

Transforming the Organisational Structure of Radiological Services in a Tertiary institution: Challenges and Solutions

Sally Hsueh Er Lee, Thangaraju Manoj Kumar, Louis Teo Zhang Yi, Choo Kwee Leng, Sharmila Summuyah, Lee Pei Zhi, Muhammad Illyyas Bin Mahmood, Aw Lian Ping, Lionel Cheng Tim-Ee, Winnie Lam Wing Chuen, Chan Lai Peng, David Ng Chee Eng, Tay Kiang Hiong, Tan Bien Soo

Division of Radiological Sciences

Singapore General Hospital SingHealth

Introduction

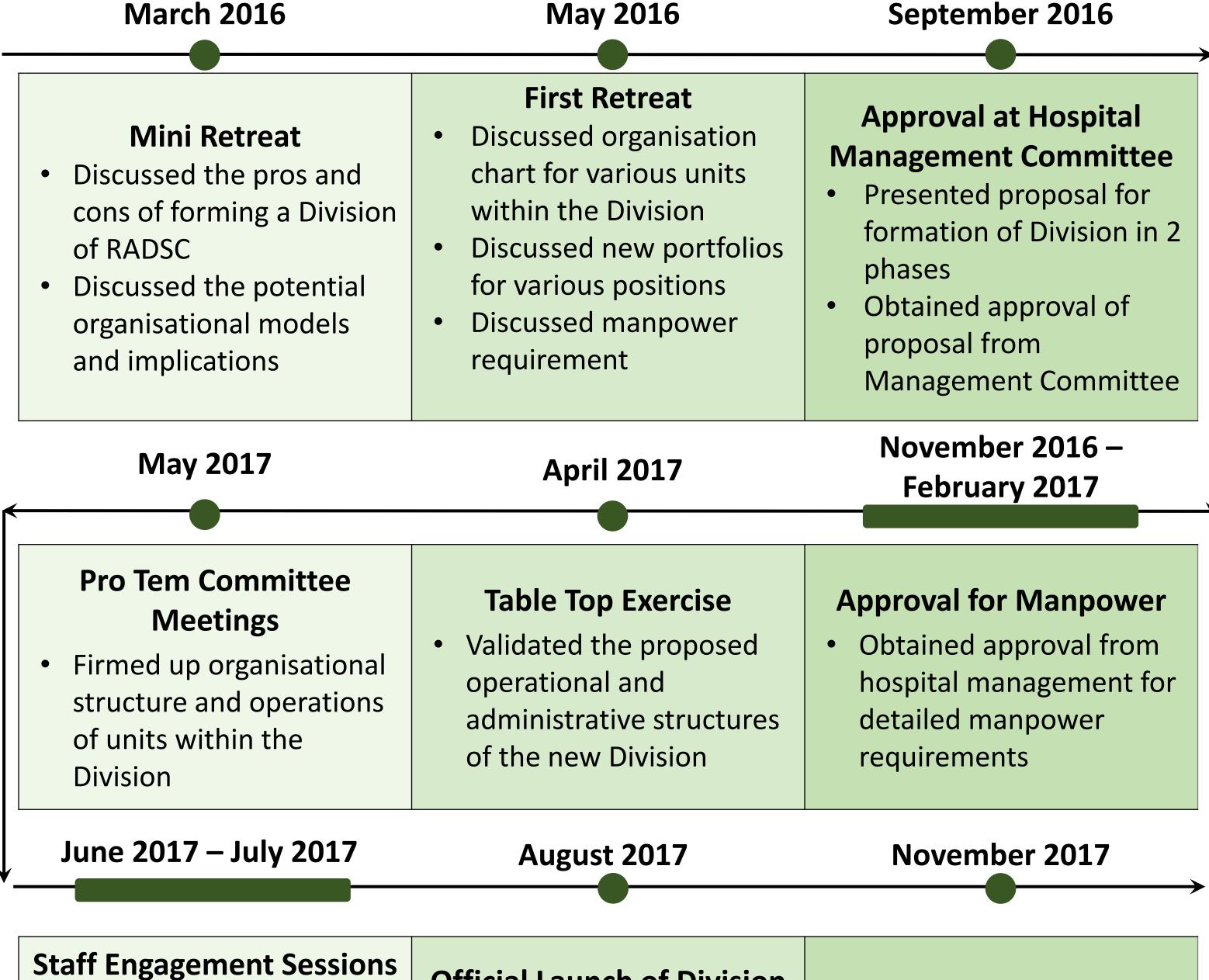
The Department of Diagnostic Radiology (DDR) and the Department of Nuclear Medicine and PET Imaging (DNMP) were organised under the umbrella of Division of Ambulatory and Clinical Support Services in Singapore General Hospital (SGH). Both are the largest departments in Singapore providing a comprehensive range of imaging services. DDR workload increased significantly from approximately 534,000 procedures in 2011 to 601,000 in 2015. DNMP, which also serves as a national training centre, performed approximately 22,760 procedures in SGH and 2,000 cases beyond SGH. With the evolving healthcare landscape, there was a need to restructure radiological and nuclear medicine services by forming a new Division of Radiological Sciences (RADSC).

Objectives

The aim of the transformation was to restructure these services to better meet the imaging, interventional and therapeutic needs of our patients. This would prevent fragmentation of patient care by preserving core clinical radiological sciences knowledge and enable us to deliver new high value services to improve patients' quality of life.

Methodology

The following is a timeline of key events that shaped the formation of the Division of Radiological Sciences:



Staff Engagement Sessions

- Reached out to more than 600 staff from various groups and staff grades over 4 sessions
- Engaged and disseminated new Division structure and how the Division will function

Official Launch of Division of Radiological Sciences

 New RADSC Division formed with 3 main departments (Diagnostic Radiology, Interventional & Vascular Radiology, Nuclear Medicine & Molecular Imaging)

Management Survey

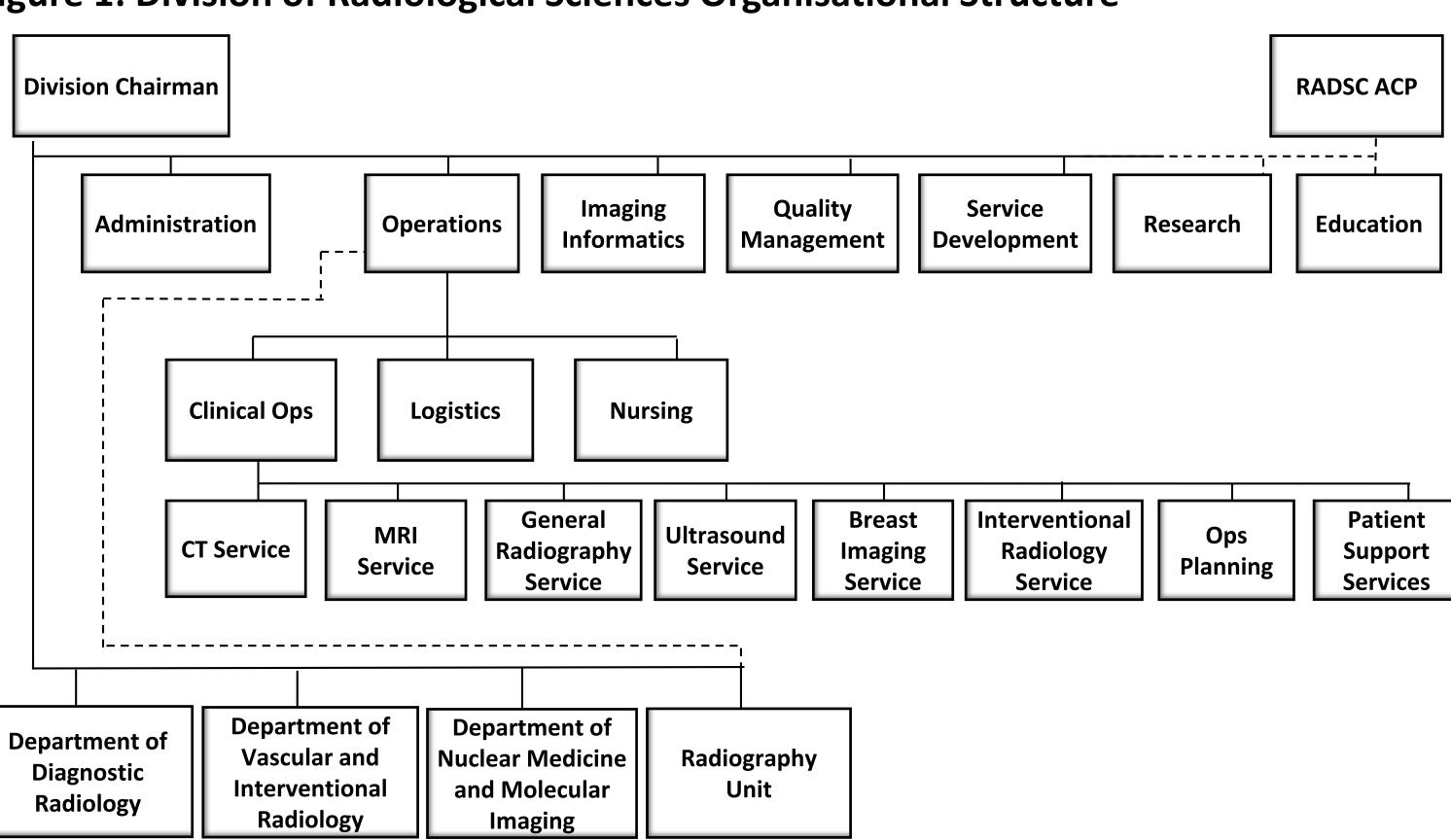
Surveyed Division
 Management to assess outcomes and potential gaps in the new organisational structure and processes

In November 2017, a survey was conducted among the management team of the Division to assess gaps in the new organisational structure. On 24th March 2018, the inaugural Division of RADSC Retreat was held. Approximately 100 leaders from the Division of RADSC came together to brainstorm and discuss strategic themes that would bring the Division of RADSC forward. The themes included vision and mission for RADSC, patient safety, value based healthcare and being future ready.

Results

The Division of Radiological Sciences was officially formed on 1 August 2017 in SGH (see Figure 1). Some of the changes implemented include shifting away from centre/locality management to imaging modality management; appointment of Radiologists as modality directors and Radiographers as modality managers; formation of Imaging Informatics, Quality Management and Service Development units to manage imaging informatics, quality and safety and project development within the Division; and centralisation of operations, administration, nursing and front-line support.

Figure 1: Division of Radiological Sciences Organisational Structure



The Management survey results showed positive outcomes (see Table 1) from the new Division structure while surfacing some operational challenges (see Table 2) that needed to be addressed.

Table 1. Positive outcomes from the formation of Division

- More autonomy and nimbleness delegated to the various Units and Departments within the Division to respond to new clinical requirements.
- New structure allowed for more focus to be placed on the planning for operations and clinical services.
- Centralising administrative, operational and logistics functions allowed the clinical Departments and Radiography unit to have more capacity to drive clinical and academic initiatives.
- Optimisation of resources as duplication of tasks in multiple departments is prevented,
- The reorganisation of the various Departments and Radiography unit allowed for more efficient and effective communications that are relevant to the various stakeholders.
- The leaders of the Departments and Units are able to dedicate their time to develop and mentor staff in their various leadership and clinical roles.

Table 2. Challenges faced in the new Division

- The Division is a large and complex unit, hence good and committed leaders are required to sustain its operational viability and to drive the Division to achieve its missions and visions.
- Succession planning will be a great and continuous challenge for the Division, which has
 to be creatively managed through good recruitment strategies, talent retention,
 coaching and mentoring.
- Delineation of the Division's operational structure tends to create a clear operational boundary between various Units, resulting in the tendency for the various Units to operate in silos.
- Tendency for various sub-units within the Division to guard and protect its own needs and interests, hence resulting in sub-units to be detached and disengaged from one another

Conclusion

The new Division structure allows for sharing of good practices and increase in resources for modalities to push towards new frontiers. There is also an increase in administrative support with more responsive and coordinated operational responses. As the Division is still in its infancy stage, there is potential for more synergy between Departments and Units. As there are numerous challenges encountered in the process of restructuring, detailed planning, validation feedback and clear communications are crucial in this journey of transformation.