A sad story caught my eye in a local paper recently. A 23-year-old anorexic prisoner died in prison in Swanton, Vermont in August 2009 because of a chain of human errors. The tragedy has valuable – if tragic – lessons for all of us involved in mission-critical operations, from controlling production systems through responding to computer intrusions.

The editorial “System failed”<http://www.timesargus.com/article/20100310/OPINION01/3100314/1021/OPINION01> in the Barre-Montpelier Times Argus newspaper of March 10, 2010 summarizes the story of Ashley Ellis as follows (quoting directly but with added numbering and some [clarifying labels]):

1. Ellis’s doctors faxed her records to a doctor in the Corrections Department’s health services. This was two days before Ellis was to report to prison.
2. The Corrections doctor faxed Ellis’s records to a nurse [Nurse 1] at the prison.
3. The next day the nurse [Nurse 1] e-mailed a regional director of the Prison Health Service [the private firm with a contract for health care in Vermont prisons at that time] in California. By the end of the day the regional director authorized the nurse [Nurse 1] to order Ellis’s medication. But the nurse [Nurse 1] did not do so because it was the end of the day.
4. The next day – the day Ellis was to arrive – the nurse [Nurse 1] handling Ellis’s case had to fill in for another nurse [Nurse 2], and so another day went by without anyone ordering Ellis’s medication.
5. The next day a different nurse [Nurse 3] found Ellis’s chart on her desk, and she ordered the medication. But she found that the prison did not have it in stock, so she ordered it from a pharmacy in St Albans. She left a message with a nurse [Nurse 4] on the night shift to pick it up on her way to work [that evening].
6. The night shift nurse [Nurse 4] didn’t listen to her messages until the next day, and so she arrived at work in the evening without the medication, and the pharmacy was soon closed.
7. The next morning Ellis died.

The fundamental failure in this sequence of events is that Nurses 1 and 2 did not understand that the medication for Ellis was essential – what in an information technology context might be termed mission critical. In an incident-response environment, we would say that the agents failed to assign a sufficiently high priority to the task of getting that medication into the prison in time for the prisoner’s arrival.

Nurse 1, in particular, allowed an entire day to go by without action because she was diverted from her routine. A shared list of priorities could have served to alert someone in the team that there was an urgent need for the medication. Similarly, in a well-run incident-response team or help-desk unit, no task would be entirely dependent on the memory of a single person; there would be a shared database available to everyone listing open cases and prioritizing actions.

Nurse 3 used voice-mail to tell Nurse 4 about the urgent matter – but voice-mail, like e-mail has no guarantee of delivery, let alone timely delivery. Production personnel, help-desk teams, and incident-response groups should never rely on communications that lack immediacy and positive
feedback on delivery when dealing with critical information. If something is on a critical path, you haven’t communicated it until you have personally heard confirmation that the message has been received – and received correctly. Talk to the person you are handing the task over to personally; the recipient of the task should then summarize his or her understanding to confirm that the message got through correctly; e.g., “OK, so I will pick up the medication at the St Albans pharmacy before 18:00 tonight on my way in to work.”

I’m very sorry to learn of this young person’s death. Readers might want to discuss this case at the next meeting of their production / help-desk / incident-response team meeting as an opportunity to review communication patterns in their own group.

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