Key Success Factors to Improve Work Hours



Determined leadership Work reform Buy-in for modernised operations for quality services and training



EXECUTIVE BRIEF

- 701 HA was committed to rationalising frontline doctors' work hour and had set its targets to reduce all doctors' average weekly work hours to not exceeding 65 by the end of 2009 and their continuous work hours to a reasonable level in the long run. Following the recommendations of the Steering Committee, HA set in a corporate mechanism to monitor doctor work hour in a structured, broad-brush and prospective approach in 2009. Doctors' rostered hours of on-site work were monitored over a 26-week reporting cycle while off-site calls and called-back duties were also recognised as work in monitoring doctor work hour. Moreover, flexibility was allowed for clinical departments to adjust the duration of their daytime duty hours in the monthly call roster so as to reflect doctors' work patterns in the departments. The doctor work hour monitoring exercise was completed in 2009 with the support of a centrally-designed Doctor Work Hour Calculator; and a corporate Central Doctor Work Hour Monitoring System was developed to facilitate data submission and management reporting on doctor work hour.
- 702 Thanks to the effective work reform strategies, determined clinical leadership and the frontline staff's acceptance of pragmatic modes of operation and service delivery, HA had made great strides in improving its doctors' working conditions in the past years. Not only had the proportion of outliers working for more than 65 hours per week on average in HA fallen from around 18% in September 2006 (involving around 900 doctors in 12 clinical specialties) to 4.8% by the end of December 2009 (involving 252 doctors in 10 clinical specialties), the proportion of overnight on-site on-call doctors having immediate post-call time-off also rose from 65% in 2006 to 85.2% and 82.4% on the snapshot holiday and weekday respectively in 2009. In other

words, the number of overnight on-site on-call doctors without immediate post-call time-off had dropped from around 120 in 2006 to only 36 and 39 on the snapshot holiday and weekday in 2009. Frontline doctors were thus able to deliver quality care and acquire professional training in higher vigilance.

- 703 The Steering Committee was not entirely contented with the outcomes and recognised that the data, while not representing doctors' actual work hours which also included overrun work beyond rostered hours and unreported called-back hours, furnished an index of their average working conditions in public hospitals. Given the limited scale of pilot work reform implementation and the various confounding factors that presented increasing workload and rising challenges to HA in the past years, like outbreak of human swine influenza and financial tsunami, continued wastage of doctors in pressurised specialties as well as the corporate initiative to reduce untaken annual leave of all staff hence accrued liability towards the end of the year, the current outlying situation could be the best attainable outcome in the meantime. On the other hand, it was noted that the majority of overnight on-site on-call doctors who did not have immediate post-call time-off involved senior calls or less intense on-site workload at night. These on-call doctors should have more uninterrupted rest time during their on-site call and were more able to take longer hours of post-call work.
- 704 It was anticipated that, when the work reform strategies were rolled out to all hospital clusters, coupled with an increase in workforce for certain pressurised specialties, and pragmatic work arrangements were introduced to revamp doctors' on-call systems, the number of outliers should be further reduced in different clinical specialties and the entire organization should be able to fully attain the corporate work hour targets with corresponding improvements in both doctors' work-life balance and professional training. The quality of care and patient safety would also be enhanced in public hospitals. On the other hand, the Steering Committee was cognizant of the extra work and call duties performed by certain frontline doctors, especially those in the middle call layer in busy specialties, in order to attain the work hour targets. Their exemplary performance, professionalism and dedication were highly appreciated.

- 705 Despite certain frontline doctors' concern over the computation of average weekly work hours and request for capturing off-site tele-radiology service as on-site work, the Steering Committee kept the stance of taking a broad-brush and prospective approach to doctor work hour monitoring. Besides, HA was recommended to take into account doctors' work hour reported for different specialties in its workforce planning. A long-term doctor work hour monitoring mechanism should be set up, along with a designated office to coordinate the work hour monitoring exercise after completion of the corporate project; and a closer review should be conducted for outlier departments that were yet to fully attain the 65-hour cap for all its doctors in 2009 and those that reported prolonged continuous doctor work hours in the second reporting cycle in 2009. Compensation with time-off for outliers working in excess of 65 hours per week on average was not recommended. Instead, HA was recommended to work out pragmatic solutions for different clinical specialties in order to gradually attain the long-term targets of reducing doctors' continuous work hours to 16 on weekdays and 24 at weekends and holidays. In the interim, HA might consider granting post-call half-day time-off to doctors on overnight on-site call and arrange mutual-cover sleep time for 4 consecutive hours for those who were on overnight on-site on-call duty exceeding 24 hours, subject to adequate manpower, operational practicability and service sustainability.
- 706 On the other hand, the Court of Final Appeal's judgment on doctors' claims was handed down on 20 October 2009. Doctors were not entitled to extra payment or time-off for overtime; but they were entitled to a holiday on rest days and statutory / public holidays, including being on call off-site. This would have impacts on the implementation of off-site call systems in public hospitals on the said days. The Steering Committee noted that HA had reactivated its Task Force to Study the On-call System to explore different options of revamping doctors' on-call system in a bottom-up approach. The Steering Committee might look into the matter should there be any further issues related to the reform.

BACKGROUND

- 707 Overseas studies had shown that night work and sleep deprivation were associated with poor health, bad learning and medical errors; and exhaustion would impair doctors' performance and ability in making correct clinical judgments¹. HA was mindful to improve the work-life balance of its staff and made great efforts to reduce the work hours of doctors without compromising the quality and safety of patient services. Following a doctor work hour survey conducted in September 2006, it was estimated that about 18% of public hospital doctors (i.e. about 900 doctors) worked for more than 65 hours per week on average while only 35% of overnight on-site on-call doctors (i.e. about 120) did not have immediate post-call time-off. Against this background, HA established the Steering Committee in October 2006 with a view to formulating various Doctor Work Reform strategies and overseeing the implementation of pilot work reform programmes in different hospital clusters. It was HA's targets to reduce the average weekly work hours of doctors to not exceeding 65 by the end of 2009 and their continuous work hours to a reasonable level of 16 on weekdays and 24 at the weekend and public holidays in the long run.
- HA adopted the frontline views gathered from various corporate-wide consultations 708 and the Steering Committee's recommendations² in developing its doctor work hour monitoring mechanism, which was promulgated to all hospital clusters in December 2008. In essence, HA took on a structured, broad-brush and prospective approach which entailed simple, easily comprehensible and flexible calculations and had balanced individual fairness, operational practicability and sustainability of the entire organization in the long run. Meticulous counting of actual work hours and retrospective self-reporting, as adopted in the work hour survey conducted in September 2006, were forsaken. Instead, doctors' rostered work hours were captured and flexibility was allowed to suit the varied duty patterns of different clinical specialties. Besides, off-site call duties and travel time for call-backs during an off-site call were counted in a broad-brush approach while unrostered work performed out of clinical emergencies and endorsed by the department head would be captured. Two reporting cycles were defined in 2009, each lasting for six months; and a doctor work hour calculator and the Central Doctor Work Hour Monitoring System were developed to facilitate data submission and management reporting on

¹ Section 1.1, Finds and Recommendations from the Hospital at Night Project, Modernization Agency, NHS (April 2004).

² The Steering Committee first submitted its Doctor Work Reform Recommendation Report to the HA Board in November 2009. The document contained, among others, the Steering Committee's recommended principles and approaches to doctor work hour monitoring in HA hospitals.

doctor work hour. Moreover, since February 2008, HA had extended the employee compensation coverage for all its employees travelling for ad hoc called-back duties beyond their daytime duty hours. This would give extra protection for staff performing emergency duties during out-of-hours and improve their morale.

OUTCOME OF DOCTOR WORK HOUR MONITORING

- 709 Thanks to the dedication and collaboration of over 220 clinical departments in HA hospitals, the two doctor work hour reporting cycles were smoothly completed in December 2009. Remarkable improvements were observed in HA doctors' working conditions after two years of work reform implementation and revamp of doctors' on-call systems plus granting of protected rest time during doctors' on-site on-call duties in various clinical departments. Doctors were thus able to deliver better patient care and acquire quality training in higher vigilance.
- 710 The major improvements in doctor work hour in the second reporting cycle covering July to December 2009 were summarised below with more details available in Appendix IX of this Final Report:

a) Average Weekly Work Hours

- i) The proportion of doctors working for more than 65 hours per week on average dropped from around 18% in September 2006 (involving around 900 doctors in 12 clinical specialties) to 4.8% by the end of December 2009 (involving 252 doctors in 10 clinical specialties). The proportion of doctors working for more than 70 hours per week on average also dropped from 10% to 1% in the same period.
- ii) The proportion of outliers (i.e. doctors working for more than 65 hours per week on average) in the rank of Medical Officer / Resident dropped from 24% to 7% whereas that of outlying senior doctors dropped from 3.6% to 0.6%.
- iii) The drop in the proportion of outliers was most significant in Neurosurgery (from 73% to 13%), Paediatrics (from 40% to 7%), Surgery (from 45% to 19%), Oncology (from 26% to 0%), Obstetrics & Gynaecology (from 40% to 18%) and Medicine (from 21% to 2%).



Fig. 7.1 – Comparative Data of Doctors' Average Weekly Work Hours

710 b) Continuous Work Hours

- i) The number of doctors undertaking on-site on-call duties for more than 24 hours at one go dropped from 340 in September 2006 to 244 and 221 on the snapshot holiday (July 1) and weekday (July 8) respectively in 2009.
- ii) The proportion of overnight on-site on-call doctors having immediate postcall time-off rose from 65% in 2006 to 85.2% and 82.4% on the snapshot holiday and weekday respectively in 2009.
- iii) The number of overnight on-site on-call doctors who did not have postcall time-off dropped from 120 in September 2006 to 36 and 39 on the snapshot holiday and weekday respectively in 2009.



Fig. 7.2 – Comparative Data of Doctors' Continuous Work Hours (Holiday)

Fig. 7.3 - Comparative Data of Doctors' Continuous Work Hours (Weekday)



- 711 The Steering Committee recognised the huge strides that HA had made in the work hour improvements but was not entirely contented with the outcomes. The data, while not fully representing doctors' actual work hours including overtime beyond rostered hours and called-back hours unreported by the frontline doctors, furnished an index of their average working conditions in public hospitals. Given the limited scale of pilot work reform implementation and the various confounding factors that presented increasing workload and rising challenges to HA in the past years, the current outlying situation could be the best attainable outcome in the meantime. In particular, the downturn of the global economy had brought forth greater reliance and more utilization of public hospital services, whereas the outbreak of Human Swine Influenza (H1N1) in the local society had pushed up the emergency admissions to different specialties, especially the medical wards, since May 2009. Besides, staff wastage of healthcare professionals had been kept at a high level in recent years and difficulties were encountered in employing part-time private practitioners to support hospital operations in pressurised specialties. Coupled with the corporate initiative to reduce untaken annual leave of all staff hence accrued liability towards the end of the year, these factors had much increased the workload of clinical specialties and outplayed the positive impacts of work reform at the pilot reform sites.
- The Steering Committee firmly believed that the 65-hour/week cap was a pragmatic target and improvements could be entrenched in different clinical specialties. It was anticipated that, when the work reform strategies were rolled out to all hospital clusters, coupled with a rational increase in workforce for certain pressurised specialties, and pragmatic work arrangements were introduced to revamp doctors' on-call systems, the number of outliers should be further reduced in different clinical specialties and the entire organization should be able to fully attain the corporate work hour targets with corresponding improvements in both doctors' work-life balance and professional training. The quality of care and patient safety would also be enhanced in public hospitals.

- 713 Upon review of the latest doctor work hour data, the Steering Committee came up with the following recommendations in order to improve the outlying situation of doctors working beyond the cap of 65 hours per week on average in a pragmatic manner:
 - a) For pressurised specialties with a relatively high level of staff wastage in recent years the deficiency could be made up by robust staff retention strategies, revamping their on-call systems and prompt replacement of the vacancies.
 - b) For specialties where the work reform strategies might not fully address the prolonged work hour issues and the night-time activities could barely be reshuffled to the daytime (e.g. Paediatrics and Obstetrics & Gynaecology) the deficiency could be made up by rationally deploying additional doctors and streamlining workflow and the care procedures so as to optimise workload.
 - c) For highly sub-specialised units that had grave patient safety concerns over reducing the number of on-site doctors at night (e.g. Cardiothoracic Surgery and Neurosurgery) – the deficiency could be made up by enhancing frontline doctors' core competency and launching crossover on-site on-call cover among specialties in the same service stream.
 - d) For other outlying specialties (e.g. Ear, Nose, Throat, Ophthalmology, Intensive Care Unit and Internal Medicine) – the deficiency could be made up by revamping doctors' on-call system and strengthening off-site specialist support for on-site on-call doctors.

KEY SUCCESS FACTORS TO IMPROVE WORK HOURS

714 Despite the varied outcomes of the same work reform strategy launched at different pilot sites, the Steering Committee had identified three key success factors to bring down the work hours of frontline doctors in different specialties, namely, determined clinical leadership in changing doctors' existing call systems, implementation of work reforms to optimise the overall workload and a cultural change among the frontline doctors to accommodate new modes of operation.

A. Determined Clinical Leadership in Changing Doctors' Existing Call Systems

The commitment of clinical leaders was most critical to bring about changes in doctors' existing work patterns and improve their working conditions. Recognising the negative impacts of prolonged work hours and the correlation between a fresh state of mind and due care delivery and proper clinical decision making, a number of clinical leaders had changed the frontline doctors' overnight on-site on-call systems and shortened their continuous work hours, hence average weekly work hours, in phases. This was most eminent at the pilot work reform sites but thriving examples were also found in other non-pilot reform clinical specialties. For example, in the Surgery Department of Queen Mary Hospital, the number of overnight on-site on-call doctors had been reduced with a corresponding drop in their continuous work hours, whereas its counterparts in Prince of Wales Hospital had combined the sub-specialty on-site on-call layers and capped the doctors' call frequency in a month, thereby keeping their average weekly work hours at a reasonable level.

B. Implementation of Work Reforms to Optimise Overall Workload

716 An impeccable work reform proposal would be futile if it did not get tested in reality. Since the fourth quarter of 2007, HA had implemented various work reform strategies in order to optimise the service volume and manage the risks of care in public hospitals. Deployment of doctors had alleviated the workload of frontline doctors in pressurised areas whereas other pilot work reform strategies, like reshuffling backlog operations at night to the extended day, reducing avoidable admissions to clinical specialties, sharing out doctors' basic care duties to the trained care technicians as well as enhancing the roles of experienced nurses in support of doctors' work during out-of-hours, had all created room for revamping the existing on-call systems of doctors in different clinical specialties. The work reform strategies were effective to reduce doctor work hours without compromising the quality and safety of patient care in public hospitals.

C. Cultural Change among Frontline Doctors to Accommodate New Modes of Operation

717 It was understandable that work reform would bring about uncertainty, anxiety and skepticism. But thanks to the open mind of the frontline doctors and their acceptance of new modes of operation, HA had attained much in improving doctors' working conditions. The Steering Committee was glad to observe a gradual change in the frontline doctors' attitude in the past years, from a sense of safety vested in the conventional mode of overnight on-site on-call system to the new belief that vigilant doctors could render better and safer care. This had given a great booster to implementing changes and enlisting buy-in of stakeholders for new models of service delivery. Moreover, collaborations within and among clinical specialties had increased at both pilot and non-pilot reform sites, thus facilitated the launching of pragmatic work arrangements, like stronger off-site specialist support for on-site on-call doctors and crossover on-site on-call cover between sub-specialties in the same service stream. The frequency of overnight on-site calls and the work hours of doctors could therefore be reduced; and the quality and safety of patient care were ensured with nil critical incidents reported under the corporate initiative of rationalising doctor work hour. On the other hand, the Steering Committee was cognizant of the extra work and call duties performed by certain frontline doctors, especially those in the middle call layer in busy specialties, in order to attain the corporate work hour targets. Their exemplary performance, professionalism and dedication were highly appreciated.

718 Table 7.1 below highlighted some examples of work hour improvements attained by different pilot and non-pilot reform sites through implementing pilot work reform strategies and revamping doctors' existing work patterns in the past years.

Hospital	Specialty	On-site On-call Doctors > Midnight	Doctors' Continuous Work Hours	Supportive Strategies
QMH	Surgery *	$4 \rightarrow 3$	28 → 16	Change in on-site on-call system
NDH	Surgery	3→2	No change	Combined layers of call + Capped monthly on-site
	Orthopaedics	2 or 3 \rightarrow 2	29 → 16	Extra EOT sessions
UCH	Orthopaedics	3→2	28 → 16	Extra EOT sessions
	Medicine	7 → 5	28 → 16	24-hr TSA(CA)
PYNEH	Medicine	$5 \rightarrow 4$	28 → 24	EMW + 24-hr TSA(CA) + Enhanced pharmacist service
PMH	Medicine	$5 \rightarrow 4$	28 → 16	EMW + 24-hr TSA(CA)
AHNH	Medicine	3→2	28 → 10-16	24-hr TSA(CA) + MEWS
ҮСН	Medicine	3→3	28 → 16	24-hr TSA (CA) + APN(CMU)
	Anaesthesia	1→0	17 → 8	One Anaesthetist to cover night calls in YCH / CMC simultaneously if mature

Table 7.1 – Work Hour Improvements in Different Clinical Specialties

* Non-pilot reform specialties.

^ Surgical trainees on 1st call layer could attain the 65-hr/week cap but the middle ranking doctors (Higher trainees or Associate Consultant) couldn't due to a shrunk workforce under the private market boom.

ISSUES OF CONCERN

719 A number of issues were gathered from the clinical specialties and frontline doctors in the two completed cycles of doctor work hour reporting in 2009, viz. monitoring of actual versus rostered doctor work hours, handling of statutory / public holidays and off-site tele-radiology service in work hour computation, frequency of upcoming doctor work hour monitoring, staged implementation of continuous work hour targets as well as workforce planning mechanism for medical staff in different clinical specialties. These issues were worth more in-depth discussion in order to come up with an agreeable, practicable yet sustainable yardstick for monitoring the work hour improvements for doctors in the entire organization.

A. Monitoring of Actual Versus Rostered Doctor Work Hours

720 An ever scrutinised issue of the corporate doctor work hour monitoring exercise lay in the measure of actual versus rostered doctor work hours in different clinical specialties. The doctors union representatives, in particular, called for a reversal of the prospective approach which was based on doctors' monthly call rosters, and proposed to capture doctors' actual work hours in a retrospective and selfreporting manner. Certain frontline doctor representatives also opined that the reported work hours could be misleading as clinical heads might manipulate the data, and there had been few improvements to their working conditions nor any significant reduction in their work hours since commencement of the pilot work reform programmes. The on-call duty rosters were still badly arranged in certain clinical departments. On the other hand, the possible impacts of the Minimum Wage Bill on capturing staff work hours in different disciplines were noted. The Steering Committee had a detailed discussion of this issue and made reference to the experience in the United Kingdom, where the Government was denounced by the doctor trade unions in 1995 for falsifying its claim for reducing doctor work hours, and independent inspection bodies were subsequently set up to compare what the employers claimed with what doctors reported as facts of their work hours in each hospital.

721 The local mechanism differed from its overseas counterpart on various aspects. In the first place, by monitoring doctor work hours, the Steering Committee agreed that HA sketched an index of doctor's average working conditions for workforce planning rather than any compensatory purpose. Besides, the entire mechanism, including both the scope of monitoring and the formula for calculating doctors' average weekly work hours³, was founded on HA-wide consultations with the frontline and the clinical specialties. Clinical departments were all given the flexibility to define their daytime duty hours according to their operational needs. This would avoid the potential disputes over individual fairness due to performance of unrostered work or voluntary stay-behind of doctors beyond their rostered duty hours. Besides, the prospective approach of monitoring would not only save the meticulous work of hour-to-hour reporting, but also balance operational practicability and sustainability of the organization in the long run. The Steering Committee, while appreciating the dedication and professionalism of frontline doctors to deliver quality patient care, was reluctant to learn that doctors would reduce themselves to be technical workers who clocked their work hours in a meticulous manner. The original stance of prospective counting in a broad-brush approach was therefore supported and kept. Moreover, the impacts of the Doctor Work Reform might not be prominent in certain clinical departments, due much to the limited scale of implementation in its pilot phase; and the reduction in doctor work hours at non-pilot sites was mainly a result of determined clinical leadership and frontline doctors' accommodation of new operational modes and revamped oncall duty rosters without compromising the quality of care and patient safety. These were highly commendable for genuine improvements in doctors' working conditions in public hospitals.

B. Handling of Statutory / Public Holidays and Off-site Tele-radiology Service in Work Hour Computation

722 Another hot issue rested with the handling of statutory / public holidays as well as off-site tele-radiology service in work hour computation. Under the current monitoring mechanism, the former was not discounted from the work hour formula whereas the latter would not be captured as on-site work for work hour monitoring purpose. Certain doctors disagreed to this approach as it would reduce the average weekly work hours of doctors if statutory / public holidays were not deducted from the denominator, and disincentivise doctors to deliver professional tele-radiology service using high-end technology away from the hospital.

³ For details, please refer to Chapter 5 and Appendix XVIII of the Doctor Work Reform Recommendation Report issued in November 2007.

723 The Steering Committee understood the concerns of frontline doctors but was also cognizant that whichever way of handling statutory / public holidays would not do perfect justice to all parties. As doctors performed on-call duty on statutory / public holidays, be it on-site or off-site, their work hours would be captured, net of the ensuing alternative holiday for estimation of their average weekly work hours. Simple discount of the said holidays from the work hour formula would disproportionately augment their average weekly work hours. The current work hour formula had balanced staff equity, operational arrangement and service sustainability of the organization. The Steering Committee would thus keep its initial recommendation for not discounting statutory / public holidays from the work hour formula. On the other hand, the Steering Committee definitely supported the use of advanced technology to expedite the care process and improve patient outcomes. However, in view of the insignificant volume of tele-radiology service and the meticulous work involved in capturing the work hour data, it was not suggested to capture off-site tele-radiology service as on-site work at this stage. That said, the Steering Committee opined that the methodology for work hour monitoring could evolve over time and be in line with technological advances in delivering healthcare services.

C. Frequency of Upcoming Doctor Work Hour Monitoring

The unprecedented corporate-wide doctor work hour monitoring exercise had induced loads of administrative duties on the part of frontline doctors and department secretaries in reporting and compiling the work hour data. Despite the prospective approach of capturing rostered work and the availability of such enabling tools as the Doctor Work Hour Calculator and the Central Doctor Work Hour Monitoring System, the clinical departments saw the exercise as an immense burden to their busy daily schedule. They opted for a less frequent reporting cycle which could justify the extra tasks but yet produce useful data to the corporate management at the same time. 725 In this regard, the Steering Committee would like to warmly thank all who had contributed to the success of the corporate doctor work hour monitoring exercise. After the two reporting cycles in 2009, HA had grasped the average working conditions of doctors in different ranks and specialties in public hospitals. While doctor work hours should be regularly monitored as an on-going initiative and booster to improve doctors' work-life balance, it was agreed that the frequency of monitoring could be relaxed, say, at an interval of 3 years, for clinical specialties that had attained the work hour cap of not exceeding 65 per average week and where there were few issues of prolonged continuous work hours for on-call doctors. Otherwise, a closer review and more frequent reporting requirement in every half year would be recommended until the concerned departments had attained the work hour targets and resolved the prolonged work hour issues. This would tie in with the corporate timeline of deploying Resident Trainees and House Officers in January and July each year to relieve the workload of pressurised specialties. HA was recommended to set up and promulgate a long-term doctor work hour monitoring mechanism to all hospital clusters and identify a designated team to coordinate the work hour monitoring exercise. Moreover, HA was recommended to keep on improving doctors' working conditions and reviewing clinical departments' manpower arrangement, instead of recompensing the outliers with time-off for work done in excess of 65 hours per week on average.

D. Staged Implementation of Continuous Work Hour Targets

726 Despite the encouraging attainments of the average weekly work hour targets by the end of 2009, HA was faced with daunting challenges in resolving the prolonged continuous work hours of on-site on-call doctors in public hospitals. The Steering Committee well appreciated the varied work practices and operational requirements of different clinical specialties; and had therefore recommended to HA, in November 2007, phased introduction of a hybrid model of doctors' continuous work up to 16 hours on weekdays and 24 hours at weekends and on holidays in the long run. In order to ensure that both doctors and patients would truly benefit from a more vigilant and team-based workforce, HA should work out pragmatic solutions for different clinical specialties so that both their call frequency and continuous work hours could be kept at a reasonable level without compromising their training opportunities and the quality and safety of patient care. In the interim, HA was recommended to grant post-call half-day time-off to doctors on overnight on-site call and arrange mutual-cover sleep time for 4 consecutive hours for those who were on overnight on-site on-call duty exceeding 24 hours, subject to adequate manpower, operational practicability and service sustainability. Yet, both determined clinical leadership and a change in the mindset of frontline doctors were crucial to attaining greater success in any doctor work hour initiative.

E. Workforce Planning Mechanism for Medical Staff in Different Clinical Specialties

727 To ensure a sufficient workforce of suitably gualified healthcare staff to meet the evolving needs of society in the medium to long run, HA used to take on a structured and systematic approach of workforce planning in the past years. In general, additional manpower requirements were assessed to meet the projected growth of service demand and workload; and the past workforce trend and age profile of health carers were analyzed to project the anticipated turnover beyond the forecast level. As elucidated in previous sections, doctors in certain clinical specialties were obsessed with prolonged work hours while the recommended work reform strategies might not be applicable to resolve the work hour issues in some other specialties. With the introduction of doctor work hour monitoring exercise, an index of doctor's average working conditions in different ranks and clinical specialties was available. HA could thus make better use of the index data in its workforce planning so that a more balanced workload could be attained among the frontline doctors for receiving professional training and delivering guality patient care.

PRAGMATIC MODELS OF OPERATION

728 The Steering Committee would like to briefly share a number of exemplary and pragmatic models of operation which might provide reference for clinical specialties to revamp their doctors' work arrangements. They were all wisdom of the frontline doctors aiming to improve their work-life balance and ultimately the quality and safety of patient care.

A. Fewer on-site on-call doctors for an optimised workload

729 This was made possible by implementing various pilot work reform strategies which had trimmed avoidable activities and optimised the workload of on-site on-call doctors during out-of-hours. Examples were found in a number of Orthopaedics Departments that had piloted the EOT programme with backlog operations cleared in the extended day; as well as the Medicine Departments supported by the EMWs and 24-hour care technician services which gave greater room for revamping doctors' on-call systems.

B. Partial Shift and Short-call System

730 It entailed a change in the conventional overnight on-site on-call pattern into a partial shift (i.e. a mixture of day-time duty and work on night shifts) or short-call system (i.e. on-site on-call service ending before midnight) in order to cope with the optimised night activities and reduce doctors' on-site work hours. Patient safety was of paramount concern and stronger specialist support in an off-site mode might be required. The partial shift system was run at a pilot reform site for some time, though later transformed into a post-call time-off arrangement for all overnight on-site on-call doctors due to the increased call frequencies for doctors and sustainability concerns of the concerned clinical specialty. Yet, it provided a good example of determined clinical leadership and demonstrated the importance of transparent communication in revamping the on-call systems for frontline doctors. On the other hand, doctors' continuous work hours had also been successfully reduced upon launch of the short-call system in two other medical specialties, as shown in Table 7.2 below.

		Doctors from 5 pm to Midnight	Doctors from Midnight to 9 am	Change in On-site Doctors' Continuous Work Hours	
Hospital X (1 on-site doctor)	Pre-pilot	5	5	32 → 14	
	Post-pilot	5	4		
Hospital Y (2 on-site doctors)	Pre-pilot	4	3	00. 10	
	Post-pilot	5	3	28 → 18	

C. Mutual Coverage among On-site On-call Doctors

731 Under this system, on-site doctors in the same service stream would cross cover each other for any on-call duties and take turn for a 4-hour sleep during their oncall period. This would reduce the continuous work hours of on-site on-call doctors and render safer patient care by more vigilant doctors. It was especially suitable for specialties which had stable but limited night activities; yet the core competency of the frontline doctors in acute care management had to be strengthened in order to safeguard patient safety. Moreover, where there was a genuine need or sudden patient surge at night, doctors on protected sleep should be called up to assist. This pragmatic practice was not new to clinical operation and was proven effective well before launching the pilot work reform strategies without negative clinical outcomes. Figure 7.3 illustrated how the mutual coverage system worked.





D. Combined Call Layers with Strong Off-site Specialist Support

732 Combining the on-site on-call layers could also reduce the work hours of frontline doctors without affecting the quality of care and patient safety. This measure was particularly useful to tackle the increasing staff wastage under a booming private market. Yet, strong off-site specialist support was recommended, coupled with regular safety audits and supportive programmes like enhanced senior nurse coverage and an electronic handover platform, in order to ensure that patients would receive timely and proper care during out-of-hours. The corresponding drop in training opportunities for junior doctors could be addressed by structured and scenario-based training, whereas senior doctors' concern over heavier workload would be managed through implementing various work reform strategies.

E. Other Pragmatic Measures to Reduce Doctor Work Hours

733 Other pragmatic measures were also available to attain the same ends without compromising patient care, like granting of post-call half-day time-off to overnight on-site on-call doctors, providing 4 consecutive hours of mutual-cover sleep time, capping the overnight on-site on-call frequency for junior doctors, gradually launching a hybrid shift system (i.e. 16 hours on weekdays and 24 hours at weekends and holidays), arranging continuous night shifts for doctors, extending HA's Special Honorarium Scheme to buy service from serving doctors, as well as recruiting more part-time private practitioners and retired senior doctors to take care of specialist outpatient consultations. Implementation and success of these measures would depend highly on adequate workforce, operational practicability, service sustainability and, above all, determined clinical leadership in instituting changes and a cultural change among the frontline doctors to accommodate new ways of work that might rock the conventional mode of overnight on-site on-call systems in various clinical specialities.

COURT OF FINAL APPEAL'S JUDGMENT ON DOCTORS' CLAIMS

The doctors' claims that lasted for seven years were heard in the Court of Final Appeal in September 2009, with the judgment handed down on 20 October 2009. In essence, doctors were not entitled to extra payment or time-off for overtime; but they were entitled to a holiday on rest days and statutory / public holidays, including being off-site on call. If this entitlement could not be given for operational reasons, the doctors had to be compensated either with a full day-off or a day's pay, regardless of whether they performed any work while on call off-site. The judgment would have impacts on the implementation of off-site call systems in public hospitals on rest days and statutory / public holidays. The Steering Committee was given to understand that HA had reactivated its Task Force to Study the On-call System to explore different options of revamping doctors' on-call system in a bottom-up approach.

THE STEERING COMMITTEE'S RECOMMENDATIONS

- 735 The Steering Committee put forward the following recommendations in order to attain quality doctor hours for service and training in HA hospitals:
 - a) HA was recommended to continue monitoring doctors' working conditions in a structured, broad-brush and prospective approach and incorporate doctor work hour reported for different specialties as a key consideration in its workforce planning. A long-term doctor work hour monitoring mechanism was recommended to be set up with the following arrangements, and a designated team should be set up to coordinate the work hour monitoring exercise:
 - i) For departments that were yet to fully attain the 65-hour cap for all its doctors in 2009 and those having reported prolonged continuous work hours in the second reporting cycle in 2009, HA was recommended to review their work hour data every half year until the work hour targets were attained.
 - ii) For other clinical departments, HA was recommended to review their work hour data at an interval of 3 years.

- b) HA was recommended to apply appropriate means of operation and viable work patterns to various clinical specialties and hospital clusters in order to enhance the frontline doctors' work-life balance without compromising their training opportunities and the quality and safety of patient care. Pragmatic solutions should also be worked out for different clinical specialties in order to gradually attain the long-term targets of reducing doctors' continuous work hours to 16 on weekdays and 24 at weekends and holidays. In the interim, HA was recommended to grant post-call half-day time-off to doctors on overnight on-site on-call and arrange mutual-cover sleep time for 4 consecutive hours for those who were on overnight on-site on-call duty exceeding 24 hours, subject to adequate manpower, operational practicability and service sustainability.
- c) HA was recommended to continue its efforts to reduce doctor work hour to a reasonable level and review clinical departments' manpower arrangements, instead of recompensing the outliers with time-off for work done in excess of 65 hours per week on average. HA was recommended to continue engaging different stakeholders in formulating viable solutions, balancing the need for granting day-offs for on-call duties against the need for up-keeping patient safety in public hospitals, and ensure that public money was properly used at all times.