Leveraging Technology to Better Health Services

Always ready to adopt technological innovations to improve healthcare delivery, Sir Ganga Ram Hospital in Delhi has added another feather to its cap by pioneering the Smart OPD Solution by Mcura, thereby managing overcrowding at the hospital and significantly reducing inconvenience to patients. In an interview with **Vivek Ratnakar** of **Elets News Network**, **Dr Ajay Swaroop Mathur**, Honorary Secretary cum Treasurer, Board of Management, Sir Ganga Ram Hospital, talks about his vision on how technology has emerged as a big factor in improving health services.



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Generally, what trends do you see emerging in the healthcare industry as far as adoption of Information and Communication Technology (ICT) is concerned?

ICT has already been integrated in almost all services of the healthcare industry. Basically, the back office and front office activities have already been taken over completely by IT. This means everything from accounts to billing and patient admission to discharge has been digitized and computerised. As far as patient care is concerned. IT has started playing a big much bigger role. It is also improving physicians' efficacy. In fact, in the near future, may be in my lifetime itself, I won't be surprised if virtual examination and virtual treatment of patients is a common sight and clinical history of patients is transcribed by qualified medical transcriptionists.

Will it also help patients in rural areas?

Telemedicine is already a proven method. Even the government is trying to reach rural areas to bridge the health delivery gap. It is a very promising area and Sir Ganga Ram Hospital already has a very active telemedicine programme, especially in Himachal Pradesh.

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problem and providing appropriate advice to the local physician regarding the disease management. If a case is such that he or she needs to be referred to a better facility, then we provide whatever treatment is required.

Can you explain how Mcura's Smart OPD Solution works? How does it benefit both doctors and patients?

The way routinely the OPDs are run in big hospitals is an unpleasant experience for the patients and a chaotic situation for the hospital as well as doctors. Even in the case of Ganga Ram Hospital, the patients were coming and crowding in the OPD and doctors had no idea how many patients they had to see in their given slot. This led to a lot of chaos. So. we were always thinking of trying to improve upon the situation. When we came across the smart OPD solutions by Mcura Services, they had already done a pilot project at the All India Institute of Medical Sciences (AIIMS). Since that hospital is also having a high volume of patients like Sir Ganga Ram, we thought that this system may also suit our needs. So we studied it and adopted it. The fundamental thing about the smart OPD concept is that it starts with the appointments of the patient.

So now there is a robust appointment system in place, wherein every doctor and every consultant has a list of patients who are booked for him on that particular day. Similarly, the patient also has a list whereby his exact time is booked, thereby avoiding overcrowding. If a patient is booked for 3 pm, at best he is supposed to come 15-20 minutes before, rather than coming in at the time of the slot opening and waiting in the queue and then rushing all over the place.

Now it is mostly a syncronised procedure, thereby the patient knows where and what time he is supposed to be seen and the doctor knows how many patients on that particular day are fixed for him so that he adjusts his time accordingly. That is step number one.

The step number two is when the

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patient reaches the hospital in a particular department he is met by a representative of Mcura Services, who guides him as per his requirements. When the patient reaches the reception, he is asked to fill a very small demographic form, in which his or her particulars are filled and based on that a smart card is generated. Once the smart card is generated, the information is conveyed to the doctor's chamber that the particular patient has arrived. At the same time, once the smart card is generated, he is asked to pay the consultation fees of the concerned doctor, which again is online. Once the patient is registered, the representative of the company (Mcura) goes to the particular doctor's chamber where there is a queue system. The person concerned there is told which patient is being seen by the doctor and after how much time. This information is also available with the patient in his android system.

The step three is when the patient enters the doctor's chamber, he is examined and his history is recorded by a qualified medical transcriptionist and this information is then stored on the card and printouts are given to the patient so that now there is a record that what exactly transpired on that particular visit. When the same patient comes back next time, he doesn't have to carry a bag full of reports of examinations, x-ray reports, etc. Everything will be filled in the card and as soon as the smart card is swiped, all the information can be accessed. The patient can take this card to the investigating areas like radiology or blood test, etc. He just has to swipe his card and all

the necessary information regarding the patient can be seen by the particular department.

It is proposed in the near future that the scope of the card will be increased. It may function as an e-wallet, whereby the patient can put in some money in it and doesn't have to go to the cashier every time there is a need. He just needs to swipe the card and the money is automatically deducted. Similarly, it is also proposed to give certain advantages to the patient having the smart card. Some sort of concessions in subsequent investigations can be given to the smart card holder.

What kinds of new innovations you see coming up in the next few years?

We already have a lot of new innovations and to name a few we have something called PACS, which is a Picture Archiving and Communication System. Now by virtue of this, in any given area of the hospital a consultant or a docor is able to view various radiological reports of X-rays, CT scan and MRIs. These images are stored so that at any given time it can be retrieved and the surgeon or physician is able to access.

Robotic surgery is gaining more and more prominence now, but we are doing it for the last five years. Our robotic unit has been successfully using robotic surgery in the treatment of tumours, neurological disorders, prostate surgery, gynaecology, and oral cancer. We are continually trying to improve our system with the use of new technology to make the life of the patient as well as the treating physician easy. e