


Ms.Arunima Patel, Managing Director, iGenetic Diagnostics talks about reducing ICU stays and need for advance diagnosis

EXPERT
MEDICARE INSIGHT OPINION

Critical Care: Reducing ICU Stays Through Advanced Diagnostic Testing



Arunima Patel
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While doctors and the medical fraternity have long been saying that longer stay for patients in the Intensive Care Units (ICUs) should be avoided, it is only recently that advanced diagnostic tests with cutting edge technology have enabled that.

A patient is admitted in the ICU when he or she cannot cope up in an ordinary environment because of one or more organs not performing up to the mark. While the ICU does prove to be beneficial in many ways, and the patient is saved from worsening his or her condition, the patient also runs the risk of contracting infections that are inherently present in the ICU. The end outcome of such an acquired infection can be life threatening.

A patient is prone to contract nosocomial or hospital-induced infections during the stay in the ICU. These could be typically multi-drug resistant bugs or fungal infections. These require more

intensive treatments which are not only expensive but also will leave the patients with a lot of side-effects.

Longer ICU stays due to sepsis can leave the patients with permanent disabilities like breathing problems, arthritis and a cognitive decline in neuro infections.

Hence there have been attempts to diagnose the problem of the patient quickly, administer the right treatment and get the patient out of the ICU as fast as possible.

One major challenge in implementing a shorter ICU stay was the time needed for getting the diagnostic test results.

Several tests take quite some time, even weeks to be carried to deliver results. While waiting for these test results, doctors are forced to give only empirical drugs that will treat the ailments which a patient might be showing by way of symptoms. What happens in this case is that the doctor has to cover the entire gamut of diseases that the patient might be suffering from but a targeted treatment is not possible.

Sometimes, the patient is given a wide spectrum of drugs because of apparent symptoms which can lead to unwanted side-effects.

The longer the ICU stay, the higher are the chances of the patient getting some other hospital-borne infection.

Now advanced diagnostic tests determine the root cause of the ailment much faster, sometimes within a few hours, there by helping the doctor to administer targeted therapies and save the patient from receiving a plethora of medications that may not be needed. For example, diagnostic tests for sepsis are used to take several days until some time ago in India, but now advanced testing has made it possible to give results within 24 hours which could mean a difference of life and death for patients. Similarly, the tests for dengue

and certain infectious diseases can be performed with advanced methods to arrive at results quickly.

Faster diagnostic results also mean that the easier it is for the doctor to manage the disease as there will be fewer complications like Multi Organ Dysfunction Syndrome.

Lack of Medical Infrastructure in India.

There are several other aspects of reduced ICU stay. In India, we already face a shortage of medical infrastructure and ICUs and hence it makes all the more sense for the patients to be given targeted treatment to enable a faster recovery and discharge from ICU. The shorter the stay of each patient in the ICU, the higher will be the number of patients that can be accommodated.

Critical care or ICU beds in large public teaching hospitals constitute about 5-8 percent of the total bed strength of the hospital. In certain advanced centres in big cities, the ICU bed strength varies between 2-10 percent of the total hospital beds. The availability of ICU beds is disproportionately low, both in government as well as private hospitals. Obtaining an ICU bed in a hospital is often difficult for critically ill patients. Because of shortage of ICU beds, only the most critical/ life-threatening patients are given ICU care, which could be contributing to high mortality inside the ICU as well as outside the ICU i.e., in the wards. Things could be worse in rural India. Not to mention the shortage of medical staff. According to the Indian Medical Association, the country needs 50,000 critical care specialists but has just about 8,130.

Using advanced diagnostic techniques helps improve patient outcomes and also reduces the burden on our limited medical infrastructure by helping patients recover faster.

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