

# Leveraging online to Enhance the patient experience, & Achieve system-wide cost efficiencies

## SingHealth Cluster-wide Websites Revamp

Authors and Co-authors

Chan Fun Jui (SHHQ), Crepin Chua (SHHQ), Jerry Wong (SGH), Retna Devi D/O Shanmuga Retnam (CGH), Rekha D/O Manoharan (SKH), Juita Mohamed (KKH), Hazlin Binte Mohamed Hepbun (NCCS), Edith Soh (NDCS), Lau Qian Yu (NHCS), Sharlyn Bay (NNI), Daphne Khoo (SNEC), Low Ming Li (SHP), Cheryl Lim (SCH), Andrew Wong (SHHQ), Lim Sook Luan (SHHQ), Syaheeda Aryanie Sapari (SHHQ), Pamela Poh (SHHQ), Grace Ng (SHHQ), Adeline Cheong (SHHQ), Kathryn Ng (SHHQ)

## AIMS

The SingHealth Cluster-wide Websites Revamp project aims to rationalise, revamp and harmonise 33 cluster websites to:

1. Provide an enhanced presentation of services and information to support our patients through their medical journey with us.
2. Achieve cost savings and efficiencies through co-ordinated, one-time development of common functionalities and website templates.
3. Increase productivity by leveraging on technology and business process re-engineering to automate information sharing across SingHealth websites, thus eliminating duplicate uploading of materials.

## METHODOLOGY

### 1. Harmonisation of websites through co-ordinated effort of all SingHealth institution webmasters

- Rationalised 33 websites into **14 core websites**, reducing the number of small sub-sites to be developed and maintained on an on-going basis.
- Cluster webmasters brainstormed and developed **over 30 common templates and functionalities** for shared use, enabling better information sharing and collaboration between institutions, whilst reducing development and maintenance costs.

### 2. Developed a comprehensive “Cluster Taxonomy” and tagging

- Taxonomy for the site – which refers to how information is organised, categorised and labelled in a shared information environment – was robustly explored. A final cluster taxonomy was developed and implemented. All articles were assigned accurate and specific tagging, allowing them to be published automatically to the correct section and across multiple websites.

A common article is published automatically to the correct section of other institutions' websites.

### 3. Leverage on the latest technology

#### • Redevelop platform for full mobile responsiveness

Used a responsive grid system styled in Bootstrap for a mobile-friendly website.

#### • Harness cross-publishing capabilities of SharePoint

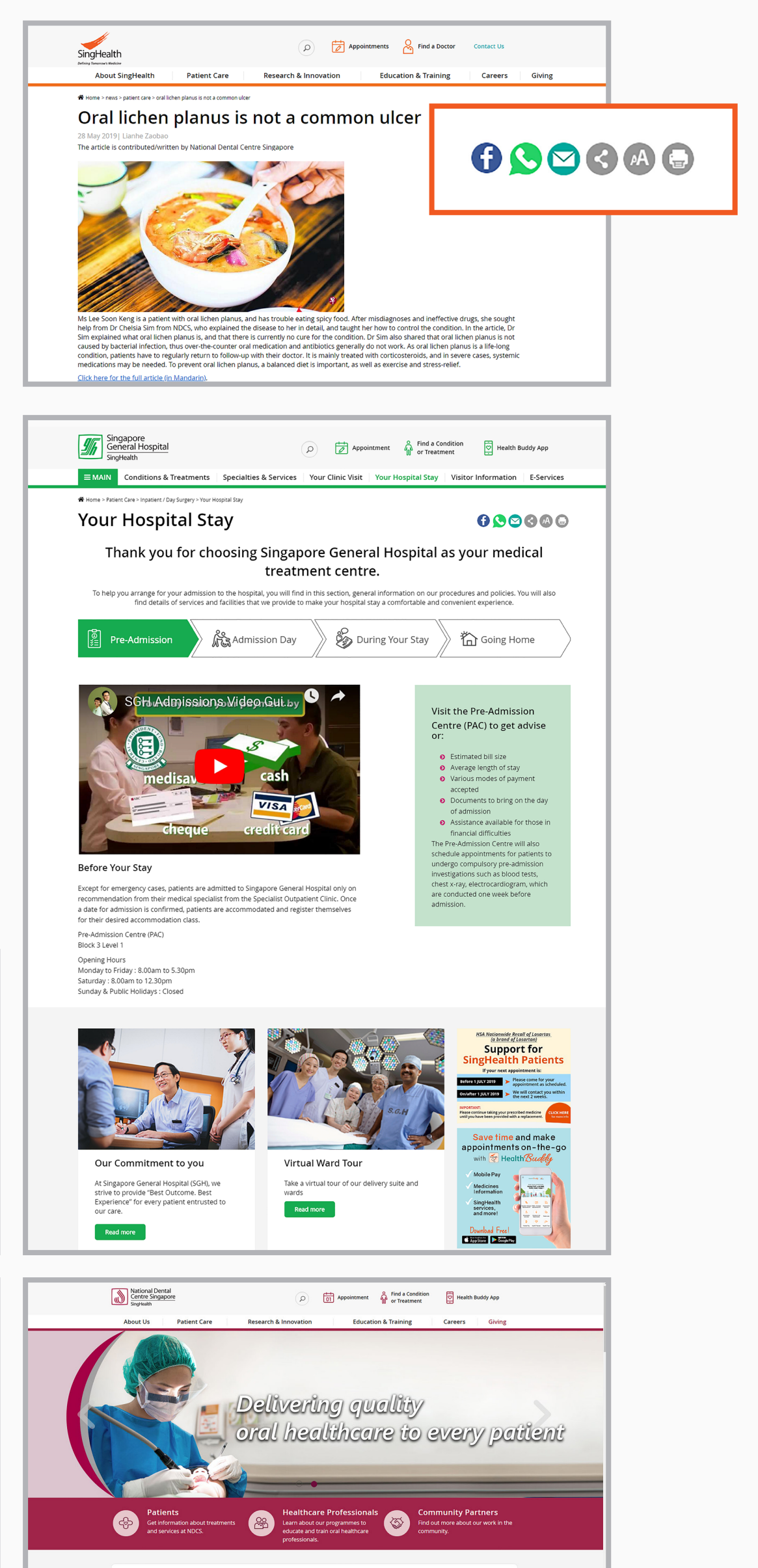
Used common repositories for key information such as the Doctors Profiles, Conditions and Treatments, Medicines, News and Events, eliminating duplicate efforts to publish the same information across the cluster websites.

#### • Social media sharing

Introduced social share via Facebook, Twitter, LinkedIn, Pinterest, WhatsApp, and other social media platforms to organically maximise reach.

#### • Redesign user interface for harmonisation across cluster

The objective of providing a one-stop reference for patients seeking treatment at our institutions was achieved through the structuring of our websites to follow the path of a **typical patient journey** with key information provided at each point of the journey. This information was decided collaboratively by all the institutions to facilitate a **common patient navigation experience** across our websites.



### 4. Benchmark with best in healthcare industry- and beyond

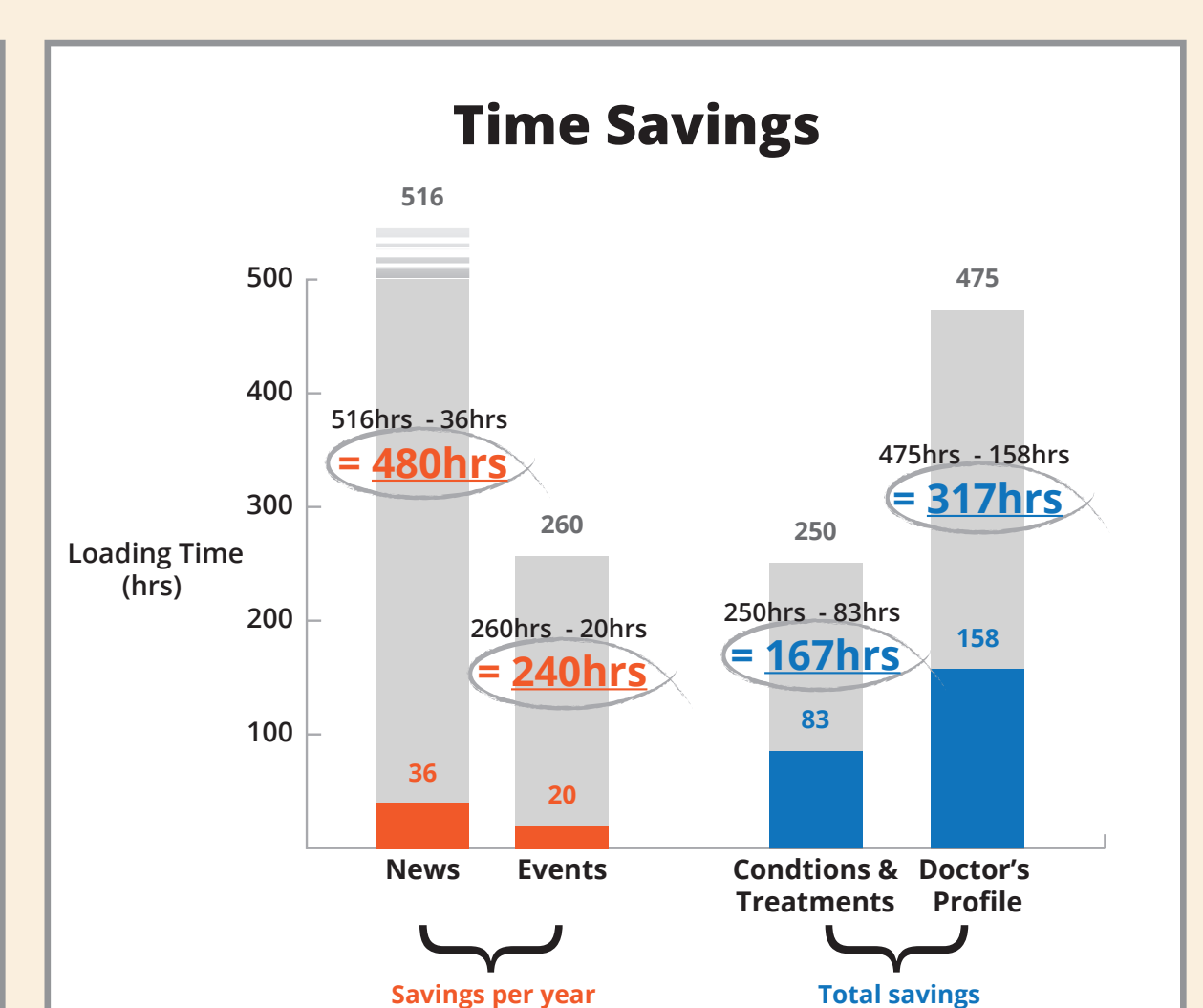
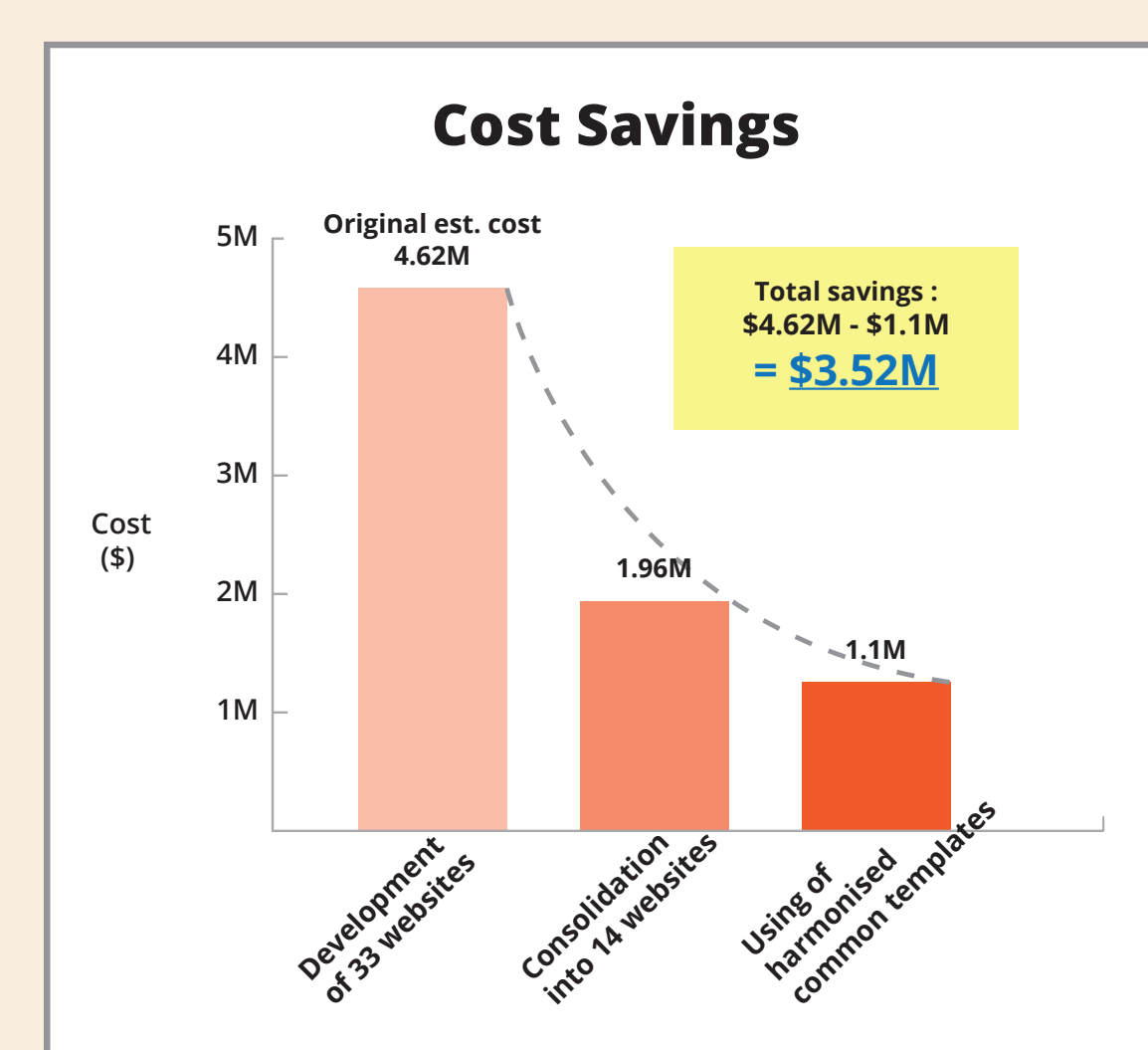
- Thorough benchmarking was conducted with the world's top online health resources like WebMD and Mayo Clinic, as well as popular local and international news sites.

### 5. Search Engine Optimisation (SEO)

- All websites were search engine optimised so that relevant SingHealth content can be found in common search engines such as Google and Bing. SEO training was also conducted for about 70 staff to impart the expertise to optimise their webpage content for optimal search engine ranking.

## RESULTS

- **Cost savings of approx. \$3.52 million** was achieved with the consolidation of 33 websites into 14.
- **60% reduction in manpower costs** in duplicate work and maintenance with the development of common templates and functionalities. **Total savings of 1204 hours** per annum.
- **70% reduction in the overall effort** to maintain the websites through the use of common elements.



## CONCLUSION

The revamp of the SingHealth cluster websites was driven by the impetus to enhance the patient experience on our websites, achieve cost savings and improve operational efficiency. Through the collaborative efforts of all the cluster communications teams, significant savings in costs and manpower was achieved.

