

Dan Coyro/Sentinel

Watsonville Community Hospital nurse Jean Johnson wheels through the emergency ward with a computer on wheels that holds medical charts.

Speeding Up Emergency Care

Hospitals [redacted]
Despite more patients, ERs using new technologies, systems to trim wait time

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WATSONVILLE — On New Year's Day, the emergency department staff at Watsonville Community Hospital had a full house: 13 examination rooms full, 17 patients in the waiting room, six in the overflow area.

By midnight, 94 people had been treated, more than usual.

When the rooms were full, doctors called for help and declared "code red." Ambulances were diverted to Dominican Hospital, which has 26 beds in its emergency department and treated 141 patients that day.

That situation is becoming more unusual in Santa Cruz County. The two hospitals with emergency rooms have adopted new procedures to speed up emergency care and reduce the times patients are taken elsewhere even as the number of visits has increased.

At Watsonville Community Hospital, the average wait time, from



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Watsonville Community Hospital nurse Eileen Azevedo takes the temperature of an emergency room patient as she checks in.

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Waiting times vary widely

Patients who enter the emergency room for treatment spend an average of four hours there. This includes time spent waiting for a doctor, waiting for a test and treatment. The figures below are based on the experience of 1.5 million patients treated at 1,552 hospitals in 2006. California ranks near the bottom of the list.

1. South Dakota 2 hours, 38 minutes
2. Idaho 2 hours, 39 minutes
3. Iowa 2 hours, 47 minutes
- National average 4 hours
- 42. California 4 hours, 27 minutes**
49. Nevada 5 hours, 58 minutes
50. Utah 6 hours, 21 minutes

SOURCE: 2007 Emergency Department Pulse Report, Press Ganey Associates

Watsonville cuts wait times

YEAR	PATIENTS	DAILY AVG.	DISCHARGE
2003	26,688	73	2 hours, 37 minutes
2004	25,507	70	2 hours, 36 minutes
2005	27,035	74	2 hours, 32 minutes
2006	27,368	75	2 hours, 28 minutes
2007	29,081	80	2 hours, 23 minutes

SOURCE: Watsonville Community Hospital

Dominican admits more ER patients

YEAR	ER PATIENTS	ADMITTED
2003	39,201	15%
2004	37,989	16%
2005	38,745	17%
2006	39,878	18%
2007	41,293	18%

SOURCE: Dominican Hospital



Watsonville Community Hospital's emergency waiting room was nearly empty on a recent afternoon.

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ER

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door to discharge, has dropped to 2 hours, 23 minutes from 2 hours, 37 minutes during the past four years while the emergency patient count has grown from 25,507 to 29,547.

At Dominican Hospital, which reports about 40,000 emergency room visits annually, the average wait time has dropped to 3 hours, 20 minutes, down as much as 25 minutes from 2006.

Compare that to the state average of 4 hours, 27 minutes.

"It's a much better situation," said county EMS program manager Celia Barry, who will report the 2007 findings to county supervisors this month. "Hospitals are working really hard to manage emergency medical care."

Statewide problem

Overcrowded emergency rooms have been a problem nationwide. Emergency departments are open 24 hours a day and provide the only guaranteed source of care because federal regulations stipulate that no patient be turned away.

A new Harvard study, based on national data from 1997 to 2004, found overcrowding increased wait times from eight to 20 minutes for heart attack victims, who must be treated swiftly to survive.

"This study shows how emergency department overcrowding affects all of us," said Dr. Robert Lowe, associate professor of emergency medicine at Oregon Health and Science University. "If a loved one has a heart attack, it doesn't matter whether he is well-insured."

Santa Cruz County has been participating in a study to speed patients requiring cardiac care through the system. When paramedics suspect cardiac problems, they can transmit electrocardiogram results to the emergency department before a patient arrives. Specialists can be called while a patient is en route.

This speeds up care by about 30 minutes, Barry said, a potentially life-saving improvement.

"For life-threatening medical conditions, it is better to call 911 and be transported by ambulance than it is to drive someone to the hospital by private car," she said.

In California, emergency room visits have grown to more than 9.5 million per year, up from about 8 million a decade ago, according to the California Hospital Association. Most of the increase is due to situations that are not emergencies.

A 2006 state survey found about half of the emergency room patients said their problem could have been handled by a primary

tor, and some leave without getting care. In 2006, at the UC Davis Medical Center, about 20 percent of the patients left before seeing a doctor.

At Dominican Hospital, about 3 percent of patients in July left without treatment. In October, with the new procedures in place, that dropped to 1.9 percent.

Both county hospitals have adopted a new system of triage for evaluating patients.

Dominican uses "immediate bedding," where each patient is taken to a treatment room immediately after assessment by a nurse. A computerized system monitors patient flow to facilitate bed assignments for those newly admitted.

Patience Beck, the chief nurse executive, said emergency room staffing fluctuates by the day and hour, to accommodate busy periods. She hopes to reduce wait times further.

"One of our challenges is that more and more of our emergency department patients are very sick and require hospitalization, and until they can be moved to hospital rooms, we cannot use that bed for another emergency patient," she explained. "That affects overall wait time."

The strategy in Watsonville includes an overflow area for non-emergencies, more staff and new technology.

Liz Pullen, a nurse who has been at the hospital for 12 years and oversees emergency services, bubbles with excitement as she describes how the staff has cut wait times for patients.

"To me, it's the best keep secret in Santa Cruz," said Pullen, who has worked at 18 different hospitals.

New triage system

Watsonville has increased its emergency room staffing from 18 to 22 people over a 24-hour day. They see an average of 80 patients a day, up from 55 in 2003.

Doctors and nurses agree the new way of evaluating patients for treatment has had a positive impact.

In the old system, there was a registrar who wrote down the patient's chief complaint, then a nurse interviewed the patient and took vital signs. That system produced bottlenecks.

Under the new system, a registered nurse interviews the patient using a five-step screening process to determine what's needed.

"That's invaluable," said Pullen, citing the nurses' training and experience.

The screening process, developed in 1998 by Dr. Richard Wuerz and Dr. David Eitel, is in its fourth version. It helps the hospital staff determine who needs to be seen immediately and who can wait.

Before, the triage nurse screened patients inside an enclosed space,

2007 Vital statistics

HospitalER beds.....Visits

Dominican 26 41,293

Watsonville 13* 29,041

*2-4 bed overflow

and bruises fill the room, the hospital staff can assign a nurse and physician's assistant to provide care in an "overflow" area with three beds and several chairs.

"We can treat them without impacting the trauma patients," Pullen said.

If it's just too busy, the staff calls for reinforcement.

"We always have an extra doc on call," said Dr. Michael McGannon, who's been at Watsonville Community Hospital since 1979.

Supervising nurses from each floor meet twice a day to assess bed availability for new patients "so everyone's on the same page," Pullen said.

New technology

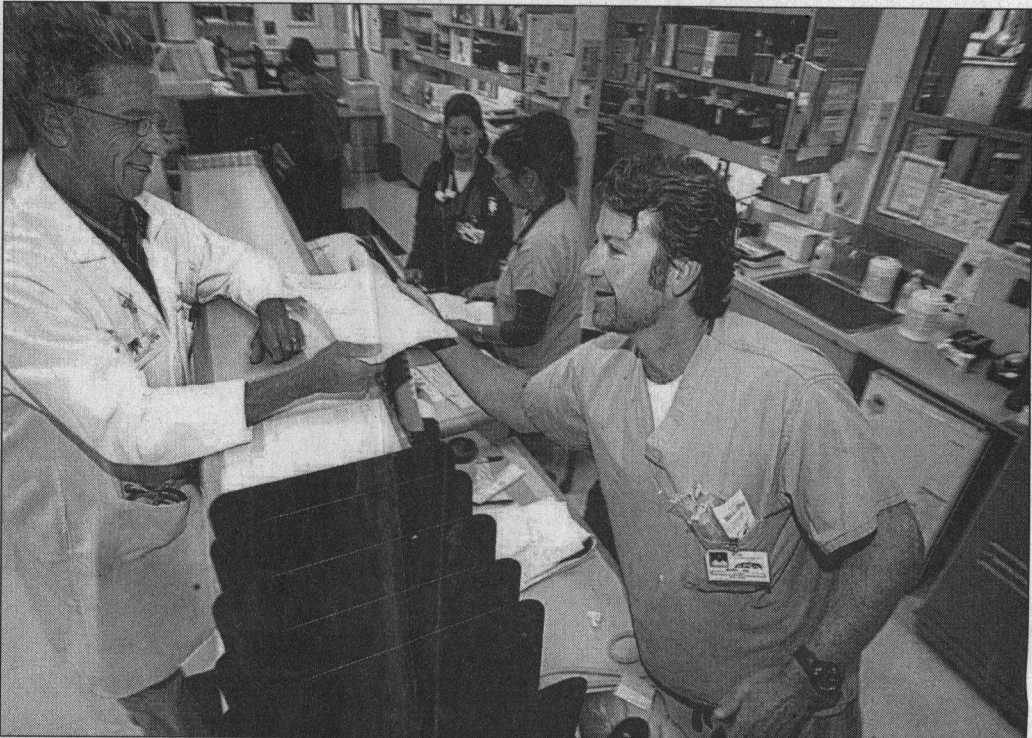
The hospital also is taking advantage of newer technology.

In September, a digital system for storing patient X-rays arrived, replacing a cumbersome manual process. It means doctors can view radiology films sooner, which speeds up diagnosis and treatment.

More new equipment will be in use as soon as staff are trained.

Most patient rooms have a "COW," a computer on wheels, that will enable doctors and nurses to track patient information and lab tests electronically rather than on hand-written documents.

Patient surveys conducted by



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Dr. Sterling Lewis gets a patient chart from nurse Mark Garvey.

Health Stream Research show the emergency room care earned satisfaction ratings of 90-95 percent last year.

When a patient called out for help as Pullen walked by, she stopped what she was doing to hail a nurse.

Although Pullen can recall times years ago when the emergency room was empty, she doesn't miss those days.

"There's no place in the world like an ER," she said. "It's making order out of chaos. I love it."

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A 2006 state survey found about half of the emergency room patients said their problem could have been handled by a primary care doctor, if one had been available.

The overcrowding isn't just because of people without health insurance. It's also because of people who can't get an appointment with their doctor that day, in the evening or on weekends.

But when the emergency room fills up, it takes longer to see a doc-

tor. It helps the hospital staff determine who needs to be seen immediately and who can wait.

Before, the triage nurse screened patients inside an enclosed space, and was unable to see new arrivals. Now that task has been relocated to the front of the room so the triage nurse is the first person the public sees.

If there is a surge of patients, another nurse helps assess patients so they can be seen by a doctor sooner.

If people suffering colds, scrapes