

MARCH 2022 • ISSUE NO. 05



Origin Integrated Studios

THE OFFICIAL NEWSLETTER

Contents

Recent Deploiments - 02
Recent Updates - 03
Upcoming Releases- 04
Improving Clinical Processes
with Six Sigma Steps - 05

Our Recent Deployments

We have just successfully deployed Origin CIS to...



Sunway TCM Centre (Kuching) incorporates multi-disciplinary and holistic medical care through Traditional & Complementary Medicine



At Sunway Fertility Centre (Kuching), every miracle begins with hope. Consists of skilled medical and clinical team backed by top-notch facilities to deliver optimised fertility treatment outcomes.



Top class cancer specialist centre which focus to provide advanced medical equipment, specialist doctors and professional nursing care with love and empathy.

Recent Updates



Origin Badminton Club - 7th Session



Origin IT Intern in 2021 - 2nd Batch



Origin Hiking Club - 1st Session
(Shah Alam Community Forest)



Upcoming Releases

New clinical features are out for your Origin EMR, improving workflow efficiency!

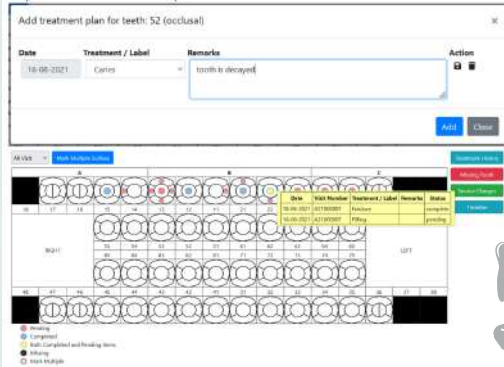
Nursing Task

and its description

Start Date & Time	Nursing Order	Frequency	Last Action	Next Action	Actions
15-08-2021 12:13 (14 Days Ago)	Closely observe patient vitals	EVERY 30 MINUTES	15-08-2021 14:53 (14 Days Ago) By: ORIGIN ADMINISTRATOR	Order Expired 17-08-2021 12:13	✓ + -
15-08-2021 12:14 (14 Days Ago)	Perform fall risk assessment	ONCE PER SHIFT	15-08-2021 14:52 (14 Days Ago) By: ORIGIN ADMINISTRATOR	Order Expired 18-08-2021 12:14	✓ + -
18-08-2021 10:00 (Today)	Change IV line dressing	SEGBRS	-	18-08-2021 10:00 (18 minutes ago)	+ -
18-08-2021 12:12 (Today)	Collect Void C&S	SEGBRS	-	18-08-2021 12:12 (7 hours) from now	+ -
18-08-2021 12:13 (Today)	Flush IV line	TBP-2 J&P	-	18-08-2021 12:13 (2 hours) from now	+ -



As we all know nurses have many duties, including caring for patients, liaising with doctors, administering drug and monitoring vital signs. With the presence of Nursing Task module, it assists nurses by presenting the list of tasks created by nurses on the dashboard. There are color codes to differentiate between upcoming tasks, expired tasks, and overdue tasks. Nursing Task module also directs users immediately to corresponding clinical documentation for ease of update of clinical charts or forms.



Dental and Periodontal Chart :- A visual dental and periodontal chart to ease dental consultants' documentation. Actions which can be done are annotation of treatment, marking of missing teeth and entering remarks relevant to patient teeth and treatment. All treatment are neatly recorded in a history / timeline view to ensure the next approach is on track and to ease subsequent visits and treatment



Partogram :- We have now managed to insert partogram as one of the clinical charts options in Origin EMR. This is a key observation method for mothers in labour. It is used to keep track of both maternal and fetal progress including fetal heart rate, maternal vital signs, cervix and contraction charts, medication administered and output records. The chart will be a big help in obstetric information tracking during labour.

Improving Clinical Processes with Six Sigma Steps

Six Sigma is a straightforward and much-adopted tool for process improvement, driving operational excellence. When we look at clinical processes, it is largely workflow-based and similar to manufacturing setups. Think of multiple nucleus processes which intertwine to form a safe care environment for patients which in Six Sigma terminology, is the response or output of the process.

Contrary to the common practice of utilizing the Six Sigma methodology in manufacturing, it is very useful for the hospital environment albeit being scaled down in terms of statistics generation. The guideline in Six Sigma for process improvement is DMAIC as illustrated in the (name of image):

1 Define



The start of the entire process improvement project. A phase where the core team is formed, and all will sit together and agree upon a common problem statement, objective, resources, and timeline. This is also the phase where project charter submitted for approval. Support from management is key to project success

Example:

- Problem statement: waiting hours for ED patients > 45 minutes every Monday morning
- Objective: Reduce waiting hours at ED every Monday morning to less than 30 minutes
- Project Team: QI nurse, ED Nurse manager, ED senior RN, Medical Admin representative, Senior Front office clerk, OPD Pharmacy Assistant Manager

2 Measure



Data collection phase. Dust your stopwatches and perform Gemba walks, carry pens and papers around for interviews, perform observations and record down important elements of the workflow like time, people involved, information handover points, patient engagement points etc. Spaghetti diagrams and time record sheets probably would be your best friend at this stage

Example:

- Obtain past ED patient registration statistics for every Monday morning for past 6 months: number of registrations, registration start time, bill payment time etc
- Observe ED workflows and record down time spent for each process e.g. passing patient from triage to doctor's clinic, time taken for triage, difference of triage time from nurse to Senior nurse to doctor etc

3 Analyse



Time to grind all the collected data. Think root cause analysis. Identify factors (X) which affects your outcome (Y)*. Observe for interactions and relationships between factors. Map out process maps and identify wastes. When many waste are identified, use the Pareto rule to manage project scope and resource (both financial and personnel) requirements.

Example:

- Factors affecting waiting time: nursing staff efficiency skill mix, trend of high patient load every Monday, high physical documentation load

4 Improve



With help of clinical research, lay out new workflow steps which can improve outcome. Always ensure evidence-based practice. Decide the "to-be" situation but remain practical and keep hospital priorities and organizational values always in close sight. When rolling out suggested improvements, adopt Training Within Industry concepts (Job Instruction, Job Method, Job Relation) for ease of knowledge transfer and better adoption.

Example:

- Review possible technology e.g. self-registration kiosk, self payment kiosk
- Plan regular role-play practices and skills training between nursing staff

5 Control



The last stage of the process after all improvements have been rolled out. Observe adherence to new workflows. Always keep "Kaizen" principles in mind and encourage feedback to further improve.

Example:

- Continue review of patient waiting time every Monday for another 6 months
- Obtain feedback from ED staff on new workflow

*General Six Sigma process equation of $Y = f(x)$ where Y is the response of the process, f is functions or workflow and x is the variable factors affecting the workflow

It is impossible to share Six Sigma methodology in further detail within one newsletter page so this would be the small tip of the iceberg for all readers. Six Sigma is simple and powerful, but it will only be as effective as the team running the project. One important concept for all would be to "start small". Do not work on complex processes like 'Patient discharge within X number of hours' which could be contributed by multiple workflows e.g., emotional preparation of the patient, allied health service, pharmacy workflows, family members' readiness, etc. Remember:

Success is a series of small wins

John C. Maxwell