle needed to go to the hospital. PCMO Gao indicated that she had concerns about Chinese hospitals, such as giving treatment that was not up to American standards. PCMO Gao said that PCV Castle needed an IV as soon as possible. She said she wanted to get input from PCMO Christian, and called [redacted] to send IV fluids to the hotel. PCMO Gao said that she called the Peace Corps driver or asked [redacted] to arrange a driver to pick up PCV Castle. PCMO Gao and PCMO Bing waited at the hotel. PCMO Gao gave PCV Castle Fenogan (intramuscular) and PCV Castle drank a cup of ORS. PCV Castle seemed stable and talked to PCMO Bing and PCMO Gao. PCMO Gao said that PCV Castle did not ask for any additional treatment or object to their treatment.

PCMO Christian arrived and talked to PCV Castle. He was conscious and reacted well. PCMO Gao performed a physical examination. While doing so, [redacted] arrived with the IV. PCMO Christian said that they needed an ambulance. Then PCV Castle violently vomited. He sat up and gasped like it was hard to breathe. He lay back on the bed. The PCMOs turned his head to clear his mouth. PCMO Christian asked him some questions but he could not answer, his voice was not very clear. PCMO Gao said that they called twice for the ambulance, but PCMO Gao stated that the ambulance took more than 30 minutes to arrive. PCMO Gao said that she and the PCMOs were preparing to administer the IV but it was hard because PCV Castle was repeatedly vomiting. PCMO Gao said that they needed to keep PCV Castle still to receive the IV but he kept vomiting. The IV was never accomplished. The ambulance arrived and they put him on a stretcher. PCV Castle was still breathing. They took him downstairs. PCMO Gao could not recall how they got him down but said it was done quickly. PCMO Christian and PCMO Gao jumped into the ambulance.

The ambulance doctor [later identified as [redacted] tried to give PCV Castle an IV. PCMOs Gao and Christian kept trying to roll PCV Castle onto his side so his tongue would not obstruct his airway. PCMO Gao said that it was hard to monitor him during transport. She could not recall details about the transport. They arrived at the ER. At that

point, PCV Castle was not breathing, and ER staff administered CPR. When PCV Castle was resuscitated, he was sent to the intensive care unit (ICU).

PCMO Gao said that it was not common for PCVs in China to receive IVs. She stated that the PCMOs see approximately 10 cases of diarrhea per month, of which a small percentage receive IVs–less than one case every two months. She said that doctors in Chinese clinics are more liberal about providing IVs to patients with diarrhea and vomiting than U.S. doctors. She said that she has seen research that Chinese receive more IVs per capita than any other country.

In a follow-up interview, PCMO Gao said that oxygen was available on the scene as the ambulance crew brought an oxygen bag, and it was available in the ambulance (see Exhibit 15). She stated that oxygen was administered on the scene and in the ambulance using an air mask. She said that intubation and laryngeal mask airway are generally required equipment in ambulances, but was not used because the crew was focused on trying to get IV fluids into PCV Castle.

[redacted]

OIG interviewed [redacted] (see Exhibit 16). [redacted] is a nurse who has worked for Peace Corps since 2006. Prior to that, she was employed by Global Doctor, a clinic for foreigners. [redacted] first heard that PCV Castle was sick at the hotel when PCMO Gao called her to bring some IV fluids to the hotel because there was a patient there that needed an IV. [redacted] suggested that PCMO Gao take the patient to the Peace Corps medical office or to a hospital. She said if it was not urgent, it was better not to administer an IV at the hotel.

[redacted] prepared the IV, but a few minutes later she received a call from PCMO Gao saying not to bring the IV. PCMO Gao stated that after discussing it with PCMO Christian, they were going to bring PCV Castle to the Peace Corps medical office.

A few minutes later, PCMO Gao called back and said that they were sending PCV Castle to the hospital, but told her to bring the IV to the hotel. PCMO Gao said she was sending a Peace Corps driver [redacted] to pick [redacted] up. [redacted] waited for [redacted] to arrive for about 10 minutes.

PCMO Gao called and asked [redacted] where she was, as the situation was very serious. [redacted] called [redacted] to find out where he was. [redacted] said he was at the office, but that Country Director Bonnie Thie (CD Thie) had intercepted him and wanted him to do some work on the second or third floor. [redacted] stated that she told [redacted] that it was a medical emergency. He came downstairs right away and told [redacted] that PCMO Gao never told him it was a medical emergency. They left for the hotel. Along the way, PCMO Gao called [redacted] and told her an ambulance was coming, that PCV Castle's condition was not good, but no need to hurry because she did not want [redacted] and [redacted] to get into an accident. They arrived at the hotel within 15 minutes. The ambulance had already arrived, and the ambulance doctor and nurse had just stepped into the hotel. All four went up to PCV Castle's room together. All of the PCMOs (Gao, Christian, and Bing) were in the room already. [redacted] said that PCV Castle was able to move his hand, but he was very weak. The ambulance

staff later said that they had been told only that the patient had diarrhea and needed to go to the hospital. Only upon arrival did they see the seriousness of PCV Castle's condition.

The PCMOs did not try to put in the IV. [redacted] said that PCMO Christian wanted to give PCV Castle oxygen, and kept repeating that the patient could not breathe. [redacted] said she told them, "We need to give him fluids right now."

[redacted] said that PCV Castle's condition was very bad and said, "let's move him to the ambulance and try to give him fluids there, because if we are not successful, we would waste a lot of time." [redacted] stepped back. The ambulance staff and PCMOs put PCV Castle on the stretcher and took him out of the hotel. [redacted] PCMO Bing, and [redacted] drove separately to the hospital and arrived there later than the ambulance. Inside the hospital [redacted] went to the ER. She saw nurses and doctors giving PCV Castle electric shocks to restart his heart.

Later, hospital staff asked [redacted] take PCMO Christian out because she was "bossing them and disturbing their work." [redacted] told PCMO Christian, but she refused to leave, although she promised to be quiet and stay back.

During her interview, [redacted] said she would have given PCV Castle an IV. [redacted] said that when she worked for Global Doctor, it was common to administer an IV if the patient was short of fluids. If the patient cannot eat well, drink well, sweated a lot, has abnormal (decreased) urine, dry lips, even if the BP is normal, the patient should be given IV fluids. [redacted] said that lots of Volunteers were sick during IST, so maybe the PCMOs did not realize how serious PCV Castle's condition was.

CD Thie

OIG interviewed CD Thie (see Exhibit 17). CD Thie said that she had no recollection of tasking [redacted] with an assignment on January 28, 2013. She recalled asking him on occasion to do such things as carry boxes that were mistakenly delivered to her office to the correct floor, but did not know if she had done so in this case. Nevertheless, she said that [redacted] would have felt comfortable telling her that he could not perform a task if he knew there was a medical emergency that took precedence.

PCMO Bing

OIG interviewed PCMO Bing, who provided a sworn statement (see Exhibit 18). PCMO Bing said that she started with the Peace Corps in February 2013. [Agent's Note: According to the Peace Corps' Personnel Tracking System, PCMO Bing entered on duty on February 26, 2013, approximately one month after this incident.] She was previously a cardiologist at the Number 1 People's Hospital in Chengdu. On her second day working with Peace Corps part-time, she overheard a conversation in which [redacted] was asked to send a BP cuff to PCMO Gao who was at the hotel with a patient. PCMO Bing offered to take the cuff over there. When she arrived between 2:30 and 2:40 p.m., PCMO Gao asked her to take PCV Castle's BP. She saw that PCV Castle looked very bad, and told PCMO Gao that she did not need to take vital signs. PCV Castle

was pale, had dry mouth, his hands and feet were cold, he had Kussmaul breathing,[11] and he was not very alert. PCMO Bing told PCMO Gao that PCV Castle needed to go to the hospital or get IV fluids immediately. PCMO Gao said that the hospital would be very crowded and difficult to get admitted into. PCMO Bing said that if PCV Castle did not get an IV within 30 minutes he was going to die.

PCMO Gao murmured to herself, then told PCMO Bing to take PCV Castle's BP. It was 80/60. PCMO Bing said that she did not trust the electric cuff. She could tell by the feel of his pulse that PCV Castle's BP was very low. PCMO Gao made several phone calls, but PCMO Bing was not sure of the order: PCMO Gao called PCMO Christian for advice; she called [redacted] and asked for IV fluids; and she called for an ambulance.

PCMO Christian arrived before the ambulance. PCV Castle was still able to answer questions. The ambulance took 30 or 40 minutes to arrive at the hotel. During that time, PCMO Gao got a call on the duty phone from the ambulance. They got lost and needed directions. Then PCV Castle sat up, vomited, and fainted. PCMO Bing wanted to start CPR on PCV Castle, but PCMOs Christian and Gao had rolled PCV Castle on his side. PCMO Bing took PCMO Gao's phone, called the ambulance, and asked them where they were because PCV Castle had fainted, they needed to get there now, and it was an emergency.

PCMO Bing went downstairs to get the hotel staff to help get the ambulance crew in. The ambulance doctor and nurse came to the room with an oxygen bag. The doctor verified that PCV Castle was still breathing and they attempted to open an IV channel in his foot and his arm. But because PCMOs Christian and Gao had him rolled onto his side, they could not get the IV needle in. [redacted] said it was not necessary to have PCV Castle on his side because he was breathing. PCMO Christian disagreed, saying that he was vomiting so he needed to have his airway secured and be kept on his side. [redacted] said to just get PCV Castle out of there, and that they would try to start an IV in the ambulance. PCMOs Christian and Gao rode in the ambulance, and PCMO Bing and [redacted] followed in the Peace Corps vehicle.

When they arrived at the hospital, a doctor got the patient history from PCMO Gao, and told them that PCV Castle had no breathing or pulse when he arrived. PCMO Bing said that she believed the ambulance made the best decision by getting PCV Castle out of the hotel as quickly as possible.

PCMO Christian

OIG interviewed PCMO Christian, who provided a sworn statement, and a subsequent amendment (see Exhibit 19). PCMO Christian stated that she is a physician's assistant. She

[11] Kussmaul breathing is a deep and labored breathing pattern often associated with severe metabolic acidosis, particularly diabetic ketoacidosis but also renal failure. It is a form of hyperventilation, which is any breathing pattern that reduces carbon dioxide in the blood due to increased rate or depth of respiration.
In metabolic acidosis, breathing is first rapid and shallow but as acidosis worsens, breathing gradually becomes deep, labored and gasping. It is this latter type of breathing pattern that is referred to as Kussmaul breathing.

previously worked as a physician's assistant in an ER for a year. She also trained at an ER in China as well.

PCMO Christian said that during IST, five or six Volunteers reported having diarrhea. On January 28, 2013, at 9:00 a.m., she knew that someone at the hotel was sick when PCMO Gao came into the office to gather medical supplies. PCMO Christian told PCMO Gao that PCMO Bing was already at the hotel looking in on another patient with diarrhea, and suggested that PCMO Gao have PCMO Bing look in on her Volunteer (PCV Castle). PCMO Gao refused, saying that she had talked with the patient that morning.

PCMO Christian stated that at 2:30 p.m., she received a call from PCMO Bing that PCMO Gao needed her at the hotel. PCMO Christian, who was returning from lunch, tried to get a taxi but it took a long time. Approximately 15 minutes later, she received a second call, this time from PCMO Gao.

PCMO Christian said she arrived at the hotel at about 3:15 p.m. She went to PCV Castle's room, where she examined him. She said PCV Castle was talking and answering her questions. PCMO Christian tried to take his BP using a manual cuff but could not detect his BP. She said she thought her stethoscope was in the wrong place. She could not believe that his BP could be so low because he was talking to her, and looked ill, but not that ill. PCMO Christian realized that if she could not get a BP, PCV Castle was too weak to walk to the Peace Corps vehicle. PCMO Bing called for an ambulance. Five to 15 minutes later, PCV Castle vomited explosively. PCMOs Christian and Gao turned PCV Castle on his side. He lay on his side for a couple minutes, and then struggled to sit up. He was sitting up with no support to his back, leaning over. PCV Castle's breathing became very deep, slow and pronounced, then he suddenly collapsed. PCMO Christian shouted into PCV Castle's ear if he could hear her. He nodded and she thought he said yes. The PCMOs laid PCV Castle on his side, and he was unresponsive. PCMO Christian rubbed his collarbone but he did not respond. The PCMOs kept PCV Castle on his side listening to his heart, which was beating rapidly. They called the ambulance again to find out where it was.

The ambulance doctor and nurse[redacted] and the Peace Corps driver arrived at the same time. The ambulance crew had a stretcher. PCMO Christian wanted to use the ambulance crew's oxygen but the ambulance nurse pushed PCMO Christian back as[redacted] examined PCV Castle. The ambulance crew placed PCV Castle on a stretcher and carried him down three flights of stairs to the ambulance. PCMO Christian stated that PCV Castle's head was hyperextended on the gurney, and the crew took time and had difficulty taking him downstairs.

PCMOs Christian and Gao forced their way onto the ambulance over[redacted] objections and told them "Go, go, go." The ambulance departed for the Huaxi hospital. PCMO Christian said that she kept trying to get the ambulance crew to turn PCV Castle on his side, as the ambulance crew kept trying to put on a BP cuff and start an IV. The ambulance nurse was trying to start an IV in PCV Castle's hand. PCMO Christian told her she should try a larger vein in his arm. Meanwhile, the PCMOs were trying to turn PCV Castle on his side and keep his head steady to keep the airway open. PCMO Christian said that the ambulance crew did not have a heart rate

monitor on PCV Castle, but [redacted] had a stethoscope on his chest, which was moving during transport.

PCMO Christian said that when the ambulance arrived at the hospital, PCV Castle was not breathing. She said that everyone pushed her out of the way and took PCV Castle to the ER on the stretcher. When she caught up with them, they were performing CPR, doing compressions continuously as they tried to get an IV into his feet, then finally into his jugular vein. After PCV Castle's heart started again, he was moved to the ICU.

In a follow-up interview, PCMO Christian said that oxygen was available on the scene as the ambulance crew brought an oxygen pillow, but that [redacted] resisted using it. She said that the oxygen mask was not used in the hotel and was unsure if it was used in the ambulance. She said that intubation and laryngeal mask airway were not available on scene or in the ambulance.

[redacted]

At OIG's request, Foreign Service National Investigator [redacted] U.S. Consulate, Chengdu, interviewed [redacted] the ambulance doctor dispatched by "120" (the equivalent of 911 dispatch) from the People's Hospital Number 7 (see Exhibit 21). [redacted] stated that she was notified by 120 that there was an emergency case. She called the patient using the cell number provided by 120, and a female picked up the phone and told her there was a diarrhea case. No other details were provided.

[redacted] stated that the ambulance arrived at the hotel at 3:33 p.m. There was a Chinese female and an American female in PCV Castle's room. [Agent's Note: [redacted] was referring to PCMOs Gao and Christian, respectively.] She saw the patient on the bed, and observed that his arms and legs were cold, there was green vomit beside him, and it was apparent the condition of patient was very bad. She said hello to PCV Castle, who gave her a weak response. The Chinese female told her that the Volunteer had been vomiting with diarrhea for three days. [redacted] planned to administer IV fluids, check PCV Castle's BP, blood sugar, and oxygen saturation.

[redacted] said she had a dispute with the PCMOs, insisting that IV fluids be administered immediately, while they insisted "secure breathing is top priority." She said that the PCMOs interfered with her care.

[redacted] said that in the ambulance, PCMO Christian turned PCV Castle on his side without her permission, and PCV Castle's head hit the metal edge of stretcher several times. [redacted] tried to stop it but PCMO Gao told her that PCMO Christian was a "qualified emergency operator, they know how to deal with this situation, all the instruction by [PCMO Christian] must be followed, secure breathing is top priority, the rest are not important." [redacted] said that the PCMO Christian's action prevented the ambulance nurse from starting IV fluids and setting the heart monitor until just before their arrival at Huaxi hospital.

[redacted] said that the oxygen saturation (SP02) monitor also has the function of monitoring heart rate, and the SPO2 monitor had been operating during the transportation from the hotel to hospital. [redacted] stated that PCV Castle kept breathing during transport. When OIG asked [redacted]

[redacted] in a follow-up interview why PCV Castle was not intubated, [redacted] claimed that PCV Castle was intubated via his nostrils when the ambulance crew arrived at the hotel.

Ambulance Records

[redacted] provided Chinese language copies of the ambulance record, ambulance doctor's report, and the transport request. OIG obtained and reviewed an English translation of the documents.

The ambulance record indicated that the ambulance crew received the call at 3:25 p.m. They arrived on site at the hotel at 3:33 p.m., and departed at 3:43 p.m. The ambulance arrived at the hospital at 4:20 p.m. PCV Castle's arterial oxygen saturation was 85 percent. PCV Castle's pulse was indicated to have been decreasing from 68 to 60 and his BP was unmeasurable. The form indicated the following emergency action taken:

1. Offer oxygen
2. Establishing vein channel
3. Medicine treatment: 5 percent GN3 250 ml

The report included the following narrative statement:

> Patient Castle, Nicholas, male, 24 years old. On Jan 28, 2013 at 15:25, we visited Kehua Yuan Hotel according to commands from 120 center. Green vomit was observed beside patient upon arrival, his limbs were cold. As we could not speak his language, the accompanying doctor (Chinese) stated that the patient had been vomiting for the past three days with diarrhea, and they called 120 today because they found the BP of patient could not be measured after they got to the hotel. Patient was transferred to the ambulance immediately and the accompanying doctor (Chinese) requested to transfer the patient to Huaxi Hospital and stated that they already contacted with Huaxi Gold Card Hospital. After the patient boarded the ambulance, oxygen was offered at once, accompanying doctor (Chinese) was asked to contact the emergency department at Huaxi Hospital again and the nurse was asked to establish vein channel liquid supplement at once. After we took care of the patient he didn't have vomit again. On the ambulance, accompanying doctor (USA) strongly requested to place patient at left clinostatism and hindered transfusion treatment, we tried to stop [her] but it didn't work, the accompanying doctor (USA) herself placed patient [lying on his left side] and caused the patient's head colliding multiple times on the lifter. We tried to explain to the other accompanying doctor (Chinese) and asked her to stop this, while she said that both of the doctors were certified with emergency aid qualifications and insisted that the treatment must be conducted according to requirement of USA doctors and "all other treatments are not important." After we tried many times but ineffective, vein channel liquid supplement was established at the side location and monitor equipment were installed, then patient was transferred to Huaxi Hospital emergency department.

Ambulance Intubation Capability

[redacted] provided information concerning Chengdu ambulance operations (see Exhibit 22). He stated that the ambulances in Chengdu are customized according to the requirements of 120, and that a device for intubating patients if not breathing is the standard equipment. He provided photographs of the interior of such an ambulance.

[redacted] said that on January 28, 2013, at about 5:00 p.m. [redacted] told [redacted] that PCV Castle was in the hospital. The two Volunteers went to the hospital waiting room. PCMO Christian came out of the ER. [redacted] asked if it was the same illness that PCV Castle had before. PCMO Christian said they did not know. [redacted] said that the illnesses sounded similar to her: violent, explosive vomiting throughout the day. She stated that "everyone" at IST was sick and PCV Castle got lost in the crowd.

Huaxi Hospital Records

OIG had the Chinese documents provided by the Huaxi Hospital translated (see Exhibit 20). The documents indicated that PCV Castle arrived at the hospital at 4:08 p.m. Upon reaching the hospital, he had no pulse, was not breathing, and the hospital staff immediately began CPR. The records indicated that the following emergency treatment was provided:

1. Immediate endotracheal intubation [Agent's Note: this is the first recorded instance of intubation.]
2. CPR
3. Establishing internal jugular vein access rehydration

At 4:26 p.m., PCV Castle's heart restarted, and he was transferred to the ICU. On February 7, 2013, with his family's consent, PCV Castle was removed from life support equipment in the ICU and was declared clinically dead at 7:14 p.m.

ADDITIONAL NOTES

[redacted] said the CD Thie called and told him that PCV Castle had just passed away. Later, [redacted] described to [redacted] the illness that PCV Castle had in Tongren in October 2012. [redacted] said that the description sounded very similar to the January event.

[redacted] said that prior to PCV Castle's death he had never seen or noticed any signs of PCV Castle taking any traditional medicine, or anything unusual. [redacted] said that OIG's interview of June 14, 2014, was the first time that a Peace Corps entity talked to him since the immediate aftermath of PCV Castle's death.

Resignation of PCMO Gao

On September 5, 2014, PCMO Gao resigned from her position.

MEDICAL ASSESSMENT[12]

OIG conducted a further medical assessment of the clinical treatment of PCV Castle with the assistance of an independent medical professional. PCV Castle was a twenty-three year old patient without apparent significant underlying medical or surgical conditions, who unexpectedly experienced a rapid decline and progressed to a shock state within several days. Our assessment found that the rapid decline in PCV Castle's health that led to his death was uncommon in an otherwise young, healthy individual.

The medical examiner's final diagnosis was viral gastroenteritis, and he opined that PCV Castle's cause of death was most probably viral gastroenteritis that "resulted in severe dehydration, multi-organ failure and ended with cerebral edema and acute pneumonia." No evidence was found in the autopsy to suggest an underlying disease condition or toxin ingestion.

On the morning of January 28, PCV Castle told PCMO Gao on the phone that he had experienced at least eight episodes of vomiting and had three episodes of watery stools over a two day period.[13] PCV Castle further noted feeling feverish the day before, with mild abdominal bloating and heartburn, and that his "urine output was decreased and dark." The medical documentation does not indicate PCV Castle's total fluid intake since the vomiting and diarrhea began. During a subsequent physical examination of PCV Castle at 9:30 a.m., PCMO Gao determined he was not in any acute distress, he was alert, awake, responsive, and oriented to name, place, time and purpose. Her physical exam indicated he had the following: temperature 97.8 Fahrenheit, oxygen saturation of 96 percent, pulse 59, BP 95/62, respiratory rate of 16, and a normal abdominal exam.

PCV Castle was at an increased risk of clinical deterioration given: (1) his history of gastroenteritis illness resulting in weight loss and requiring he receive IV fluids at a hospital three months earlier; (2) his history of ciprofloxacin intolerance resulting in vomiting; (3) his fatigue; (4) his decreased urine output; (5) and his extensive vomiting over several hours in the early morning of January 28.[14] PCMO Gao documented PCV Castle's lips were dry and he appeared fatigued, but there is no indication she considered he was at an increased risk or that she conducted additional assessments to determine the presence of dehydration/hypovolemia such as examining his skin turgor (skin is less elastic when dehydrated) or taking his orthostatic

[12] Our assessment was based on the available history, physical examinations, diagnostic results, laboratory tests and therapy provided.

[13] The record is unclear about the extent of PCV Castle's vomiting during the two day period. PCMO Gao's medical notes state that PCV Castle vomited four to five times on 1/26/2013 and three times on 1/27/2013, but her notes do not address his vomiting during the early morning hours of 1/28/2013, which caused PCV Castle's roommate to call PCMO Gao and hand the phone to PCV Castle.

[14] "Clinical features or alarm symptoms and signs ("red flags") (table 1) that identify patients [diagnosed with acute gastroenteritis] who may need hospitalization or evaluation for other causes include: Severe volume depletion/dehydration...and hospitalization or antibiotic use in the past three to six months...." According to table 1, alarm signs and symptoms of severe volume depletion/dehydration include dry mucous membranes (dry mouth); weakness/fatigue; and decreased urine output/concentrated urine (deep yellow or amber color). *Gastroenteritis in Adults.*

BP and pulse.[15] Had she done so, she may have recognized the severity of his dehydration/hypovolemia and sent him to the hospital or the Peace Corps office for an IV that morning, or at least instructed someone to observe his fluid intake over the next four hours.

Instead, PCMO Gao treated PCV Castle for mild dehydration by prescribing an oral antibiotic (ciprofloxacin), anti-nausea/vomiting medication, and increased fluids intake using ORS. PCMO Gao prescribed PCV Castle 1 liter of ORS and 2 liters of other fluids. She observed PCV Castle for 30 to 40 minutes after prescribing ORS and noted in her medical notes that PCV Castle tolerated the approximately 8 oz. of oral fluids intake.

One of the relevant algorithms[16] for recognizing and treating adults with hypovolemia calls for a provider to "reassess the patient regularly during the first six hours." However, no on-going monitoring or reassessment of PCV Castle condition was documented. To the contrary, the evidence indicates PCMO Gao left PCV Castle's hotel room at approximately 10:30 a.m., and did not return until 2:30 p.m., after she was told that the hotel cleaning lady reported PCV Castle vomited on his sheets. Examples of potential options to monitor the patient may have included sending PCV Castle to the ER or transporting him to the Peace Corps office for monitoring and treatment (affording the opportunity to provide IVs if needed). Although medical monitoring would have been preferred in this case, at a minimum PCMO Gao could have proposed another individual remain at the hotel room to monitor PCV Castle's fluid intake with instructions to contact her if the observer became concerned.

OIG's review concluded that PCMO Gao failed to use prudent judgment in her treatment of PCV Castle on the morning of January 28 because, although she properly ordered ORS and fluids, she failed to reassess PCV Castle during the next four hours and there is no indication she considered PCV Castle was at a higher risk of clinical deterioration or conducted further tests to assess his dehydration/hypovolemia.

OIG's review also concluded that on the afternoon of January 28 there were cascading failures and delays in the treatment of PCV Castle. Upon entering PCV Castle's room, PCMO Gao did not recognize the situation was critical. PCMO Gao did not immediately call for an ambulance despite learning from the hotel cleaning lady that PCV Castle had been vomiting, and finding that his pulse was 120 and his respiratory rate was 19—signs of hypovolemia. When she was unable to detect PCV Castle's BP on an electric BP cuff, she called the post for a replacement cuff presuming equipment failure rather than perhaps a BP too low to detect. PCMO Gao did not call for an ambulance even after her colleague, a cardiologist, told her PCV Castle needed an IV "in 30 minutes or he is going to die." Rather, she asked another PCMO to come to the hotel, for IV fluids to be brought from the post medical unit, and for a post driver to transport the IV to the hotel, without informing the driver that it was an emergency situation. When PCMO Gao finally

[15] Orthostatic blood pressure and pulse are usually measured to identify orthostatic hypotension in a patient, a common consequence of dehydration. Orthostatic hypotension is defined as a decrease in systolic blood pressure of 20 mm Hg or a decrease in diastolic blood pressure of 10 mm Hg within three minutes of standing when compared with blood pressure from the sitting or supine position. *Orthostatic Hypotension.*

[16] *Gastroenteritis in Adults.*

called for an ambulance, she failed to convey his critical condition, telling the first responders that PCV Castle needed to go to the hospital because he had had diarrhea for several days.

OIG's review also determined there were significant failures with the care provided by the Chinese ambulance EMTs. The EMTs failed to control the situation both in the hotel room and in the ambulance. The EMTs focused on starting an IV while the PCMOs focused on positioning PCV Castle on his left side to protect his airway from obstruction. This conflict interfered with the response and continued in the ambulance as the EMTs attempted to start an IV.

The emergency care standard of practice is for medical personnel to focus on airway, breathing, and circulation (ABCs).[17] PCV Castle's vital signs and exam the afternoon of January 28 (vomiting, change in mental status, pulse of 120, Kussmaul breathing) suggest that he required both: 1) intubation or use of laryngeal mask (airway/breathing), and 2) IV access with rapid fluid hydration managed immediately (circulation). Typically patients who are hypoxemic (low oxygen carried in blood) are unable to provide rational decisions due to mental status changes such as confusion.

The weight of the medical evidence and testimonial interviews indicate it is unlikely PCV Castle was intubated on his way to the hospital, or that adequate IV fluids were administered, which were likely factors in the occurrence of a cardio-pulmonary arrest. Inadequately treated hypovolemic shock leads to a buildup of acid in the blood, abnormal serum electrolytes (salts such as potassium), lack of blood to the gut, acute kidney injury, brain insult and cardiac arrest.

PCV Castle's ambulance records indicate arterial oxygen saturation 85 percent, pulse decreasing 68-60, respiratory rate 18 per minute, BP unmeasurable, and he reacted only to painful stimulus. This objective information suggests an emergency situation manifested by shock, respiratory failure, and an associated decreased level of consciousness.

OIG's review concluded PCV Castle probably succumbed to insufficiently treated hypovolemic shock and dehydration resulting in cardiac arrest that was associated with viral gastroenteritis fluid volume loss from vomiting and diarrhea.

MANAGEMENT CONSIDERATIONS

The following management considerations were identified by OIG during its review. Some of these factors have already been identified by the Office of Health Services and by an outside agency expert. OIG recommends the Peace Corps assess whether it needs to make overall or post specific changes to policies, procedures, guidelines, staff training, or level of available resources to address these issues.

[17] The "ABCs" of cardiac and trauma life support are: **Airway**: ensure an adequate airway; employ airway control measures, including intubation if necessary; **Breathing**: ensure adequate ventilation and air exchange, including mechanical ventilation if necessary; and **Circulation**: check for radial, brachial, femoral or carotid pulses, and ensure adequate perfusion of vital organs, including CPR if necessary. *Peace Corps Medical Technical Guideline 385;* "Emergency Medical Evacuation," Peace Corps Office of Medical Services, July 2010.

Contingency Plans that Support Better Decision Making. To develop effective contingencies it is important to anticipate the possibility of failure. Decision making by individual healthcare workers depends on training to prepare for unexpected events based on tasks involved, context,[18] and self-awareness.[19] For example, when there are concerns about the local healthcare system, PCMOs should err on the side of caution, even when a patient's condition appears routine.

1. Consider developing contingency plans that decrease the possibility of confusion and improve efficiency.
2. Consider training or other measures that may improve team based behaviors, and in a crisis to yield decision-making to the most experienced and knowledgeable individual.[20]
3. Consider requiring PCMOs routinely use standard order sets for the most frequent conditions, and checklists for assuring minimum go-bag functional equipment and supplies, to reduce the effect of human factors such as stress or fatigue.

Communication. PCMO Gao did not underscore the urgency of the patient's situation when requiring assistance.

4. Ensure that PCMOs clearly articulate the degree of urgency when requesting access to posts' non-medical resources (e.g., driver, car), in emergency and nonemergency situations.

Teamwork. Simulating critical events, akin to disaster drills, helps improve coordination, patient safety, and outcomes. These simulations help build teamwork and find potential defects (e.g., non-functioning equipment, failure to intubate a critically ill patient, failure to have an appropriately equipped ambulance, and failure to have a team leader).

5. Consider additional steps, such as requiring posts to simulate critical events, to improve communications and teamwork among medical staff and with emergency providers.

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[18] "Context" would include: lack of necessary material, unserviceable equipment, available healthcare facilities' capabilities, local culture, etc.

[19] "Self-Awareness" would include: limits of expertise, fatigue, inexperience, new to job, negative life events, etc.

[20] Suggested Resources:

James Reason, *The Human Contribution: Unsafe Acts, Accidents and Heroic Recoveries*, (United Kingdom: Ashgate, 2008);

James Reason, *Managing the Risks of Organizational Accidents*, (United Kingdom: Ashgate, 2007);

The website of the U.S. Department of Health and Human Services, Agency for Healthcare Research and Quality; "TeamSTEPPS," accessed September 9, 2014, http://teamstepps.ahrq.gov/ ["TeamSTEPPS® is an example of an evidence-based teamwork system (initially developed in the military) aimed at optimizing patient outcomes by improving communication and teamwork skills among health care professionals. It includes a comprehensive set of ready-to-use materials and a training curriculum to successfully integrate teamwork principles into any health care system."];

Karl E. Weick and Kathleen M. Sutcliffe, *Managing the Unexpected: Assuring High Performance in an Age of Complexity*, (Michigan: University of Michigan Press, 2001);

Mark R Chassin and Jerod M Loeb, "High-Reliability Health Care: Getting There from Here," *The Milbank Quarterly*, 91(3) (2013): 459–490, http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3790522/;

David Marx, *Patient Safety and the "Just Culture": A Primer for Health Care Executives*, (NY: Columbia University Press, 2001), http://psnet.ahrq.gov/resource.aspx?resourceID=1582.

Anchoring. Anchoring is a cognitive bias that describes the common human tendency to rely too heavily on the first piece of information offered. The Peace Corps PCMOs were also treating five or six other Volunteers who were attending training along with PCV Castle and who were staying in the same hotel, who also reported having gastrointestinal illnesses but did not become violently ill. The Peace Corps has already taken steps to educate PCMOs about the danger of anchoring bias.

Training. Gastrointestinal illness is the health issue most commonly reported by Peace Corps Volunteers, more than double the second most reported health issue. Though death from gastroenteritis is uncommon in otherwise young, healthy individuals, training is important for mitigating risk.

6. Consider enhanced training for Peace Corps' healthcare staff, and Volunteers as appropriate, to recognize, document, and treat symptoms and signs of hypovolemia/ dehydration.

Record-keeping. Good record-keeping is critical to ensure proper management of the patient, as well as improve the quality of treatment provided to future patients.

7. Set or reinforce the expectation for physicians and healthcare professionals to date, sign, and time all orders, notes, and entries.
8. Consider improving current processes for ensuring compliance with agency medical records standards. Intermittent, independent reviews should be considered to assure accountability.

Collection and Analysis of Near Miss Data. A near miss is an unintentional event that does not lead to patient harm. It is considered a red flag for potential future injury or mortality and reflects a potential chain of events that leads to the near miss. System issues of leadership, management, equipment, employee awareness, team-based behaviors, and human factors may lead to a near miss or injury. There are many more near misses than harms. A system of close-call data collection is useful to establish patterns and organizational priorities/resources to establish targeted interventions. Data collection systems may be pro-active (healthcare worker incident reporting) or reactive (root-cause analysis). It is recommended both harm and near-miss reporting systems allow for anonymous reporting and follow an algorithm to establish if there was negligence, human, or other factors involved.[21] The results of such reviews should be used to improve safety systems and reduce risk via training, feedback, and performance.

9. Consider establishing or reinforcing a systematic method to collect and discuss near miss events.

[21] Similar to reviews of airline incidents where anonymous reporting is utilized as a tool, allowing reporting of data that otherwise would not be reported, significant legal hurdles would need to be addressed and boundaries would have to be well established.

SUMMARY OF FINDINGS

During OIG's investigative review of the facts and circumstances surrounding the death of PCV Castle, we interviewed more than a dozen witnesses and reviewed and translated medical records regarding PCMO Gao's treatment of PCV Castle in October 2012 and January 2013 for gastroenteritis. In addition, we reviewed the agency's sentinel process and retained a medical expert to review the care provided by the Peace Corps.

A thorough review of the case indicates that the rapid decline in PCV Castle's health that led to his death was uncommon in an otherwise young, healthy individual. OIG's review concluded that PCMO Gao failed to use prudent judgment in her treatment of PCV Castle in the morning of January 28 despite his multiple symptoms of dehydration/hypovolemia. She ordered ORS and other fluids, but failed to reassess PCV Castle during the next four hours.

OIG's review also concluded that in the afternoon of January 28 there were cascading failures and delays in the treatment of PCV Castle. Upon entering PCV Castle's room, PCMO Gao did not recognize the situation was critical. PCMO Gao did not immediately call for an ambulance despite signs of dehydration/hypovolemia, and a warning from a fellow PCMO that PCV Castle needed an IV "in 30 minutes or he is going to die." Rather, she asked a different PCMO to come to the hotel, for IV fluids to be brought from the post medical unit, and for a post driver to transport the IV to the hotel, without informing the driver that it was an emergency situation. When PCMO Gao finally called for an ambulance, she failed to convey his critical condition, telling the first responders that PCV Castle needed to go to the hospital because he had had diarrhea for several days.

OIG's review also determined there were significant failures with the care provided by the Chinese ambulance EMTs. The EMTs failed to control the situation both in the hotel room and in the ambulance. At the time of PCV Castle's transportation, he required his airway to be protected, adequate oxygenation, and a significant amount of IV fluids. Our review found that the EMTs likely did not intubate PCV Castle or use a laryngeal mask airway on the scene or in the ambulance. The EMTs focused on starting an IV while the PCMOs singularly focused on positioning PCV Castle on his side to protect his airway from obstruction. This conflict interfered with the response and continued in the ambulance as the EMTs attempted to start an IV. OIG's review concluded PCV Castle probably succumbed to insufficiently treated hypovolemic shock and dehydration resulting in cardiac arrest that was associated with viral gastroenteritis fluid volume loss from vomiting and diarrhea.

OIG's review also uncovered additional information, which while not contributing to PCV Castle's death, did indicate PCMO Gao failed to adhere to several Peace Corps guidelines regarding medical chart record-keeping, including:

- documenting all clinical contacts with PCV Castle in the medical chart
- preserving an email sent to her by PCV Castle concerning his weight in his medical chart, and
- preserving and translating medical records concerning an earlier ER visit at his site.

OIG also uncovered that PCMO Gao altered PCV Castle's in-service notes after submitting them to Peace Corps headquarters for review. PCMO Gao resigned from her position on September 5, 2014.

John S. Warren
Assistant Inspector General for Investigations

Joaquin Ferrao
Deputy Inspector General

Kathy A. Buller
Inspector General

Exhibit 1	Medical Records Provided, dated July 5, 2013.
Exhibit 2	Receipt of Complaint, dated April 23, 2014.
Exhibit 3	Photographs of Site and residence, dated June 13, 2014.
Exhibit 4	Interview of [redacted], dated June 13, 2014.
Exhibit 5	Interview of [redacted] dated June 13, 2014.
Exhibit 6	Interview of [redacted] dated June 13, 2014.
Exhibit 7	Interview of PCMO Gao, dated June 16, 2014.
Exhibit 8	Review of VIDA Records, dated April 23, 2014.
Exhibit 9	Interview of [redacted] dated June 10, 2014.
Exhibit 10	Review of Emails, dated April 23, 2014.
Exhibit 11	Interview of QI Supervisor Geri Kelly, dated July 24, 2014.
Exhibit 12	Visit to Kehua Yuan Hotel, dated June 16, 2014.
Exhibit 13	Review of Driving Directions, dated July 8, 2014.
Exhibit 14	Interview of [redacted] dated June 14, 2014.
Exhibit 15	Survey Regarding Availability & Use of O2 & Intubation, dated July 23-24, 2014.
Exhibit 16	Interview of [redacted], dated June 16, 2014.
Exhibit 17	Interview of Bonnie Thie, dated August 12, 2014.
Exhibit 18	Interview of PCMO Bing Ziyi, dated June 16, 2014.
Exhibit 19	Interview of PCMO Kandice Christian, dated June 11, 2014.
Exhibit 20	Review of Huaxi Hospital Records, dated June 4, 2014.
Exhibit 21	Interview of [redacted] dated June 17, 2014.
Exhibit 22	Review of Ambulance Intubation Capability, dated July 20, 2014.