

Enhancing the Quality of Patient Care at NKF through Digitalisation

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Introduction

Background

Presently, all the renal patient case notes are recorded manually, capturing their medical history, dialysis treatment details, machine readings, blood test results, hospitalisation details and nurses/doctors' clinical notes.

Whenever the patients need to be hospitalised, the referral letters containing their medical history must be manually typed for the patients to bring along for the hospital admission.

During emergencies whenever a patient's medical condition changes, the nurse will have to call the doctor and then fax to him all the medical information required. He will then review the information and advise the nurse on the next course of action. If ever the doctor needs to know more details, he has to commute to the Dialysis Centre (DC) to go through the case notes and see the patient there.

Need for online access of patients' medical records to enhance quality of care
As NKF's patients are getting older and sicker, they need more direct care from the nurses. This can only be achieved if the manual administrative work of maintaining the records is reduced, allowing them more time with the patients.

In addition, if all the medical records are digitised and can be accessed anytime, anywhere, this will enable both the doctors and the nurses to have immediate access to the patients' medical history to accord immediate care. This is especially beneficial to NKF's environment where all the DCs are geographically distributed across Singapore and a lot of unproductive time can be spent commuting for information access if without digitalisation.

Method

NKF then embarked on the digitalisation journey through these 2 systems initiatives:

- Renal Point-Of-Care System (RPOCS)

We worked with the 3 Dialysis Machine Vendors to automate the transfer of the machine readings throughout the dialysis process of every patient to our backend Clinical System. This eliminated a significant amount of hourly manual transcription of these readings, blood pressure, pre/post weight of the patient, etc.

- Electronic Medical Record (EMR)

With the availability of the digital data of all the treatment details to complement our patients' demographic and clinical data that exists in our Clinical System, we developed our own EMR module whereby the system provides a holistic medical history of every patient.

Results

With this implementation, the doctors are now able to provide prompt medical advice especially for those patients in need of immediate care, wherever they are. With the easy access of the medical record of every patient under the Nurse Managers' care, and a more productive nursing team, these managers can lead them to deliver the best possible care.

Conclusion

This Digitalisation project provides the platform to empower our nurses and doctors to enhance their patient care with their ability to access the EMR anytime, anywhere. In addition, the rich data captured provides the fuel to propel our delivery of care to greater heights as there are plans to:

- Develop systems to empower our patients to be more self-reliant in monitoring and managing their own health
- Do Analytics to provide greater insights to enhancing Renal Care.