International
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World Hospitals and Health Services

The Official Journal of the International Hospital Federation

IHF Recognition Awards for 2016

- Integrating Medical and Social Support for Elderly in Hong Kong – System and Technology Enabled Service Innovations
- Myong Ji Hospital MERS Preparedness and Response Project (The emergence of emerging infectious disease response system)
- Engaging Leadership for Transformation
- Saving Blood, Saving Lives – an innovative rational blood utilization project
- Comprehensive Corporate Social Responsibility Health Programs: Providing Quality, Affordable and Accessible Healthcare for Financially – Challenged Patients (Private Tertiary Hospital Setting)
- The R.K. Khan Hospital Pharmacy Decongestion Project: An Innovative Partnership in Service Delivery
- Implementation of Enhanced Anesthesia Recovery Program (EARP) for improving Anesthesia Related patient care outcomes & enhancing early recovery

IHF Poster Award Winners 2016

- Empowering the patient: Smart Card (SC) Integration with Electronic Medical Record (EMR)
- Key Interventions that Support the Realisation of Data Driven Hospitals
- Nurses Experiences Regarding In-Patient Suicide in a Specific General Hospital in Gauteng, South Africa

Abstracts: Français, Español, 中文

International Hospital Federation

2017 International Awards

Supporting recognition of excellence, innovations and outstanding achievements in global healthcare leadership and management

IHF/DR KWANG TAE KIM GRAND AWARD

ELIGIBILITY

» IHF Full and Associate Members ONLY
» Demonstrated excellence and outstanding achievements with proven results at health system or facility level in several areas such as:
- *Quality and patient safety*
- *Corporate social responsibility*
- *Innovations in service delivery at affordable costs*
- *Healthcare leadership and management practices*

AWARDS TROPHY AND PRIZES

Winner:
✓ *5,000 Swiss Francs to cover travel and accommodation for attending the Congress*
✓ *Internal exposure through IHF publications and healthcare media network*
✓ *3 complimentary Congress registration*

Runners-up:
✓ *2 complimentary Congress registration*
✓ *International exposure through IHF publications*

IHF EXCELLENCE AWARDS

CATEGORIES

» Leadership and Management in Healthcare
» Quality and Safety and Patient-Centered Care
» Corporate Social Responsibility

ELIGIBILITY

» IHF Members and Non-Members
» Demonstrated excellence and outstanding achievement at hospital, institution or unit level through an activity or project with proven results

AWARDS TROPHY AND PRIZES

Winner:
✓ *2,500 Swiss Francs to cover travel and accommodation for attending the Congress*
✓ *2 complimentary Congress registration*
✓ *International exposure through IHF publication and healthcare media network*

Runners-up:
✓ *1 complimentary Congress registration per category*
✓ *International exposure through IHF publication and healthcare media network*

Submission deadline:
June 2, 2017

Winner announcement:
August 7, 2017

For inquiries, please email 2017awards@ihf-fih.org

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2017 IHF TAIPEI
41st World Hospital Congress

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Contents volume 53 number 1

IHF Governing Council members' profiles can be accessed through the following link:
http://www.ihf-fih.org/governing_council

IHF Newsletter is available in **http://bit.ly/IHF-Newsletters**

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Innovation and Development in Hospitals:
An underutilized mine of valuable resources

ERIC DE ROODENBEKE
CEO
INTERNATIONAL HOSPITAL FEDERATION

ALEXANDER S. PREKER
PRESIDENT AND CEO
HEALTH INVESTMENT & FINANCING
CORPORATION

In this volume of the World Hospitals and Health Services Journal (WHHSJ), we share some new and innovative practices with our readers, from our members and the broader community of friends of the International Hospital Federation (IHF).

Ten to twenty years ago, innovation was something done in universities, large pharmaceuticals, medical technology and private start-up companies. Hospitals were just places for treating patients. Hospital managers were supposed to manage services at the lowest possible costs and not spend time or money on new innovations. Today, however things have changed. Throughout the world, the modern hospital, university hospitals in particular, have become not only centers of excellence but also "centers of innovation and development."

In this post-millennium era, hospitals are no longer mere recipients of new ideas, they have become the healthcare innovator's "playground." What better place to experiment, test and refine new ideas than the very place were those ideas will eventually be implemented by clinical staff treating patients, or by managers responsible for hospital performance.

Some hospitals have dedicated centers of innovation, while others have established commercialization arms and technology transfer offices. Whatever the business model, the objectives are often similar. The first is to make sure that scientific research undertaken by the institution in question – be it clinical, management, financial or process engineering etc. – gets out on the "street" where it can be used by health care professionals to improve the quality, effectiveness and efficiency of care provided to patients. The second objective is to further the professional reputation of the institution undertaking the research. Lastly, the third objective is for the institution to reap the benefits of the investments made in such research in terms of sharing the financial returns from products and processes that become commercially successful.

Beyond this evolution in research and development, there is also a timely opportunity to look at innovative practice methods and business models for improving health services. Although this is not a new topic, it is gaining increasing attention due to opportunities for leapfrogging to new levels of performance. Innovation brought about at an individual level may not seem like a lot by itself, but often there are synergies, so that in the end the total impact of multiple small improvements can add up to major changes in dynamic healthcare organizations.

Often there is no need to re-invent the wheel. When looking across the totality of both national and international levels of experience, individual hospitals and health services can learn a lot from the innovative practices of others. Increasingly IHF members are learning from each other in this way.

In this issue of the Journal there is an active north-south and east-west exchange of practices that has yielded results. We share with you those that have received special recognition from the Federation as leaders in their field. These are just examples, and there are many others worthy of recognition.

There is an ancient proverb that "little drops of water make the mighty ocean". A multitude of small and seemingly modest innovative practice experiences can add up to something truly significant. With enthusiasm and dedication, successful innovations at the level of a medical unit or a facility can add up or be scaled up to something much more significant. Often good ideas and the processes behind them can be adapted to other settings and scaled up to improve practices and services. What has been accomplished at a small scale may be of great interest to the rest of the world.

There is a need to recognize innovative practices and the importance of creating a real culture of innovation as part of the DNA of healthcare facilities. Such local innovations provide an opportunity for advancements in both quality and patient safety. They enable the adoption of best practices, underpinned by solid outcomes which can then be scaled up. Such an approach constitutes the foundations for continued quality improvement.

We are certain that you will be inspired by the issue of the Journal. You may find more information about the 2016 awards on our congress website http://congress.ihf-fih.org/ihf_awards. In addition to participating in webinars providing more detailed information, and learning from other who have already implemented innovative approaches, IHF members can also use our dedicated community of practice tools http://bit.ly/IHF-SIG and https://www.ihf-fih.org/open_a_new_account.

The International Hospital Federation remains committed to its members and the broader global health care community in sharing the positive experiences of its members like those presented in this issue of the Journal.

We want to challenge our readers. It is your turn to be the next one to be featured as a practice innovator. We invite all our readers to think creatively and to share innovative approaches that your organization may have implemented and that provided tangible results. There is no need to hesitate. Share your experiences now with others: http://congress.ihf-fih.org/ihf_awards.

HOSPITAL EXECUTIVE STUDY TOUR

June 5-8, 2017 | Montreal, Quebec

**DISCOUNT REGISTRATION
DEADLINE: MARCH 31, 2017**

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Why you should not miss this study tour?

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- Get insights about the host country's healthcare reforms and system like: History of Universal Health Care in Canadian Health and Recent Reforms in Health Care in Quebec.
- Encounter deeper topics on healthcare such as the Role of Organizations & Strategic Management.
- Discussions on regulations and reforms within the Canadian healthcare administrations and policies session to be headed by Jean-Louis Denis.
- Site visit in Sante Montreal /Health and Social Services
- Discover more of the Innovative Delivery Models, as well as the important role played by health systems research in improving healthcare and Long-Term Care Networks in Montreal

Lastly, if you started the tour with a bang, expect it to end with a blast through more valuable knowledge about Healthcare Management and Leadership.

These are just some of the highlights of the Montreal Hospital Executive Study Tour, there's a lot more! And you will only discover it if you join!

Registration Discount (for those who register before March 31, 2017)
1. IHF C-Suite members - US$2,000
Save US$800 discount equivalent to one year of membership fees
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Get the most of your stay in Montreal

The Montreal Grand Prix just following the Study Tour (June 9-11, 2017) is not just about the race. It's about a whole city coming alive with excitement! People arriving to Montreal from every part of the globe with one common objective- to get the most out of their 72 hours! The Grand Prix Week with the Jet Set in Montreal is where it all begins!

KEYNOTE SPEAKERS

Hon. Dr. Réjean Hébert
Former Minister of Health of Quebec
Professor, School of Public Health, University of Montreal

Henry Mintzberg
John Cleghorn Professor, Management Studies (Strategy and Organization)
Faculty Director, International Masters for Health Leadership, *Policy and Management Overview*

Bill Tholl
President and CEO
HealthCareCan

SPEAKERS

Jean-Luis Dennis
Chair on Governance and Transformation in Health Care Organizations and Systems
Health Innovation Forum

André-Pierre Contandriopoulos
Emeritus Professor University of Montreal School of Public Health Member,
Royal Colleague of Canada

Isabelle Matte
Deputy Director, Montreal Institute of Geriatrics

Brent Diverty
Vice President Canadian Institute for Health Information (CIHI)

ORGANIZER & SPONSOR

Alexander S. Preker
President/CEO
Health Investment & Financing

PROGRAM FACILITATOR

Eric de Roodenbeke, PhD
Chief Executive Officer
International Hospital Federation

SITE VISITS

The Executive Study Tour includes visits to the McGill University Business School's Leadership program in Health Care Management, National Insitute of Clinical Excellence (INESSS) the University of Montreal School of Public Health, Hospitals under the new McGill University Medical Center, Community Health Clinics (CLSC), HealthCareCan in the Ottawa - the capital city of Canada and other health care institutions in the Montreal Metropolitan area.

McGill · Centre universitaire de santé McGill · McGill University Health Centre · INESSS · Université de Montréal · Québec

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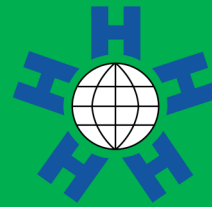
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DR. KWANG TAE KIM
IHF President (2013-2015)

Dr. Kwang Tae Kim is a graduate from Catholic Medical University, Seoul, Korea in 1961. He has served in various positions at the Korean Hospital Association (KHA), including the presidential post, since 2002 to 2004. From 2013-2015, he has also served as the International Hospital Federation's (IHF) President. One of his accomplishments during his term was the commencement of the IHF Awards.

IHF Awards Brief Introduction
"IHF Awards Program was started to promote IHF's goal of knowledge sharing towards the goal of well-managed hospitals. The first Awards were given out at the 2015 Chicago World Hospital Congress.

The second Awards were given out in 2016 at the Durban World Hospital Congress. The third Awards will be at the 2017 Taipei World Hospital Congress.

By recognizing noteworthy programs from around the world, we hope to contribute to promoting Patient-safety, Corporate Social Responsibility, and Innovation in Service Delivery at Affordable Cost. We are hoping for a wider participation in 2017."

-Kwang Tae Kim, IHF President (2013-2015) E-mail: ktkim69@gmail.com

IHF/DR. KWANG TAE KIM GRAND AWARD

WINNER
Integrating Medical and Social Support for the Elderly – System and Technology Enabled Service Innovations
Hospital Authority, Hong Kong
This project had transformed the way public-funded healthcare for elderly patients is provided in Hong Kong, through an integrated, multidisciplinary and proactive approach, with emphasis on partnership and empowering the patients.

HONOURABLE MENTION
Myong Ji Hospital MERS Preparedness and Response Project (The emergence of new infectious disease response system)
Myongji Hospital, Korea
This project deals with responding to emerging infectious diseases; preparation for a form of workforce, facility, manual and drills; and having a communication in the proper method.

2016 International Awards

Supporting recognition of excellence, innovations and outstanding achievements in global healthcare leadership and management.
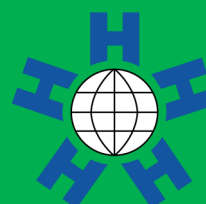
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IHF EXCELLENCE AWARDS

LEADERSHIP AND MANAGEMENT IN HEALTHCARE

WINNER

Tan Tock Seng Hospital (TTSH)'s Collective Leadership Journey
Tan Tock Seng Hospital, Singapore

This project is about building an Engaging Leadership Framework anchored on staff and patient values that path the way to enable the hospital to adapt and thrive in a more complex healthcare system and environment.

HONOURABLE MENTION

R. K. Khan Hospital Pharmacy Decongestion Project – An Innovative Partnership in Service Delivery
RK Khan Hospital, South Africa

This project is about a win –win situation for both the patients and the hospital. It involves the utilization of community facilities in issuing medicines to patients.

CORPORATE SOCIAL RESPONSIBILITY

WINNER

Comprehensive Corporate Social Responsibility Health Programs: Providing Quality, Affordable and Accessible Healthcare for Financially-Challenged Patients
Manila Doctors Hospital, Philippines

This project, the Social Vision, by Manila Doctors Hospital implements Corporate Social Responsibility (CSR) programs focusing on health, environment and gender.

HONOURABLE MENTION

Special Needs Oral Health Care Model
Tapei Medical University Shuang-Ho Hospital, Taiwan

This project developed oral health education, behavior inducement and combined the anesthesia creative care mode, trained the special needs dentists and caregivers, and created a medical care network.

QUALITY & SAFETY AND PATIENT-CENTERED CARE

WINNER

Saving Blood, Saving Lives Project
Edendale Hospital, South Africa

The "Saving Blood, Saving Lives" Project is concerned with the reduction of blood product expenditure and the decrease of blood usage in South Africa.

HONOURABLE MENTION

Improving Patient Safety & Patient Outcomes by Implementing ENHANCED ANESTHESIA RECOVERY PROGRAM (EARP)
Max Smart Super Specialty Hospital, India

The project Enhanced Anesthesia Recovery Program (EARP) is about improving peri-operative care by using evidence based interventions in a structured manner in form of care pathways.

2016 IHFDURBAN 40th World Hospital Congress

2017 IHFTAIPEI 41st World Hospital Congress

Integrating Medical and Social Support for Elderly in Hong Kong – System and Technology Enabled Service Innovations

DR. MAW KIT-CHEE CHRISTINA
CHIEF MANAGER
(PRIMARY & COMMUNITY SERVICES)
HOSPITAL AUTHORITY HEAD OFFICE

DR. LEUNG PAK-YIN
CHIEF EXECUTIVE
HOSPITAL AUTHORITY

DR. LO SU-VUI
CLUSTER CHIEF EXECUTIVE
(NEW TERRITORIES EAST CLUSTER)
HOSPITAL AUTHORITY

ABSTRACT: Hong Kong is proud of its population's long life expectancy, but rapid population ageing is one of its greatest challenges. The Hospital Authority (HA) is the largest healthcare organization in Hong Kong. To cope with the challenges, HA has formulated the "Strategic Service Framework for Elderly Patients", emphasizing the development of multidisciplinary integrated elderly services, patients and caregivers' engagement, and enhancing collaboration with community partners. Over the past few years, HA has innovated and re-engineered various service models to provide appropriate care based on the stratified needs of individual elderly patients. We have adopted an integrated case management approach to cater for the multi-faceted needs of high risk elderly, enhanced chronic disease management and improved support for self-care. Information technology has played a significant role in transforming the service model. Evaluation of the new programmers showed encouraging results in reduction of unnecessary hospitalizations, improvements in health outcomes and patient empowerment.

Introduction. Hong Kong is proud of its population's long life expectancy, but rapid population ageing is also one of its greatest challenges. The proportion of elderly persons aged 65 years and above is projected to rise markedly, from 15% in 2014 to 30% in 2034. As our population ages, chronic diseases have become the leading causes of disability, morbidity and mortality.

The Hospital Authority (HA) is the largest healthcare organization in Hong Kong, currently providing publicly funded healthcare services to the 7.3 million local population via 42 hospitals, 47 specialist outpatient clinics and 73 primary care outpatient clinics.

HA provides over 90% of hospital services and takes care of the majority of patients with chronic diseases in Hong Kong. Over 50% of its inpatient bed-days and two-thirds of unplanned emergency readmissions are accounted for by patients aged 65 years or above. The demand on HA services is growing immensely with the ageing population and increase in patients with chronic diseases.

Strategies developed with the Integrated System Approach

To cope with the challenges, HA formulated the **"Strategic Service Framework for Elderly Patients"** in 2012 to guide the development of its elderly services through extensive consultations with overseas experts, various specialties and disciplines, patient groups and community partners. The Framework aims to develop new and sustainable models of care for elderly patients, with emphasis on wellness and minimizing the need for hospitalization through a proactive approach. Its goals are to:

i. Develop multidisciplinary integrated elderly services across the continuum of care
ii. Engage patients and caregivers in disease management
iii. Enhance collaboration with community partners

Based on the Framework, over the past few years HA has innovated and re-engineered various service models to provide appropriate care, based on the stratified needs of individual patients,

with the anticipation that older patients with complex needs or comorbidity will require more public healthcare services.
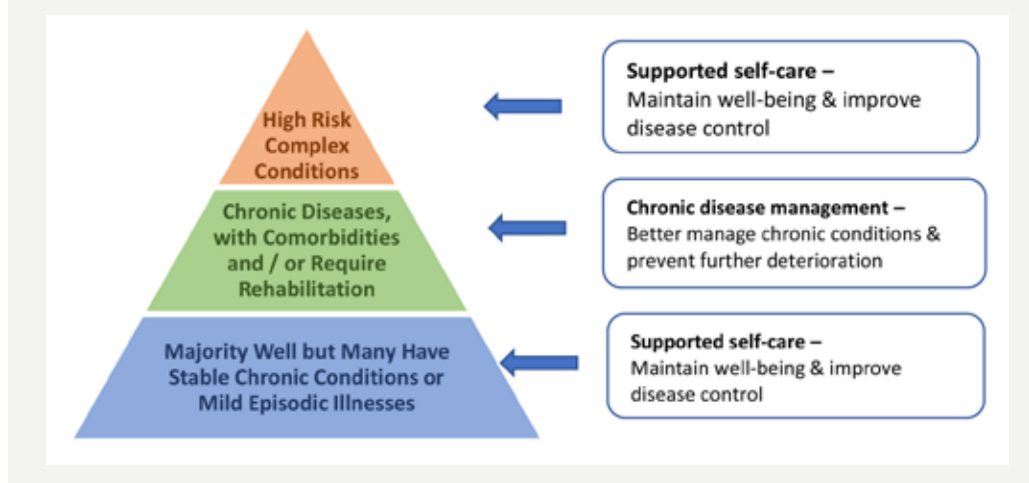
The stratified care for elderly patients covers three broad categories:

i. **Supported self-care** for most elderly patients who are living in the community with stable chronic conditions or mild episodic illnesses. The focus is to maintain well-being and facilitate self-management of disease conditions through patient education and empowerment in the primary and community care setting.

ii. **Chronic disease management** for patients with multiple chronic conditions and/or requiring rehabilitation (e.g. chronic obstructive pulmonary disease, heart failure, stroke) to prevent complications. An important element is coordinated care provided through multi-disciplinary teams, taking reference to Wagner's model of chronic care.

iii. **Integrated case management** for those with complex needs or severe impairment, who are at high risk of prolonged hospital stay and unplanned readmission. The emphasis is on reducing avoidable hospitalization and improving community support for frail patients. The model requires an integrated and coordinated care approach involving health care, social care and community partners.

FIGURE 1. SYSTEM APPROACH STRATEGIES BASED ON STRATIFIED NEEDS OF ELDERLY PATIENTS

Based on the stratified care approach, HA has taken the lead in seeking government funding support, developing and implementing the following new service models and programmers to enhance chronic disease management and elderly care:

a. **Integrated Care and Discharge Support (ICDS) Program** with HA hospitals working in collaboration with non-government organizations (NGOs) to provide care for high-risk elderly patients using a case management approach, emphasizing early identification of needs, discharge planning and post discharge support. Hospitalized elderly patients who are at high-risk of readmissions are identified automatically using an electronic risk prediction "HARRPE" (Hospital Admission Risk Reduction Programmed for the Elderly) Score developed by HA. Designated "linked

nurses" assess the patients before formulating individualized care and discharge plans with multi-disciplinary input. If needed after discharge, patients receive day and/or outreach services such as community nursing and allied health rehabilitation, as well as social care and home support provided by NGOs. The Program is coordinated by Geriatric teams and led by senior Geriatricians.

b. **Community Health Call Centre (CHCC) Service** for discharged high-risk elderly patients. This pioneering model integrates information technology (IT), communication technology, statistical modeling and Electronic Patient Record (ePR) system to deliver professional telephone advice to target patients. Elderly patients at high risk of readmission are identified automatically by "HARRPE" score upon discharge, and the lists of these patients are transferred to a corporate Call Centre manned by trained nurses. The nurses proactively call up these elderly patients within 48 hours upon discharge to assess their needs, also taking into consideration their health problems recorded by the system. Advice is given accordingly and referrals to the appropriate care units or NGOs are made when needed.

c. **Outreach Support to Old Age Homes** for the 7% of the elderly population in Hong Kong who are old age home residents, the majority on whom are frail with multiple co-morbidities. To bolster support for these patients, and as corporate social responsibility, our **Community Geriatric Assessment Teams (CGATs)** provide onsite medical and nursing services, as well as carer training in drug management, infection control and outbreak management, to promote better care and patient safety in old age homes. Moreover, for a subset of elderly residents facing the final stage of life, CGATs also work together with the old age home staff to provide **End-of-life (EOL)** care and facilitate a more peaceful and comfortable death.

d. **Risk Factor Assessment and Management Program (RAMP)** provided by a multi-disciplinary teams of nurses and allied health professionals at primary care clinics, to improve chronic disease management. Patients with diabetes mellitus (DM) and hypertension are systematically assessed, have their risks of complications stratified, and are provided with targeted clinical interventions including medical care, nursing, allied health care and patient empowerment.

e. **Patient Empowerment Program (PEP)** in collaboration with community NGOs to support patients with chronic disease on self-care and disease management, drawing inspiration and reference from the Chronic Dis-

ease Self-Management Program of Stanford University. Moreover, patient empowerment for chronic disease patients is also provided via the CHCC telephone advice service.

f. **Smart-Patient Website** provides a one-stop electronic platform delivering information on disease management and community resources to support self-care and promote health awareness, as part of HA's patient support and corporate social responsibility. To help strengthen care support for elderly patients, a **"Smart-Elders"** subsite on health and social care information is also available.

IMAGE 1. COMMUNITY HEALTH CALL CENTRE

FIGURE 2. INTEGRATED DISCHARGE PLANNING AND POST-DISCHARGE SUPPORT FOR HIGH RISK ELDERLY

Engagement at Different Levels and Community Partnership

HA's "Strategic Service Framework for Elderly Patients" was formulated under the policy direction and guidance of the HA Board. The formulation process and implementation of the Framework was carried out through a dedicated Taskforce and Working Groups including senior management, clinicians of various specialties, nurses and allied health staff from HA's Head Office, hospitals and clinics. It involved extensive consultations with patient groups, community partners, NGOs, overseas experts, government bureaus and departments on health and welfare, through various platforms including workshops, forums, meetings, focus groups and field visits.

Partnerships with local community and NGOs are emphasized to meet the multi-faceted needs of the elderly. The ICDS is carried out in collaboration with NGOs, with funding from both health and welfare bureaus. The CGAT and EOL care program

involved extensive engagement with the private and NGO sectors and various HA clinical teams. PEP is delivered by NGOs under contractual arrangement, with training materials and protocols developed by HA. The Smart-Patient Website was developed with input from various clinical specialties and disciplines, in partnership with patient groups.

Significant Results and Achievements

A study on the ICDS Program for high risk elderly patients demonstrated that it was effective in reducing emergency consultations by 16%, emergency hospitalizations by 16% and acute patient days by 15%. It is available in all districts in Hong Kong and serves around 80,000 elderly patients every year. Likewise, evaluation also showed that the CHCC service could significantly reduce emergency consultations and readmissions of target elderly patients by 27% and 26% respectively, and it is now supporting more than 52,000 elderly patients per year. Our CGATs currently provide services to more than 90% of old-age-homes in Hong Kong. The service, on evaluation, was shown to have reduced emergency consultations by 12%, emergency hospitalizations by 15% and outpatient consultations by one-quarter.

Evaluations conducted by local universities on the chronic disease management programs in primary care settings showed positive outcomes, including better control of blood sugar level and blood pressure. A series of the evaluation results were published in more than 40 peer-review journal articles. Specifically, in the RAMP program, the number of diabetic patients achieving the target control of HbA1c $\leq$7% increased by 16%, BP $\leq$ 130/80 mmHg by 14%, and LDL-C $\leq$2.6 mmol/L by 22%. As for hypertensive patients, there was more than a 10% and 20% increase in patients achieving a blood pressure < 140/90 mmHg and LDL-C $\leq$ 2.6 mmol/L respectively. Evaluation also revealed RAMP's long term effectiveness in risk reduction of coronary heart disease, heart failure, stroke, end-stage renal disease, sight-threatening diabetic retinopathy and all-cause mortality. In particular, blindness was prevented for 40,000 diabetic patients as of March 2014. RAMP intervention in addition to usual care was considered cost-effective and cost-saving. Evaluation on PEP working together with NGOs also showed significant improvement in patients' control of HbA1c, blood pressure and LDL-C, and reduction in cardiovascular diseases and all-cause mortality. To date, the RAMP program has benefitted more than 230,000 diabetic and 240,000 hypertensive patients, and the PEP program has also served more than 85,000 patients.

Moreover, the new models and programs have received international and local recognition. For example, the CHCC service was highly appreciated by international and local experts. Health ministries and clinical delegates from different cities of Mainland China as well as overseas countries, including Austra-

lia, Japan, Singapore and Thailand have visited our Call Centre to learn from the experience. In addition, the CHCC project has won the Best Innovation & Research Grand Award and two additional Awards in the Hong Kong Information and Communication Technology Awards.

The ICDS model of integrated care, with enhanced medical-social collaboration to support high risk elderly patients, is also well acknowledged by local and international health authorities and experts. HA was invited to share the model at international platforms such as conferences organized by the International Foundation for Integrated Care, International Association of Gerontology and Geriatrics, and the Singapore Ministry of Health.

The Smart-Patient Website is very popular with patients and the public, and received more than 10 million hit-counts last year. Furthermore, the Website has received the Hong Kong Television and Entertainment Licensing Authority Meritorious Websites Award.

Conclusion

The new service models and programs have transformed the way public-funded healthcare for elderly patients is provided in Hong Kong, through an integrated, multidisciplinary and proactive approach, with emphasis on partnership and patient empowerment. Recurrent funding is being injected by the government to sustain and extend programs. They are well received by the patients and their caregivers, as shown by evaluation studies. HA will work further with different stakeholders within and beyond the healthcare sector to continue to improve our system and cater for the needs of our ageing population.

BIOGRAPHIES

Dr. Christina Maw is currently the Chief Manager of Primary and Community Services of the Hospital Authority Head Office. Her portfolio involves overseeing the HA geriatric services, rehabilitation services, primary healthcare, palliative care, community health call centre services and patient engagement. Dr. Maw is a Public Health Medicine Specialist, and was trained in Geriatric Medicine during her early years after graduation. Before joining HA Head Office, she worked in the Department of Health, Centre for Health Protection and the Food and Health Bureau. She is experienced in public health and health administration. She is also a trainer of the Hong Kong College of Community Medicine and examiner of the College examination.

Dr. SV Lo, FHKAM (Com Med), FHKCCM, MRCP (UK), FRCP (Edin), FFPHM, FRACMA, is a Cluster Chief Executive of the New Territories East Cluster in Hong Kong. He manages an annual budget of HK$9.6 billion and a staff size of 12,000. Prior to this current appointment, Dr. Lo has served as Director of Strategy & Planning from 2007 to 2016. Professionally, Dr. Lo is a practitioner in Public Health & Administrative Medicine. He has served as a Part I and II examiner of the Faculty of Public Health, and Censor and examiner of the Royal Australasian College of Medical Administrators.

Dr. Leung Pak-yin began his career in 1985 in public health and administrative medicine. He was appointed Deputy Director of Food and Environmental Hygiene in 2000, Deputy Director of Health in 2002 and the first Controller of Centre for Health Protection in 2004. Dr. Leung joined the Hong Kong Hospital Authority as Director of Quality and Safety in 2007 and is currently Chief Executive of the Hospital Authority responsible for 42 public hospitals and institutions and over 74,000 staff.

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Myong Ji Hospital MERS Preparedness and Response Project (The emergence of emerging infectious disease response system)

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ABSTRACT: According to World Health Organization (WHO) reports, MERS patient of the last five years mostly occurred in Saudi Arabia, but uniquely, over 180 patients appeared in Korea in 2015. The reason is in the nature of the Korean medical, characterized by high medical accessibility. MERS has rapidly expanded to infect large numbers of people in Korea in a short period of time through nosocomial infection . Under the circumstances, Myong Ji Hospital had accepted MERS patients and did not cause any nosocomial infection because the hospital had prepared, trained and formed a response team for emerging infectious diseases, a year before MERS occurred in Korea. However, Myong Ji Hospital has under-estimated the communication problem; inadequate communication during the MERS period caused a lot of confusion among people. Myong Ji Hospital learned two important lessons in responding to emerging infectious diseases; the first was to prepare a form of workforce, facility, manual and drills; the second was to prepare proper communication methods.

ntroduction. The risk of emerging and proliferating infectious disease has been rapidly increasing due to global environmental change and an upsurge in migration. South Korea has experienced a peculiar trend of new infectious diseases over the last few years.

On May 20th, 2015, the first MERS patient in Korea was diagnosed; the infectious disease had spread to 186 people and caused 38 deaths within two months. Moreover, about 16,000 people were isolated as they had been in contact directly or indirectly.

The main problem of that incident is that MERS transmission occured in the form of nosocomial infection, involving patients from four hospitals C, H, M, and N .

In Korea's healthcare system, people can choose from available hospitals for treatment, regardless of the type, ranging from the public health center to the mega-sized general hospitals. It certainly appears that the Korea healthcare system is high-quality and ensures high medical accessibility for citizens.

The problem is that such high medical accessibility is vulnerable to new types of epidemic, such as MERS, that need to be controlled. Since all residents in Korea have the right to visit medical institutions in any area,, this mobility and freedom has increased the spread of MERS. Therefore, it is necessary to re-inspect the double-sidedness of Korea's medical delivery system.

Under a medical system with such a weak immune system, this paper will explain in detail how Myong Ji Hospital was able to perfectly respond to the unexpected incident that caused such disturbance in South Korea.
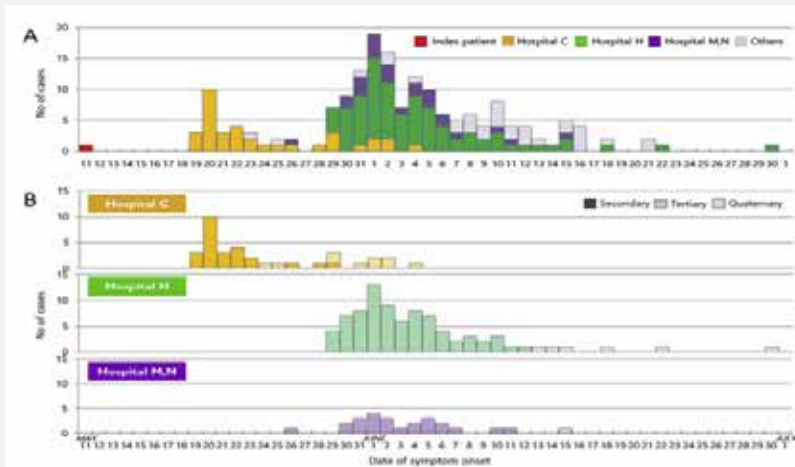
Source: Korea Centers for Disease Control and Prevention. 2015. "Middle East Respiratory Syndrome Coronavirus Outbreak in the Republic of Korea, 2015" Osong Public Health Res Prerspect 2015 6(4) 269-278

Background

Myong Ji Hospital was in the forefront in the fight against the pandemic flu (H1N1) by establishing the 'Swine Flu Virus Response Center' in 2009 within the hospital. Additionally, the hospital has treated the largest number of flu patients in Korea and dealt with various types of flu patients. As Myong Ji Hospital had already experienced dealing with the pandemic flu, the hospital was fully aware of the importance of a tighter management system since emerging infectious diseases may occur in the near future.

In 2014, Myong Ji Hospital began a significantly relevant project to put together a systematically-structured response system for the emergence of infectious diseases, involving the installation of a government designated 'Negative Pressure Isolation Room' at Myong Ji Hospital. The hospital also was able to secure the necessary equipment and human resources to provide and ensure security for patients, employees and the local community. Furthermore, the hospital acknowledged the essential need to train a separate response team, consisting of various experts, given the deadly nature of emerging infectious diseases. Hence, the first stage of the project was to promote the multidisciplinary 'Contagious Disease Response Team' (CDRT), including doctors, nurses and administrative personnel.

Although Myong Ji hospital is a private organization, the hospital has been participating in numerous public health projects to pursue social responsibility as the role of a hospital for local communities and for the country.

FIGURE 2: HEADQUARTERS ORGANIZATION STRUCTURE AND CHART OF EMERGING INFECTIOUS DISEASE RESPONSE TASK FORCE IN MYONG JI HOSPITAL (2014)
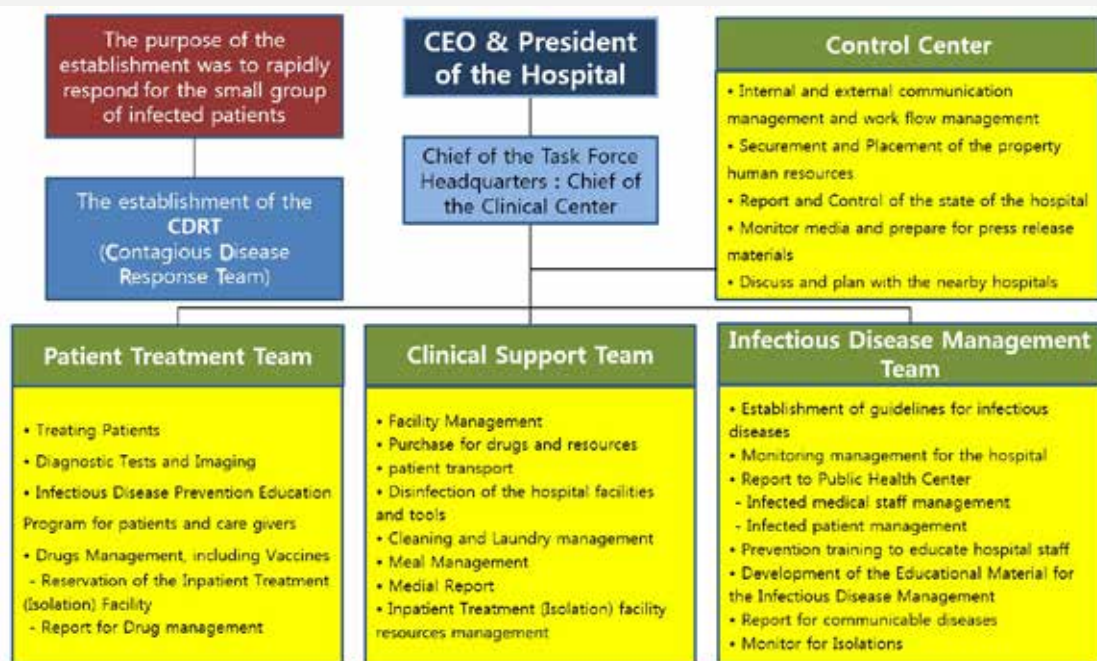
This project was based on the philosophy to strategically prepare and prevent emerging infectious diseases for the betterment of our society.

Also, when Myong Ji hospital was getting ready to build up this project in 2014, the management of the hospital was being active as members of the 'National Infectious Disease Management Committee', gaining in-depth information on MERS. At that time, the management was informed of the statistics of 20,000 residing Korean workers in areas of the Middle East, 200,000 travelers between Korean and the Middle East, and the 40 percent fatality rate upon exposure. Management immediately addressed the need to prepare for a possible MERS outbreak in Korea, as there were no distinctively known vaccines.

Myongj Ji hospital's emerging infectious disease project consisted of four stages: **Preparation-Response-Recovery-Enhancement.**

❚ Preparation (2014. 5. 20 – 2015. 5. 28): Preparation of the Team, Equipment, Manual and Discipline

The preparation stage consisted of forming a team, preparing proper equipment, facilities and a suitable manual for real-time response to any emerging infectious diseases.

At this stage, Myong Ji Hospital formed the response team and established the negative pressure isolation room. When the hospital established the negative pressure isolation room, 19 others in Korea had them, yet Myong Ji was the best equipped. In addition the CDRT had conducted numerous training simulations. The manual was created for any sudden outbreaks during simulation training sessions and meetings.

Image 1: Drills for Responding to Emerging Infectious Diseases- Outpatient treatment area

The organization of the project was led by the director of the hospital. Participants were involved in various educational activities, real-situation treatment and management practices and general support activities. Depending on the role, participants belonged to CDRT, Situation room, Patient Care & Treatment Team, Medical Support teams, and so on. The situation room was run by the administrative staff to control the overall situation and to manage and record and to work with media and government agencies to perform communication duties for internal and external purposes.

In addition, patient care, a treatment team and medical support team were organized to quickly response for any and all emergency situations.

It was rather difficult for majority of the medical staff to concentrate solely on this project, as they already have a busy schedule. However, the management team convinced the entire staff of the need to be ready for any severe infectious diseases outbreaks and the importance of fulfilling the hospital's role in treating and caring for all people.

Image 2: Drills for Responding to Emerging Infectious Diseases- Inpatient area (Negative pressure Isolation Room)

❚ Response (2015. 5. 29 – 2015. 7. 30): All MERS patients were discharged without any secondary infection.

On May 29th, 2015, it was announced that the first MERS confirmed patient was being transferred to Myong Ji Hospital from Pyeongtaek St. Mary's Hospital, where the first MERS case was confirmed in Korea. CDRT rushed to Pyeongtaek to pick up the patient in an ambulance in their protective suits. Upon the patient's arrival , the medical team suited up in protective gear and immediately took the patient to the designated elevator and up into the negative pressure isolation room. The decontamination response team then exterminated any potential traces of virus, following the patient transport convoy. All procedures were based on scenarios included in training as preparation for new infectious diseases, carried out since 2014.

The second patient came in when the first patient was

Image 3: Response to MERS Outbreak – The moment of Receiving MERS Patient

stabilized and had completed the necessary procedures. This patient had much worse symptoms. However, staff were calmer in view of their previous experience. A total 5 confirmed patients and 50 suspected fully recovered and were discharged from Myong Ji hospital, without any complications.

During the treatment process, approximately 20 medical personnel, including the chief nurse lodged day and night in the hospital ward and the MERS control team, were strictly prohibited from coming into contact any other patient other than MERS-infected ones. A total of about 80 personnel, including disinfection and control staff, were joined to respond to the MERS and no nosocomial infection was found. Through this real-time experience of MERS, Myong Ji Hospital was able to establish its 'Practical Manual'.

Unlike the stable response at the site, the communications sector was affected by confusion. Confusion in and out of the hospital caused by communication problems at the early stage of hospitalization for MERS, was beyond imagination. The hospital's answer to inquiries that were pouring in to confirm the authenticity of the MERS that had spread to the community from the first day of receiving the confirmed patient, remained consistent with the NCND policy (neither confirm nor deny).

The MERS crisis left an unsolved discussion on the extent to which relevant information would be communicated to the internal medical staff and to the community at the time of crisis.

IMAGE 4: RESPONSE TO MERS OUTBREAK – OBSERVATION THROUGH MONITOR

▮ Recovery (2015. 6.24 ~ 2015. 12. 31) : Resilience program to comfort fatigued medical staff

At the recovery stage, the 'sokpulyi' program, including a healing meeting, was organized by department of mental health in order to mentally and physically stabilize stressed medical staff. Additionally, various support activities were carried out to stabilize both society and medical staff who feared MERS. The activities were benchmarked according to international disaster programs, to provide psychological support to medical providers.

During this program, participating employees were able to accurately describe their true stress conditions. Therefore, it enabled them to relieve stress, acknowledge the situation and regain peace of mind. The recovery resilience program consisted of 'comforting', 'openness', 'information-sharing',

'being positive' and 'having hope', as important values for ridding participants of fear and helping them to regain strength to accomplish the project.

IMAGE 5: 'SOKPULYI' PROGRAM THAT ONE OF THE RESILIENCE PROGRAM

IMAGE 6: FLASH-MOB FOR CHEERING UP THE PERSONNEL WORKING AT SITE

▮ Enhancement (2016. 1. ~) : Sharing the MERS experience with domestic and foreign medical institutions through white papers and academic conferences

During the enhancement stage, an informative website concerning the entire project process was freely given to all people. (http://mers.mjh.or.kr) The white paper of this project was published and drafted by members for others to experience the real situation indirectly. The hospital's response organization chart, different roles, practice manual were uploaded as reports for the public.

IMAGE 7: FIRST SCREEN OF WEBSITE FEATURING THE WHITE PAPER ABOUT MERS OUTBREAK

Based on the experience and hard work, the Institute of Infection Control and Emergency Response (IICER) was established within the hospital, along with an international infectious disease symposium to share its educational and professional materials. At this symposium, infectious disease experts from Korea, America, Japan, Taipei and Singapore were invited to discuss and share insights into new infectious diseases, including in-depth research materials of the MERS situation in Korea. The symposium played a vital role for the sharing of information, to minimize gaps on the infectious diseases' dilemmas and to discuss and prepare for the future.

Myong Ji hospital has been also contributing and sharing essential information on the emerging infectious diseases via media and medical conferences for government agencies and international medical industry.

IMAGE 8: INTERNATIONAL SYMPOSIUM ON INFECTION CONTROL AND EMERGENCY RESPONSE (2016)

After MERS

There was extensive media coverage of the Myong Ji Hospital's excellent response system when MERS started to die down. The Myong Ji hospital's project was mentioned by media, SNS and medical professionals. The project report received over 10,000 positive comments in articles on the Internet. Medical products were donated in appreciation of the work accomplished by the Myong Ji Hospital. This project was also reported by the public broadcaster KBS, and featured on a special discussion TV program presenting Myong Ji Hospital's MERS medical team.

In addition, after Korea had been declared as completely free from MERS, the hospital received numerous achievement awards from the secretary of the Ministry of Health and Welfare, Governor of Gyeonggi-do, Mayor of Goyang City, members of Gyeonggi-do Congress and medical association, the hospital association and infection medicine institute.

Conclusion

Through this project, Myong Ji Hospital has fulfilled its social responsibility towards the entire nation by becoming

a role-model and suggesting direction for the Korean infectious disease response system.

Myong Ji Hospital learned two important lessons when institution suffered from MERS. The core of the preparation process is to organize the team, to prepare a manual, to maintain designated facilities and equipment, and to implement exercise practices.

Preparing adequate communication is also essential, failure to do so only adds to public disbelief, and disturbs efficiently preventive measures. Above all, there should not be any information gap between the corporate and incorporated employees. In addition, communication with the local community within the hospital should not be overlooked. It is vital to maintain close cooperation with government agencies while preparing in advance.

BIOGRAPHY

Dr. Wang-Jun Lee is the CEO of Seonam University College of Medicine, Myong Ji Hospital and currently runs two more general hospitals along with three long-term care facilities. Also, Dr. Lee is the President of South Korea's most influential healthcare news & publishing company, 'The Korean Doctors' Weekly', founded in 1992.

In addition, as a board member of the Korean Hospital Association, he serves as the secretary general of the Korean Healthcare Congress, which is the top healthcare related annual congress in Asia.

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Engaging Leadership for Transformation

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ABSTRACT: This paper describes Tan Tock Seng Hospital's (TTSH) Journey in delivering value to both staff and patients, anchored on an Engaging Leadership framework. As the healthcare landscape becomes increasingly complex and TTSH continues to strive for organisational excellence, we focused on organisational health in tandem – delivering value to our staff so that they can deliver value to our patients. We built an Engaging Leadership Framework anchored on staff and patient values. Leadership builds both human capital and social capital in people through engagement. Better care begins with better people. People are best engaged and equipped to do their jobs well, learning each day to do their jobs better and innovating to do their jobs differently. The leader's role evolves from a management perspective to a leadership perspective, from control to engagement and from hierarchy to collectively. We envision to build leaders at all levels, through the concept of "Collective Leadership", built on engagement.

An Impetus for Change.

The Singapore public healthcare system seeks to promote good health and reduce illness, ensure access to need-appropriate, good and affordable healthcare, and pursue medical excellence.

However, several challenges loom ahead for Singapore's healthcare sector:

1. Aging population;
2. Changing disease patterns;
3. Shrinking and aging workforce;
4. Fiscal tightening due to increasingly uncertain global economic conditions.

The first 2 challenges are key drivers, pushing demand for healthcare and aged care services, whereas the other two cap the system's ability to increase our capacity.

In this light, Singapore healthcare system faces the challenge of the need for increased capacity to meet increasing demands from the population, coupled with constraints to the supply of healthcare resources.

A Deeper Impetus for Transformative Change

In response, Tan Tock Seng Hospital's (TTSH) strategy was to move from volume-based care towards value-based care. This refers to the need to re-design care delivery and organisation models to maximise value for staff and patients. It calls for an environment where there is deep engagement, enabling transformative efforts to build better people and better care. To build and enable people towards better care, simultaneous optimisation efforts must be carried out in sync at various parts of the organisation system.

About Tan Tock Seng Hospital (TTSH)

TTSH is one of Singapore's largest multi-disciplinary hospitals, with over 170 years of pioneering medical care and development. The hospital has 45 clinical and allied health departments, 16 specialist centers, 1,500 operational beds and is powered by more than 8,000 healthcare staff. TTSH sees over 2,000 patients at its specialist clinics and some 460 patients at its emergency department every day. TTSH is part of Singapore's National Healthcare Group, providing holistic and integrated patient care.
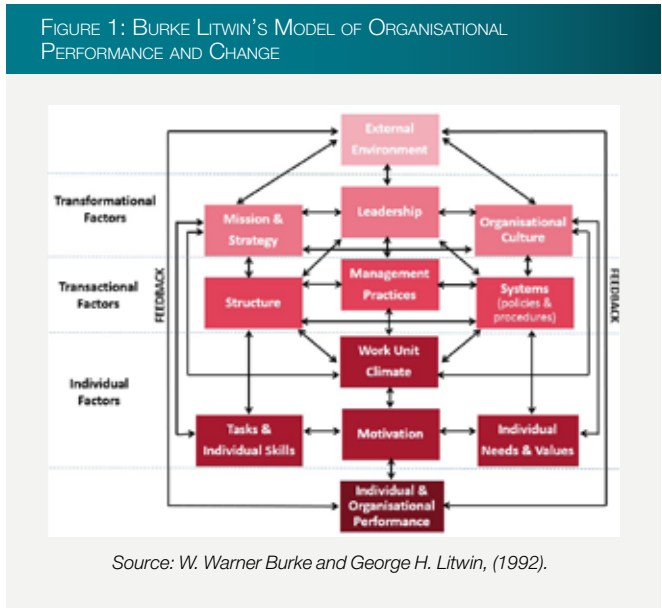
Cheung-Judge and Holbeche noted that all organisations, regardless of size and type, face 2 types of problems:

1. Continuous external adaptation to a rapidly changing environment; and

2. Corresponding internal integration that will support the success of the external adaptation.

In addition, Burke and Litwin noted that these two dimensions, together with other variables within an organisation, interact to influence transformational and transactional dynamics in organisational behaviour and change.

Figure 1 depicts the relationships among various variables influencing the organisation that may have an impact on the success of its external adaptations. Leadership is pivotal, operating at both transformative and transactional levels.

FIGURE 1: BURKE LITWIN'S MODEL OF ORGANISATIONAL PERFORMANCE AND CHANGE

Source: W. Warner Burke and George H. Litwin, (1992).

In a study by Alimo-Metcalfe et al., it was noted that the leadership quality – "engaging with others" – was shown to be a significant predictor of organisational performance.

Aon Hewitt also found significant correlations between engagement and positive organisational outcomes. The outcomes include 3 observable facets of "say, stay, and strive"; derived from interviews and focus group discussions conducted globally, with reference to what engaged employees think and do. Engaged employees say positive things about the organisation and choose to stay and strive for the organisation, thus improving performance of these organisations.

Journey in Engaging Leadership

Employee engagement is integral to TTSH's strategy. Human capital make up 60% of hospitals costs. In an industry requiring specialized skill sets and complex levels of service, the quality of care delivery is highly dependent on the quality of people. Our people must not only excel in frontline care, but also in systems design, process execution and the relentless pursuit of medical excellence.

There is a need for people who are highly engaged, aligned to the hospital's strategic mission, have the right skill sets, take ownership of their work and are prepared to put in discretionary effort to realise future potential. All of these demands, set against a staff demographic of diversity, make engagement a vital challenge.

As such, TTSH's strategy focused on strong engagement as the cornerstone for change. Our engagement strategy is carefully integrated into our workforce planning, recruitment & onboarding programmes, retention, rewards and recognition programmes, health and wellness programmes, through structured platforms and initiatives.

Figure 2 shows TTSH's staff engagement framework. The framework outlined TTSH's strategy to mitigate the challenges posed through intentional and purposeful engagement.

The foundation of the framework is guided by our value creation strategy – to create value for both staff and patients. The value creation strategy is founded on two sets of values – patients' and staff's. The 5 patient values and 6 staff values form the basis of this framework, as any activity must ultimately bring value to both patients and staff.

If value is delivered to the staff, the staff's desire to stay in TTSH will increase, and they are more likely to exercise discretionary effort, i.e. go beyond the call of duty in order to deliver value to the patient. These in turn lead to better performance by the hospital and better staff retention.

Next, by intervening at all four levels, TTSH can bring about meaningful engagement with staff. The four levels are:

1. **Work itself** – creating meaningfulness and value of work at the individual level;
2. **Team** – pertaining to the collective capability of, as well as support provided by the team;

FIGURE 2: TTSH's STAFF ENGAGEMENT FRAMEWORK

Source: Tan Tock Seng Hospital
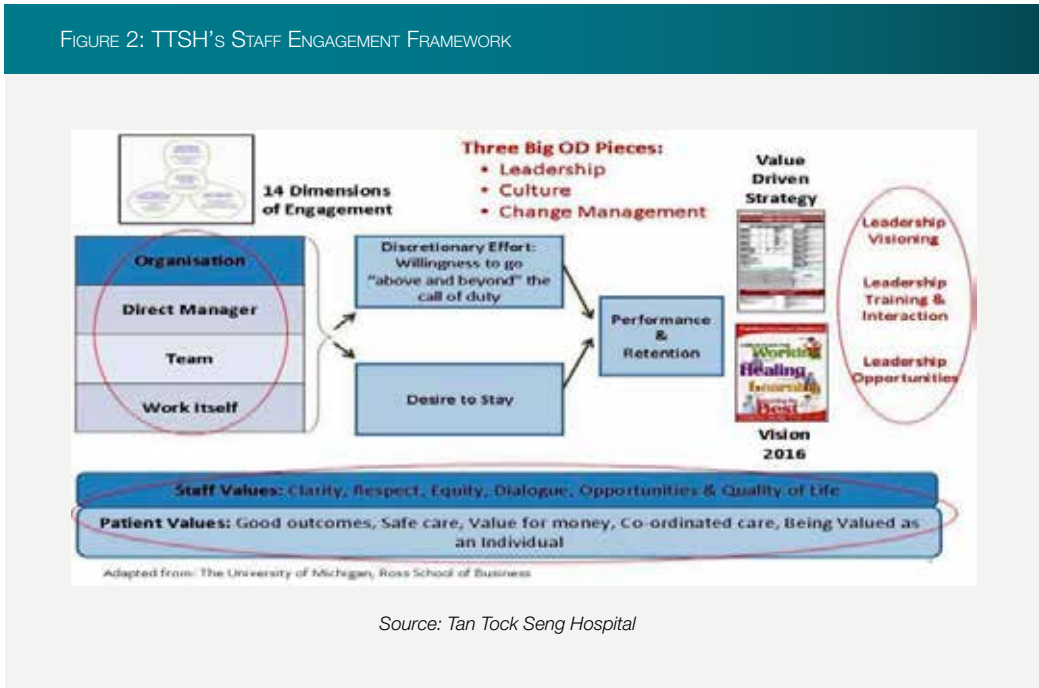
3. **Direct Manager** – focusing on the behaviours and impact of managers; and
4. **Organisation** – intervening with programmes, platforms and policies at the hospital level.

Engagement is guided by 14 dimensions of engagement derived from the Transformational Leadership Questionnaire (TLQ)™ Model developed by Real World Group.

Leaders as the Key

TTSH kicked off engagement efforts in 2011, starting with our leaders. Although staff engagement is ultimately everyone's responsibility, the premise for focusing on leaders first is to tap on them as effective partners for this huge undertaking. After all, leaders are the conduit through which vision is communicated, the agents that influence staff and the mobilisers of people for work to be done. Effective engagement requires consistent and conscious efforts over the long run, therefore hospital's approach involves multiple initiatives.

Building Skills

TTSH developed two programmes:

1. Engaging Leadership Programme (ELP) for those in senior leadership positions; and
2. Engaging Skills Programme (ESP) for those in middle management and supervisory positions.

These programmes set the hospital context, positioned the impetus and taught the dimensions of engagement based on the Transformational Leadership Questionnaire (TLQ)™ Model developed by Real World Group. Figure 3 below shows the 14 dimensions of Engaging Leadership.

FIGURE 3: THE 14 DIMENSIONS OF ENGAGING LEADERSHIP

Source: Beverly Alimo-Metcalfe and John Alban-Metcalfe, (2008). "Engaging Leadership: Creating organisations that maximise the potential of their people". London: Chartered Institute of Personnel and Development.

The ELP focuses on leadership engagement skills and impact by using the aforementioned model. Over the duration of the course, each participant receives targeted insights into their engagement style and exposure to tools, skills and insights.

The ESP mirrors the ELP in our introduction of purpose,

approach and tools used for better engagement. Although the core content for both ELP and ESP may be similar, care is exercised to pitch them appropriately, so that value can be brought to the respective groups of participants.

Interventions and Initiatives

Figure 4 below shows routine and specific engagement initiatives pegged at the four different levels of the system.

FIGURE 4: THE 4 LEVELS OF INTERVENTIONS
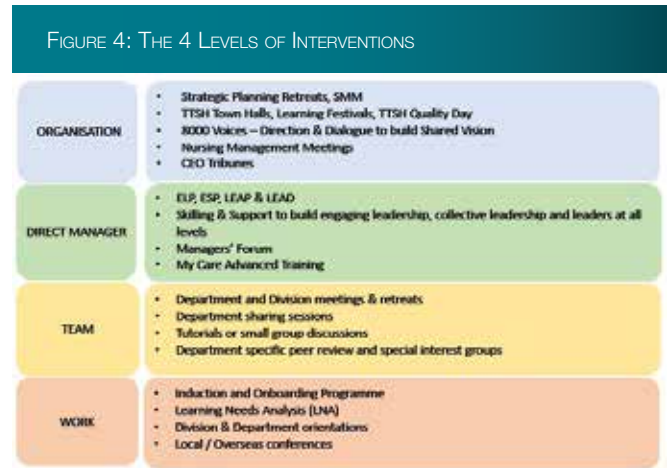
Source: Tan Tock Seng Hospital

Tools are designed to facilitate leaders' engagement with their teams. An example is the "Value Web" chart shown in Figure 5, used at team and work levels, where teams dialogued on the state of and aspirations for staff values.

FIGURE 5: VALUE WEB CHART
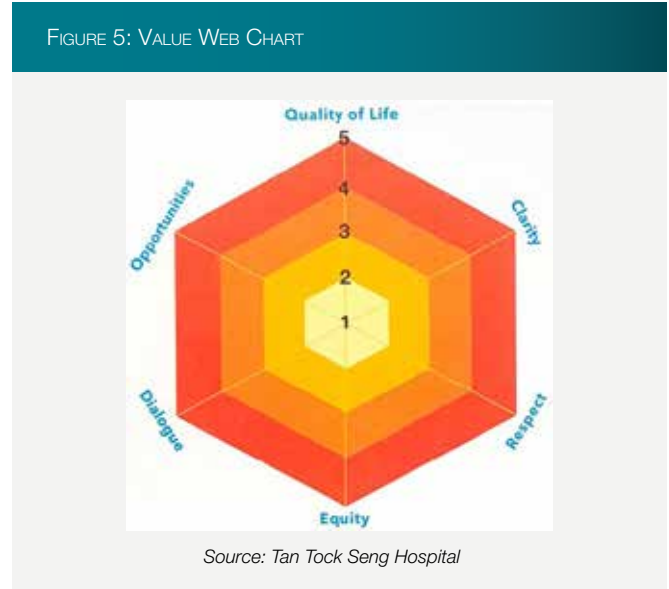
Source: Tan Tock Seng Hospital

The power of this tool comes from providing a visual and systematic framework for leaders and staff to initiate and maintain conversations about the areas that they value, and to increase the confidence of leaders to hold the space for such conversations.

In addition, stories of our staff engagement efforts and impact were captured in a volume of 2 books entitled "Our Story" and

IMAGE 1: A STAFF CONVERSATION ON THE VALUE WEB CHART AMONG THE NURSES, DOCTORS AND PATIENT SERVICE ASSOCIATES

IMAGE 2: A STAFF CONVERSATION ON THE VALUE WEB CHART AMONG ADMINISTRATORS

IMAGE 3: BOOKS ON "OUR STORY" AND "MY STORY"

"My Story". They were published and distributed to TTSH's leaders. Tools of engagement were shared to help communicate and sustain the practice of engagement.

Supporting Leaders through Cross-Learning and Continual Outreach

TTSH recognises that for leaders to consistently model engaging behaviours in the long run, they require peer learning and support. The "Leadership Engagement and Practice" (LEAP) platform was developed and pitched at the senior leadership level. Hosted by TTSH's top management, engagement issues faced by senior management take centre-stage at this platform.

In contrast, a "Leadership Engagement and Development" (LEAD) platform was designed to support leaders in middle management positions, by encouraging them to share with and learn from one another, the challenges they faced in day-to-day operational issues.

The continual outreach and staff engagement efforts seek to build a better community among TTSH's staff. To this end, the hospital has initiated:

1. Building workplace inclusiveness so as to tap into the value of diversity; and

2. Strengthening our internal communication capabilities.

TTSH also launched a staff engagement platform in Jan 2015, "8000 Voices". Hosted by CEO TTSH and senior management, this platform for open conversations seeks to aggregate all staff views on the hospital's journey.

In TTSH, we strongly

believe that engagement is a marathon and not a sprint. With the formal courses that equip our leaders with the necessary tools and skill sets for engaging leadership, there are also ample opportunities for our leaders to contribute via strategic planning and engagement platforms. These platforms provide the space for leaders to mingle and interact with ground staff, while polishing their knowledge and skill sets in engaging leadership.

The impact of our engagement interventions resulted in the following outcomes:

1. TTSH has sustained a high retention rate of 90% and above over the years. The retention rate is consistently higher than the Singapore Ministry of Manpower's industry average.
2. In the Singapore's Ministry of Health Patient Satisfaction Survey (PSS) in 2015, TTSH attained an overall satisfaction score of 86.1%. The score is 7.2% higher than the score in 2014.
3. TTSH achieved its first Joint Commission International (JCI) accreditation in 2005 and was re-accredited in 2014 for its continuous effort to improve patient safety and care. It is also the third hospital in Singapore to attain the accolade of an Academic Medical Centre (AMC) Hospital.
4. To date, 40% of our 8000-strong staff has participated and contributed through the CEO-led engagement platform, 8000 Voices, to have an opportunity to co-create TTSH's future, in line with their aspirations.

Facilitating the Emergence of Collective Leadership

Today's complex healthcare environment necessitates the building of leadership at all levels and not just leaders in hierarchical silos. Reliance on 'formal' leaders is inappropriate as they might not be the most proximal nor necessarily possess the most relevant expertise for all pertinent issues. These constraints delay decision-making and reduce the speed for action taking, posing a challenge for any change effort.

TTSH has adopted the concept of 'collective leadership' where distributed power, shared decision-making and staff engagement are central. West et al. defines collective leadership as "the distribution and allocation of leadership power to wherever expertise, capability and motivation sit within organisations." One important notion is that collective leadership requires conscious and deliberate efforts to empower and engage staff at all levels to adopt leadership practices.

As such, collective leadership can leverage on TTSH's strong foundation in engaging leadership. Before embarking on the journey from engaging to collective leadership, adoption of different ideas into the local context is necessary.

TTSH interprets the practice of "collective leadership" to encompass the following principles:

1. The practice of collective leadership does not imply the absence of reporting lines; clear accountability is still required.
2. Collective leadership does not imply the setting up of a matrix operating and reporting structure; this structure is effective only if it supports the building of a community that achieves synergistic outcomes, through shared purposes, values and relationships.
3. Empowerment of staff – the enabler of collective leadership – does not imply a free hand for the staff to do anything they desire; rather it is the hospital's conscious effort to provide staff with appropriate resources, capabilities, platforms and operating parameters to decide and take the best action for the situation at hand.
4. Distributed power and shared decision-making are central to the practice of collective leadership. The heart of this practice is about promptly identifying and rallying, for any given issue, the relevant people involved in the critical decisions and actions, led by the one person with the relevant expertise required for the task at hand.

With these principles in mind, TTSH has taken first steps in cultivating the practice of collective leadership in several areas, through the establishment of new leadership structures and the expansion of existing ones. TTSH's new Clinical Board is an example of the efforts towards facilitating the emergence of collective leadership.

FIGURE 6: TTSH's NEW CLINICAL BOARD

Facilitating Collective Leadership through the New Clinical Board

TTSH's new Clinical Board is another example of collective leadership at work in the hospital for clinical matters. Formerly known as the "Medical Board", this platform has traditionally been attended primarily by senior doctors – most of them department heads – to deliberate and decide on clinical issues, including professional practice and clinical directives. Selected senior Nursing and Allied Health staff, who then held positions like Director of Nursing, Director of Allied Health and Senior Manager of Pharmacy, were appointed ex officio members to support the discussion and work at this platform.

This platform is a key structure, providing governance and leadership oversight for clinical matters. If TTSH seeks to deliver Better Care through better alignment and integration of our services, regardless of the clinical disciplines involved, this platform has to be re-constituted to provide a model for effective inter-disciplinary care.

Today this re-constituted platform has an expanded ambit through the membership of other clinicians, and thus has been renamed the 'Clinical Board". Further to Pharmacy, several other Allied Health services have been re-designated as clinical department or services. That way, this division is now repositioned as a clinical division in TTSH. In addition, selected heads of both Nursing and Allied Health departments/services are appointed as members of the clinical board on a rotational basis. By doing so, Nursing and Allied Health professionals are given the opportunity to participate in this platform as peers, not followers, of doctors. The Clinical Board's agenda has also expanded accordingly – it now regularly includes clinical matters from the Nursing and Allied Health areas, not just medical ones. This expanded platform aligns TTSH's clinical mission

and service development amongst our various clinical stakeholders. For instance, the Chairperson of this re-constituted board now holds accountability of all professional practice matters and clinical directives, for Nursing and Allied Health professionals, in addition to doctors. Conscious effort has also been made to actively seek Nursing and Allied Health perspectives for issues discussed. With participation of all clinical professional groups at this platform, the new Clinical Board also facilitates the direction and alignment of resources for the development of holistic team-based care.
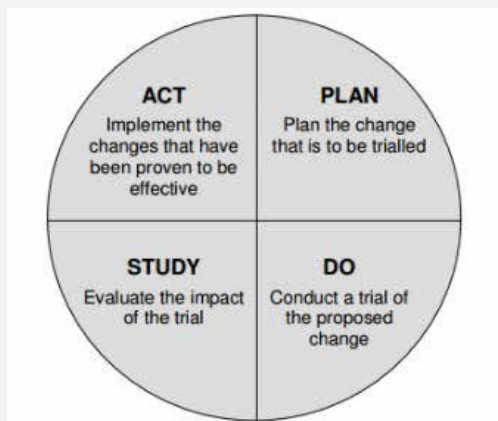
Source: Tan Tock Seng Hospital

Conclusion

This article has presented TTSH's framework of engagement leadership and throughout this journey, TTSH has endeavoured to build 'Better People & Better Leaders'. Through a robust foundation in engaging leadership, TTSH delivers "Better Care" to patients through nurturing "Better People" within the hospital.

TTSH constantly strives for improvement to ensure that Better People deliver Better Care to our patients. To this end, we utilise the PDCA cycle as shown in Figure 7, which is the most commonly used method in health care, enabling us to conduct iterative cycles of improvement, through reflection and practice.

FIGURE 7: TTSH's PDCA CYCLE

Source: Tan Tock Seng Hospital

Moving ahead, the TTSH's staff engagement framework, together with the PDCA cycle of improvement, paths the way for building collective leadership, enabling the hospital to adapt and thrive in a more complex healthcare system and environment.

BIOGRAPHIES

Koh Huey Bing has close to 20 years of healthcare experience; of which 14 years at the Tan Tock Seng Hospital. Expertise and experience range from Communications and Public Relations, Service and Process Improvement through Lean methodologies to Human Resource Development, Staff Engagement and currently, Leadership and Organization Development.

Karen Koh has 15 years of industry experience, including Organisation Development, IT Systems Development, Electronic Communication and Publishing, Marketing Communication and Public Administration.

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Saving Blood, Saving Lives – an innovative rational blood utilization project

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ABSTRACT: Blood products are essential components of effective healthcare management. However, they are expensive and scarce in many developing countries. In South Africa, several factors are likely to escalate this problem in the future. The "Saving Blood, Saving Lives" Project is an innovative healthcare system that promotes the rational utilization of blood products, improved decision-making, accountability, and quality improvement. It requires no budget and no additional staff. Once implemented, it simply takes a few hours a month to run. The inclusion of the innovative "accountability form" has contributed to its success. The project has significantly reduced the unnecessary administration of blood products, expenditure, and improved the efficient delivery of blood products to those patients who need them most. The project has been adopted and successfully replicated in several other South African hospitals, and is ideally suited to the developing world.

Introduction. Blood products are lifesaving, but are an expensive and scarce resource in the developing world. During the last decade, significant progress has been made in understanding when to administer these products most effectively. Blood products have obvious benefits when used correctly, but also carry risk. More recent evidence has shown high hemoglobin levels previously targeted are not only unnecessary, but also contribute towards increased morbidity and mortality. A rational, evidence based approach to blood product utilization by medical professionals has been researched and applied in several developed healthcare settings. However, these strategies require technological infrastructure, expertise and staffing that is not available in most resource-limited environments.

The objective of the "Saving Blood, Saving Lives" project was to implement a budget-free healthcare system that would encourage rational blood product utilization, enable continuous clinical auditing, support in education and behavioral change, without spending money or additional staff.

Background

Edendale Hospital, a regional hospital with over 900 beds, serves a population of 1.4 million people in Kwazulu Natal, South Africa. Towards the end of 2013, the hospital was identified as one of the worst provincial performers in terms of rational usage and wastage of blood products. The seriousness of the situation was compounded by a national shortage of blood. Factors responsible for this shortage include a decreasing number of blood donors, a rapidly growing population, an increase in the number of units of blood being administered (far in excess of population growth), and a high prevalence of people living with HIV/AIDS (thus excluding them from donating blood).

We were unable to replicate developed world systems due to financial and staffing constraints. Therefore, a simple system that could run itself was devised, with the aim of achieving three goals:

- SAVE BLOOD: Improve responsible blood product usage, thus saving blood and avoiding complications associated with transfusions, additionally making more blood available for other patients to benefit from.
- IMPROVE SERVICES: Avoid waste and decrease the amount of blood products and tests ordered, thus reducing unnecessary laboratory work, and making the provincial system more efficient.
- SAVE MONEY: Reduce unnecessary blood product expenditure, one of the biggest cost drivers in the country.

Strategy

The simplicity of the project makes it appealing and possible for replication in other developing world settings:

- A new evidence-based hospital protocol for blood product utilization was drafted.
- All key role-players were involved to ensure every discipline in the hospital had the opportunity to contribute and debate the new protocol and system.
- Once the protocol was finalized, the planned system and explanation of the need for change was distributed via a pre-recorded video presentation using simple software available on most computers. This twelve-minute video was regularly shown at department meetings and to all new staff joining the hospital. This ensured clear and consistent communication.
- An innovative system using a "blood accountability form" was introduced. This additional form was designed to guide the medical practitioner's decision-making, prompting logical thought processes. It captured basic demographic details, as well as information pertaining to the reason for ordering the blood product/s, if there were any special considerations, and who was involved in the decision-making. It enabled ongoing clinical governance of the system, capturing the reasons for transfusions, and was used to hold healthcare practitioners accountable for their actions.

I The Hospital Transfusion Committee was revitalized with support from hospital management for sustainability. The committee was not only responsible for ongoing clinical governance and auditing, but also addressing new publications and research, involving other stakeholders, and challenging previously conceived ideas that were not evidence based.

I Monthly meetings facilitated the auditing of accountability forms and the review of South African National Blood Service statistics. These meetings helped refine policies, identify new problems, and improve communication between departments. Accountability, re-education of individuals deviating from protocol and feedback to hospital staff were all key measures applied to said strategies (problems were identified through accountability forms).

Implementation

Implementation was preceded by three months of preparation, during which time all heads of departments were given adequate time to respond to changes, the new protocol, and provide suggestions. It was important to adopt principles of:

I Inclusion – involvement of all medical, support, and managerial structures within the hospital, thus creating a culture of responsible blood product usage.

I Transparency – in goals, implementation and where savings would be used; money used to improve patient care.

I Flexibility – willingness to change with new information/evidence and ideas.

At the start of the project, specific areas of rational blood product utilization were targeted, as these were deemed easier to correct. These included the excessive use of packed red blood cells; excessive type and screen testing; after-hours levies; and the unnecessary use of freeze-dried plasma.

A significant amount of time was spent educating teams within the hospital regarding the new blood product utilization protocol. Recent evidence suggests a symptomatic hemoglobin trigger of 7g/dL for most patients. We were able to adjust the protocol according to published evidence, and the accountability form also allowed for deviation from the protocol when adequate explanation was provided. The accountability form was improved multiple times after pilot runs during the preparation period.

Importantly, a gatekeeper system for the accountability forms was possible at the on-site blood bank. The standard SANBS forms would not be accepted without a corresponding accountability form. It became essential to include the blood bank in all the processes leading up to and after implementation of the project. The system only worked if the accountability form was compulsory.

Monthly review of the accountability forms and collation on a spreadsheet would take approximately two to three hours. This spreadsheet, together with hard copies of the accountability forms, were discussed and distributed at Hospital Transfusion Committee (HTC) meetings. After the committee members had approached and discussed the accountability forms in question with the individuals involved, electronic feedback would be provided and discussed at the next HTC meeting. Staff who repeatedly deviated from the protocol could be identified, as well as departments that were struggling or doing well. The committee focused on these departments with

encouragement and re-education.

Results

The project had an immediate impact on nearly all aspects of blood product usage and ordering. When compared to previous year use, the hospital decreased the use of red blood cells by nearly 36%, saving 4400 units of blood during the first 2 years. After-hours levies were reduced by 57% and the ordering of type and screen tests was reduced by 99%. In addition, transfusion cross-match requests went down by 77%. The use of emergency requests and platelet transfusions remained unchanged.

These savings amounted to R13.3 million over 2 years, which equates to R15.6 million when inflation is taken into account. This amounts to a reduction in expenditure of 39%.

As a consequence of the reduced workload for the hospital blood bank, samples were processed faster, resulting in both standard and emergency requests for blood being processed faster. The workload of the blood bank was almost halved by the large reduction in unnecessary type and screen requests.

Discussion

The "Saving Blood, Saving Lives" project confirmed the idea that innovation is simply something both new and useful. It does not need large budgets or sophisticated technology to be successful. Rather, it requires teamwork, cooperation, and flexibility to adapt to changing and difficult environments.

Several assumptions were made at the outset of the project:

1. Healthcare professionals want to make the correct decisions and do what is right for their patients. Many healthcare structures rely on junior staff for service delivery in busy and stressful working environments. Consequently, decision-making is often difficult, fatigue sets in, and can lead to incorrect choices. However, if the system for ordering blood guided decision-making processes, then correct decisions would increase. This was achieved through the "accountability form".

2. Healthcare professionals, like most people, require motivation to change their behavior. At the heart of this project lies the challenge of changing peoples' behavior. The project adopting principles (published by Daniel Pink) such as:
   a. Giving people a reason why they needed to change
   b. Providing a means to change, and not just telling them what to do
   c. Making the message emotive

3. Teamwork is possible, even within large organizations, and was achieved by:
   a. Inclusion of all role-players and clear communication of the plan before initiation of the project.
   b. Allowing even the most junior staff to contribute to improving the system.
   c. Gaining support from all leaders within the hospital.
   d. Ensuring support from the most senior hospital management.
   e. Continued communication and feedback to everyone involved in ordering blood products within the hospital. This was done through verbal feedback, written reports, and posters.

f. Strong, unambiguous, and consistent leadership in a revitalized hospital transfusion committee, a clear succession plan in the leadership, and maintaining our mandate to hold each other accountable for every blood product ordered.

Importantly, the financial savings from the project were used to improve patient care. This motivated and encouraged clinical staff to continue their efforts and was an important driver in seeing improved results between the first and second years after implementation.

Implications and the Future

Many outreach seminars, workshops and presentations have already been performed in several provinces in South Africa. All material generated from the project, including video presentations, accountability forms, blood utilization protocols, scientific literature, and audit templates are available to any interested hospitals.

The project has been supported by the Department of Health and has been initiated at several hospitals around South Africa. The initial results from these hospitals also show dramatic improvements in both the number of units of blood transfused and monetary savings.

"Saving Blood, Saving Lives" was included as part of the Saving Mothers Campaign, a joint venture with SANBS and the Department of Health, to reduce national maternal morbidity and mortality. The project was presented in Kwazulu Natal, Mpumalanga, Limpopo, North West, Gauteng and the Eastern Cape. It was well received and helped promote the project so that several hospitals in other provinces are interested in replicating the system.

Lessons Learnt

- Significant change is possible even if no financial support is available.
- Innovation can be simple and still have significant results – sometimes simplicity is the key.
- "Saving Blood, Saving Lives" requires careful preparation before implementation.
- Communication, cooperation, teamwork and flexibility are key to any success and longevity.
- It is possible to change behavior, even within stressful, understaffed, and busy environments.

Conclusion

The "Saving Blood, Saving Lives" project managed to reduce blood product expenditure by 39%, and decrease blood usage by nearly 36%, demonstrating that it is possible to implement cost-effective solutions to help address service delivery challenges facing South Africa. Several hospitals are successfully replicating the project around the country. No budget is required for replication of the project. Project success is only possible with teamwork, effective communication, and cooperation. The project also showed it is possible to create a culture within a community of healthcare professionals to change behavior and save an expensive and scarce resource.

The "Saving Blood, Saving Lives" Project could dramatically improve the national blood shortage problem if adopted on a broad scale. We are hopeful that many more hospitals will adopt it and help make more blood available to those patients that need it most.

BIOGRAPHY

Dr. Rob Wise is an anaesthesiologist and intensivist, affiliated to the University of Kwazulu Natal, and working as the Head of Clinical Unit for Critical Care at Edendale Hospital, Pietermaritzburg, South Africa. He is involved in the Critical Care Society of Southern Africa, the South African Peri-Operative Research Group and the World Society of Abdominal Compartment. He is particularly interested in data collection/ systems management, professionalism in the workplace, and innovation in resource-poor areas.

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Comprehensive Corporate Social Responsibility Health Programs: Providing Quality, Affordable and Accessible Healthcare for Financially – Challenged Patients (Private Tertiary Hospital Setting)

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ABSTRACT: In 2012 the Manila Doctors Hospital became the first hospital in the Philippines to launch and commit to a Social Vision. Since then, this Social Vision has served as a guide for good governance and a blueprint for its Corporate Social Responsibility (CSR) programs focusing on health, environment and gender. The goal of the Manila Doctors comprehensive CSR health program is to render the fundamental right to health care available to marginalized patients. Through our CSR programs, more than 20,000 financially challenged patients gain access to quality medical services annually. This directly contributes to the country's health development agenda 2016-2020 of achieving the health related SDG Targets of Financial Risk Protection, Better Health Outcomes and Responsiveness.

State of Healthcare in the Philippines.

Six out of 10 Filipinos who succumb to sickness die without ever seeing a doctor, according to the University of the Philippines Health Institute (2010 as cited by the Oxford Business Group, 2012). In light of this, it can be noted that there are multiple factors that affect health care access in the Philippines which include the following:

Health Financing

There are four major sources of health financing, including "(1) national and local government, (2) insurance (government and private), (3) user fees/out of pocket and (4) donors (Department of Health (DOH), 2012: p. 3)." In 2014, Filipino families spent 55.8% of the country's annual health expenditure (Philippine Statistics Authority, 2016). This remains high despite the presence of the national health insurance program. Therefore out-of-pocket (OOP) expenditure remains to be the main source of health financing, and this greatly affects the health-seeking behavior of Filipinos.

Health Facilities

In terms of health facilities, the DOH (2012) classifies hospitals according to ownership (private or public) and also in terms of hospital level as determined by their criteria, with Level 1 being the lowest, and Level 4 being the highest, based on the Hospital's capacity. In their study, the DOH mentioned that there are more private than public hospitals.

There are three times more private hospitals than public hospitals in Level three (3) or tertiary hospitals (more advanced hospitals), (p. 6). This poses more barriers for Filipinos in terms of healthcare access, since the cost of services is greater in private compared to public hospitals. Therefore, out-of-pocket expenditures continues to increase. In addition there is a disparity of Level 3-4 hospital presence geographically, with most level 3 hospitals situated in the National Capital Region and the adjacent Central Luzon Region (p. 6).

Other Health Barriers

A working paper from the Asian Institute of Management (2010) also pointed out that despite the presence of a National

Health Insurance Program, there are "contentious coverage issues as well as a lack of facilities and trained medical personnel." The DOH (2012) also mentioned that most health workers are concentrated in highly urbanized cities such as in Metro Manila (p.7).

Manila Doctors Response to the Philippine Health Disparity

The declaration of a Social Vision is Manila Doctors' means of contributing to reducing the disparity in access and affordability of healthcare in the country. In fulfillment of our commitment stated in the Social Vision, the Manila Doctors Hospitals Corporate Social Responsibility (CSR) Office, with support from the Board of Directors, Investors, Management and the entire internal community, utilizes the normative elements of the right to health that include (1) Availability, (2-4) Financial and Geographic and Cultural accessibility; (5) Quality of health services, and (6) Equality in access to available health services in implementing its health programs for marginalized patients.

CSR is deeply embedded in the hospital's corporate culture. It is considered as the 5th perspective of the hospital's balanced scorecard – the main tool used by the hospital to monitor its achievement of targets each year. CSR is not only implemented hospital-wide, each unit also indicates their own target for CSR Contribution. Various medical, technical and support departments are involved in service delivery for CSR patients, including the hospital's high level officers.

Manila Doctors CSR Health Programs

The CSR Office of Manila Doctors implements twelve (12) different programs in line with health, gender and the environment. The majority of these programs are focused on healthcare. These programs are as follows:

Outpatient and Inpatient Services

Manila Doctors caters to patients in its CSR Clinic, providing access to medical consultations at a fraction of a cost, PhP 100 or 2 USD (the same amount paid for in most government hospitals within the city of Manila), instead of the usual 11 USD to 22 USD per consultation. Patients are able to access services from seven (7) medical departments, according to an integrated value-based service principle. The hospital also provides a 50% to 70% discount on 143 laboratory procedures. Blue cards are given as access cards for patients who are eligible for services.

A partial subsidy is granted to admitted patients to help decrease the out-of-pocket payment of hospital bills. In addition, Manila Doctors has partnered with a government organization that specifically provides financial support to patients who lack the resources to afford surgery, implants, medicines or hospital bills. This is in addition to the National Health Insurance Program or PhilHealth coverage. The combination of these support facilities prevents the financial debilitation of families due to healthcare cost.

Manila Doctors has also organized a network of partners (government agencies, non-government organizations, private companies and civic organizations) called the **CSRO Circle of Partners**. These partnerships allow the hospital to conduct "one day blue card processing" (ODBCP) in identified marginalized communities, providing ready access to quality healthcare to the beneficiaries of partner organizations at the CSR Clinic.

In-House Surgical Programs and External Surgical & Medical Missions

For 16 years, Manila Doctors has been implementing free in-house surgical programs for goiter, cataract, ovarian and uterine tumors, and cleft lip alveolus palate. The program benefits an average of 150 patients annually who are in need of critical surgery procedures but are unable to afford the required expenses. Through our CSRO Circle of Partners, patients coming from the province are able to undergo the medical procedures at Manila Doctors for free. An NGO partner shoulders the living expenses of the patient and his/her relative while they are in Manila, transportation is provided for free by partner airlines or other various transportation companies. The program has shown a pronounced impact on the lives of the patients and their families, as it allows the patient to recover productivity and resume regular life roles after the procedure.

In addition to collaborating with the CSRO Circle of Partners in making quality healthcare accessible for those residing in far-flung areas by bringing them directly to Manila Doctors Hospital, CSRO also regularly organizes an average of two (2) surgical and multi-specialist medical missions in underserved areas in different provinces.

School and Community Health Programs

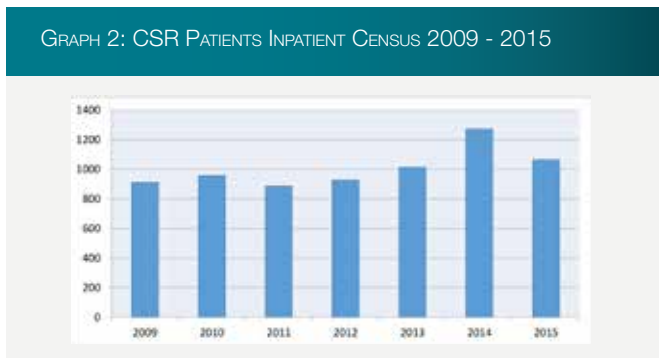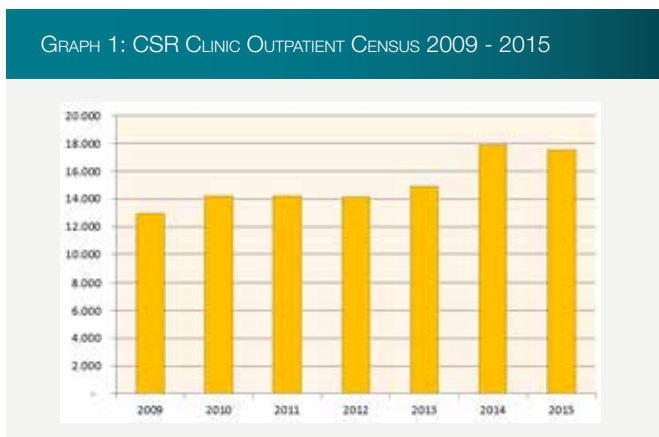The hospital, as part of its commitment in helping develop

IMAGES 1 & 2: IN-HOUSE SURGICAL PATIENTS OF CLEFT LIP AND PALATE (LEFT) AND CATARACT (RIGHT) AFTER OPERATION
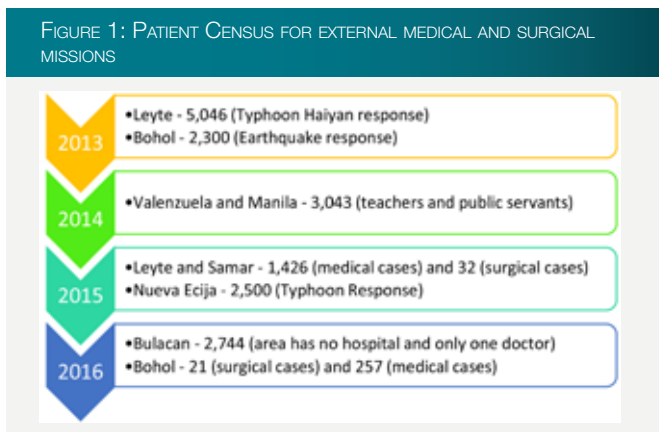
healthy communities, regularly adopts public primary schools and communities for three years. Seven elements of school and community health are implemented using internationally accepted standards. The program focuses on direct health services, health education, environmental cleanliness and sanitation, etc. Through these programs, the smallest units of the Philippine education system and the local government are capacitated to manage and prevent health risks and address health issues.

Results of Program Implementation

The data shows that there has been an increase of patients from 2009 to 2015. The high increase in 2014 may be attributed mainly to the collaboration with the CSRO Circle of Partners since the network was formed in 2014.

GRAPH 1: CSR CLINIC OUTPATIENT CENSUS 2009 - 2015

GRAPH 2: CSR PATIENTS INPATIENT CENSUS 2009 - 2015

For the medical, dental and surgical missions, below is the data on patients served from 2013 to 2016:

FIGURE 1: PATIENT CENSUS FOR EXTERNAL MEDICAL AND SURGICAL MISSIONS

2013
• Leyte - 5,046 (Typhoon Haiyan response)
• Bohol - 2,300 (Earthquake response)

2014
• Valenzuela and Manila - 3,043 (teachers and public servants)

2015
• Leyte and Samar - 1,426 (medical cases) and 32 (surgical cases)
• Nueva Ecija - 2,500 (Typhoon Response)

2016
• Bulacan - 2,744 (area has no hospital and only one doctor)
• Bohol - 21 (surgical cases) and 257 (medical cases)

In summary, a total of 17,316 consultations were provided, and 53 patients underwent surgical procedures including thyroidectomy, hernia repair, thyroglossal duct cyst, cholecystectomy, hemmorhoidectomy, mastectomy, parotidectomy, palatoplasty and removal of cysts in minor operations. Through its disaster response program, Manila Doctors served areas hard-hit by natural calamities and those with limited access to medical specialists. For instance, in 2013 Manila Doctors sent a multi-specialist team to the Province of Bohol after the devastating earthquake, and immediately after to the province of Leyte after the onslaught of Typhoon Yolanda (Haiyan). Both calamities incapacitated the already overwhelmed health system of said provinces, hence the need for reinforcement of services, specifically in hard to reach areas, with particular emphasis on Persons with Disabilities. In the Province of Bulacan (Medical Mission 2016), which is located in the northern part of the country, the hospital served an area where there is only one doctor serving an estimated population of 30,000 and no available hospital. The area is also home to an Indigenous Peoples Group residing in the mountainous area.

IMAGE 3: PHOTOS OF THE MULTI-SPECIALIST MEDICAL AND SURGICAL MISSION DURING TYPHOON HAIYAN IN 2013

IMAGE 4. PHOTOS OF THE MEDICAL MISSION IN THE PROVINCE OF BOHOL AFTER AN EARTHQUAKE IN 2013

Analysis of Results and Sustainability Measures

The data previously presented indicates that the comprehensive CSR Health programs have catered to increasing numbers of patients annually, meaning that more patients have access to quality and affordable healthcare at Manila Doctors which is an ISO, PhilHealth Center for Excellence, and Accreditation Canada International accredited institution. These results contribute to the Universal Health Care Access indicator of the United Nations Sustainable Development Goals 3 – "Ensure Healthy Lives and

IMAGE 5. PHOTOS DURING A MEDICAL MISSION IN BULACAN, WHEREIN THERE ARE NO HOSPITALS AND ONLY ONE DOCTOR. A CONSIDERABLE NUMBER OF INDIGENOUS PEOPLE ARE ALSO IN THE AREA.

Promote Well-Being for All at All Ages." As one of the founding members of the United Nations Global Compact Philippine Network, Manila Doctors considers this as a commitment and contribution to the achievement of this particular goal.

The number of our CSR program partners continues to grow. From 7 in 2014, the members of the CSRO Circle of Partners increased to 20 in 2015, enabling us to reach more communities. Partners help ensure that the services are provided by harmonizing resources and supporting logistical needs for transportation, food, laboratories, etc. Patients are able to readily seek medical attention since the OOP expenses for their health needs are considerably cut through the CSR programs of Manila Doctors in collaboration with its partners. Services are made available to them without prejudice to their economic status.

Health Education among patients is included in our strategy for sustainability to ensure the continuation of the implemented health programs. By training community health workers, educating our patients, partner schools and communities, Manila Doctors is able to make its health program beneficiaries embrace and practice the principle of "preventive health seeking behavior" rather than curative, which can be financially debilitating for the whole family. The hospital emphasizes that the individual holds primary responsibility for his/her health and at the same time treats patients as equal partners in managing their health.

Conclusion

Manila Doctors Hospital implements CSR programs with a rights-based and participatory approach, with sustainability and impact as the end goal. Through the concerted effort of internal and external partners, Manila Doctors was able to implement CSR health programs which are recognized locally, regionally and globally by external organizations like the Philippine Society for Quality in Healthcare, the Hospital Management Asia and the International Hospital Federation. A results-based management approach ensures that program outcomes are consistently monitored. Our CSR programs are not considered part of our public relations or marketing campaign, but rather a serious and ardent commitment of the organization to helping financially-

challenged patients through the fulfillment of our mission and social vision. This is our humble contribution to making inclusive growth and development a reality in the Philippines. Our 60 years in the industry has proven that a private business can achieve balance of financial growth while being a force for good.

BIOGRAPHIES

Jill S. Alvarez is an Advocacy and Gender Specialist with more than twelve years of experience in program implementation with local non-profit organizations, multilateral agencies and international funding institutions. He majored in Communication.

Levi Grace D.C. Ambon – Rota has more than six years experience in the field of social work with her experiences focusing on program management, case management and medical social work. She has a Bachelor of Science in Social Work at the University of the Philippines in 2010. Currently, she is taking her up her Masters Degree in Social Work at the same university.

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The R.K. Khan Hospital Pharmacy Decongestion Project: An Innovative Partnership in Service Delivery

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ABSTRACT: In its quest to improve service delivery and reduce congestion, the busy R.K. Khan Hospital Pharmacy has embarked on a unique partnership with community organizations whereby 13 community facilities including community halls, temples and churches, are being used as venues for issuing chronic medicines to patients. Patients receive their initial supply at the hospital and are then referred to a facility most convenient to them to collect their repeat medicines. They only return to hospital after six months on their review dates. Almost 24000 patients per month are currently utilizing this service. Medicines are pre-dispensed, transported and controlled by pharmacy staff. It has resulted in a win – win situation for both patients and the hospital. Patients benefit by receiving their medicines quickly and conveniently from centres close to their homes instead of queueing for hours at the pharmacy. The hospital benefits since congestion is significantly reduced.

Background.

R. K. Khan Hospital is a regional hospital situated in Durban, South Africa which serves a catchment population of more than a million people. Prior to the project, the hospital pharmacy was an extremely congested place throughout the day with over 1800 outpatients attending daily. This, coupled with a shortage of pharmacists, resulted in extremely long waiting times, frustrated and agitated patients and dissatisfied staff who had to work extended hours on a daily basis to cope with the workload.

As a result, the working environment was stressful, complaints about the service were ongoing and staff turnover was high. This compounded patient delays and increased frustrations. The objective of the decongestion project was to try and address these issues.

Planning

An assessment of prescription statistics and the flow of patients was undertaken to try and identify peak periods. Statistics revealed that more than 50% of our prescriptions (approximately 1000 scripts daily) were repeat scripts. Patients with repeat scripts were not required to consult with the doctor, but were visiting the hospital just to collect medicines. They arrived very early in the morning, sometimes as early as 3am. When the pharmacy opened at 8am it was not uncommon to have more than 400 patients waiting. This figure would usually increase to 800 prescriptions

in the pharmacy by 10h00 and more than 1200 by noon.

With the staff shortage of pharmacists at the time, it was very difficult to cope adequately with this workload and long delays were unavoidable. The pharmacy waiting area was also extremely congested as a result.

Possible solution

We realized that a possible solution would be to pre-dispense these repeat scripts and find alternate venues away from the hospital for issuing them. This would help to reduce congestion, reduce waiting times and improve service delivery. Also, if we could get assistance with dispensing, it would help to reduce our workload and improve working conditions.

Project Commencement

In January 2008, we approached members of our Hospital Board, other community members and the municipality for assistance with sourcing alternative venues in the community. We also enlisted the assistance of Esplamed Pharmacy, a chronic medicine dispensing facility within the Department of Health, for assistance with pre-dispensing.

The project commenced in February 2008 with 150 patients per week collecting medicines from one facility, and has since expanded significantly to almost 6000 patients per week currently collecting medicines from 13 facilities.

The sites used were as follows:

COMMUNITY FACILITY	LOCATION	AVERAGE No. OF PATIENTS
Peoples Church of God	Chatsworth Main	500 patients weekly (Monday)
Word of Hope Ministries	Savannah Park	200 patients weekly (Monday)
Aryan Benevolent Home	Arena Park	150 patients weekly (Tuesday)
Child Welfare Chatsworth	Arena Park	450 patients weekly (Tuesday)
Sathya Sai Clinic	Moorton	150 patients weekly (Wednesday)
Apostholic Faith Missionaries	Westcliff	250 patients weekly (Wednesday)
Havenside Community Hall	Havenside	200 patients weekly (Thursday)
Bayview Christian Fellowship	Umhlatuzana	250 patients weekly (Thursday)
Montford Community Hall	Montford	500 patients weekly (Friday)
Gospel Outreach Assembly	Shallcross	250 patients weekly (Friday)
Sarva Dharma Ashram	Welbedacht	250 patients per month
Gateway Clinic	RK Khan Hospital	250 patients daily Monday– Friday
Express Clinic	R. K. Khan Hospital	350 patients daily Monday – Friday

Process

Patients collect their initial supply of medicines at the hospital pharmacy after which they are referred to or select a facility close to their homes for the collection of the repeat medicines. They are given a specific date on which to report to the community facility. Pharmacy staff transport the medicines to the facilities daily and when collected, they provide the patient with a return date to the facility. This process continues for the next five months after which the patient is reviewed at the hospital where the process is repeated.

Medicines are transported to the facilities by pharmacy staff and any uncollected medicines are returned to the hospital. No medicines are stored at the community facilities. Thermolabile medicines are transported in large cooler boxes to ensure stability.

Benefits of the Project

- The pharmacy waiting area has been successfully decongested. Almost 24000 patients no longer visit the hospital every month and are utilizing these alternative collection points in the community. These facilities operate from 07h30 to 10h00 daily. At most facilities, the average delay is about 15 to 20 minutes. In some facilities, it is almost a walk-in-walk-out service.
- At each facility, there are volunteers who assist with setting up the medication and to ensure that patients are comfortable.
- At some venues, patients' blood pressure and blood sugar is checked by retired health care professionals.
- Refreshments are also sometimes provided for patients by the community organisations.
- Besides the improved service delivery and reduced waiting time, patients save on transport costs, as many of them walk to the facilities.
- Patients are extremely happy with the service and complaints against pharmacies, previously very high, are now virtually non-existent.
- This has resulted in improved working conditions for staff as the work situation is no longer as stressful as it used to be. This has enabled us to attract additional staff and this further improved our productivity and overall service delivery.
- By decongesting the hospital and keeping chronic patients away, we were able to re-organize and provide a better service to those acute patients that visit the hospital pharmacy. Waiting Time Surveys show that overall patient delays, which were more than five hours prior to the start of the project, have been significantly reduced. The average delay in our outpatient area is about an hour, with the maximum delay being in the region of two hours.
- Prior to the project, patients were leaving the hospital well after 18h00 daily. This impacted significantly on their safety as there were no taxis to transport them after 18h00 and some had to stay with relatives or at the hospital Casualty section and go home the next morning. With the smooth operation of the project, work is generally completed by 5pm daily.
- It has also had a significant impact on the amount of overtime worked and consequently monthly overtime costs.

Challenges experienced and how they were overcome

- Initially, some patients expressed reluctance to transfer to community facilities and their desire to continue collecting medicines at the hospital. Some felt that their medicines may not be sent to the clinics or that they may not get all their medicines. It was necessary to constantly explain the benefits of the outreach centre service to them, and assure them that all their medicines would be issued and on time. Upon experiencing the benefits of the service, they began to request for referral, making our task easier.
- Patients not collecting medicines on their scheduled dates - medicines that are not collected on the stipulated date are returned to the hospital and stored in the pharmacy. These medicines are returned to the clinic on the next clinic date. Usually if the patient has missed the first date they return the following week and collect their medicines. Patients who default are counselled when they do return for their medicines. "Defaulter" stickers are placed on their prescriptions to alert us and the

prescriber to the fact that the patient has defaulted. The defaulter rate currently ranges from one percent to five percent.

- Excessive number of patients scheduled at facilities. Sometimes during public holidays, patients are given dates for the week before the public holiday and large numbers of patients turn up at facilities. To overcome this, we try to organise alternate days in the week in case of public holiday, and we maintain referral stats to assist with planning and prevent this from recurring.
- Transport to and from clinics – sometimes there is no hospital vehicle available to transport staff to the clinics. Staff use their own vehicles when the need arises.
- Initial shortage of trained personnel – the training process had to be ongoing so that adequate staff have knowledge of the operation.
- Reduced staff at hospital from 07h00 until 11h00 to cope with the work due to personnel being sent to the community facilities.
- Planning and coordinating the transfer of almost 24000 patients to 13 facilities monthly and ensuring that all receive their medicines as scheduled is a constant challenge. Staff should be properly trained and aware of all processes, so that patients are not inconvenienced.

Lessons Learnt

The project has taught us that although the task at hand initially seemed enormous and insurmountable, by planning carefully and working with dedication, commitment and most importantly by working diligently as a team, we can achieve our goals. The key is to also take things one step at a time.

It has also taught us that when a long-term project is planned, you cannot expect instant success and that the situation may actually get slightly worse before it starts to improve. Provided one perseveres and remain focused on the ultimate goal even when things appear difficult, the rewards will surely follow.

Due to the tremendous support we received from the community organisations, we have learnt that there is phenomenal goodwill in the community and that community organisations (churches; temples etc.) really care for the communities that they serve. All we did was contact them and ask for assistance and the response that we got was overwhelming. They were even prepared to offer a whole lot more than we requested.

We also learnt that many people in our communities are willing to offer their services voluntarily and to willingly assist others. This is evident by the large number of volunteers (more than 50) who assist our project in one way or another and who have asked for nothing in return. They are just happy to be of service because they want to make a difference and assist others.

Importantly, we have also learnt that we must not be afraid to think "out of the box" or to think differently from the rest to find solutions. By "daring to be different" we can achieve more. The project has resulted in a 'win-win' situation for both patients and the institution. It has also helped to improve the relationship between hospital personnel and the community that we serve.

Conclusion

The concept of utilizing community facilities to issue medicines to patients has resulted in a win –win situation for both the patients and the hospital.

Patients have now welcomed the change as they benefit in various ways:

- Reduced transport costs, as most of them walk to these facilities
- Reduced waiting time
- Provision of refreshments by some of the community organizations
- Blood pressure and blood sugar monitoring at some facilities
- Relaxed and stress free environment

The impact on the facility was also extremely significant

- reduced congestion
- improved working environment
- reduced overtime
- significant reduction in complaints against the institution
- positive comments about service delivery

BIOGRAPHY

Brian Pillay is currently the Pharmacy Manager at R. K. Khan Hospital in Durban, Kwazulu Natal. He obtained a Bachelor of Pharmacy Degree from the University of Durban Westville (1980). He has vast experience in hospital pharmacy and has held the position of Pharmacy Manager since 2000.

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Implementation of Enhanced Anesthesia Recovery Program (EARP) for improving Anesthesia Related patient care outcomes & enhancing early recovery

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ABSTRACT: The Enhanced Anesthesia Recovery Program (EARP) is a unique patient-centered, Anesthesiologist-led quality improvement initiative designed to reduce postoperative anesthesia-related complications and to accelerate recovery. Anesthesia-related complications are known to be associated with poor patient outcomes and higher morbidity/mortality. This project was designed to develop protocols to improve anesthesia recovery and thereby the quality of patient outcomes. A detailed review of national & international guidelines was carried out and EARP pathways were designed to incorporate changes in perioperative management, as per recent clinical research findings, to improve the patient surgery experience, ensuring better postoperative cognitive function and a reduction in postoperative morbidity.

Following project implementation, a remarkable improvement was seen in Anesthesia Related patient care outcomes, benefitting around 6233 patients. The median Length of Stay in PACU was reduced from 26 minutes to 18 minutes. Early Return of Cognitive Functions (Early Recovery) was evident by a reduction in the time for a post-operative return of cognitive functions, from 10 minutes to 3 minutes. The percentage of people requiring oxygen supplementation was reduced from 20% to 5%. The unplanned tracheal re-intubation Rate was reduced from 0.05 to 0.02. The percentage of patients experiencing postoperative nausea and vomiting was reduced from 8% to 3%. This initiative also resulted in about a 50% reduction in spending on anesthetic agents for patients.

Background

Perioperative surgical care has undergone a paradigm shift over the last few decades. The contribution of anesthesia-related care to early postoperative normalization of the patient's physiological milieu was not accorded its due importance until recently. Various audits, such as the National Audit Project of the Royal College of Anaesthetists and the Difficult Airway Society, have shown deficiencies in

the preoperative, intraoperative, or postoperative care in the surgical population, resulting in poor patient outcomes. Adequate preoperative optimization for surgery reduces the risk of post-operative complications and consequently the risk of short- and long-term morbidity and mortality. Postoperative complications add to the total cost of care, which is substantially high-cost. a study found that the average cost for patients with one or more postoperative

complications is more than double that of patients with an uneventful procedure. Development of protocols help Anesthesiologists follow similar peer-reviewed anesthesia delivery methods, reducing variation in care quality. These findings highlight the pressing need for the adoption of interventions to improve quality of care, reduce variation in care, postoperative complications, and cost of care.

The Enhanced Anesthesia Recovery Program (EARP) is a unique, patient-centered, Anesthesiologist-led quality improvement initiative designed to reduce perioperative anesthesia-related complications and ensure early recovery. The concept of Enhanced Recovery After Surgery (ERAS) was pioneered by a gastrointestinal surgeon, Professor Henrik Kehlet of Copenhagen, Denmark. ERAS was designed around a series of individual interventions, implemented together rather than alone, to accelerate patient recovery by reducing surgical stress response and supporting physiologic function.

EARP consists of evidenced-based protocols designed to standardize and optimize perioperative anesthesia care to reduce surgical trauma, perioperative physiological stress and organ dysfunction after surgical procedures. It forms an integrated continuum, as the patient moves from home through the preoperative, intraoperative, and postoperative phases of surgery and returns home. It results in improved patient outcomes, reduced period of hospitalisation and faster patient recovery. The summation effect of ERAP is enhanced patient satisfaction with the clinical care provided.

A recent publication by the Mayo Clinic showed that the implementation of an anesthesia protocol, in practice consisting of the introduction of just three changes, resulted in a reduction of Phase 1 recovery time, decreased respiratory depression and decreased nausea and vomiting. We decided to introduce several changes in our practice, based on recent research, to improve patient outcomes and improve safety.

Exposition

At Max Smart Super Specialty Hospital, continuous efforts are made to improve quality of care and patient safety. Define, Measure, Analyze, Improve and Control (DMAIC), a data-driven approach was used (Figure 1). A project charter was formed and timelines against each phase of DMAIC were fixed. To establish a baseline, a retrospective analysis of surgical mortality and morbidity data was carried out. Data analysis indicated scope for the improvement of anesthesia-related patient care outcomes. Data analysis revealed that patient outcomes such as long length of stay in the post-anesthesia care unit (PACU), unplanned tracheal re-intubations, a high rate of postoperative nausea and vomiting and high rates of postoperative oxygen supplementation, amongst other things.

A core group was formed including representatives from Anesthesiology, key surgical specialties, nurses and paramedics. After a detailed review of national/international guidelines and a review of contemporary

literature on standardizing perioperative care as well as multiple brainstorming sessions, the ERAP pathway were designed. Multiple novel interventions like the use of low flow anesthesia, the use of NSAIDS for perioperative pain relief, avoidance of benzodiazepine midazolam preoperative, stopping use of antisialagogue premedication, a reduction in use of muscle relaxants reduced use of fat-soluble inhalational anesthetic Desflurane and the routine use of anti-emetics perioperatively were included in the pathway.

The key components of EARP included:

- Detailed Pre-Operative Assessment.
- Preoperative nutrition – to facilitate postoperative physiotherapy, positive metabolic response and enhance recovery.
- Avoidance of prolonged perioperative fasting - carbohydrate loading up to 2 hours preoperatively.
- Deep vein thrombosis prophylaxis – prolonged perioperative immobilization predisposes patients to develop venous stasis and thrombosis.
- Surgical Antibiotic Prophylaxis – to have adequate levels of antibiotics at time the skin barrier is breached.
- Stopping use of anti-sailagogue premedication – routine use of anti-sailagogue results in drying of airway and promotes micro-atelectasis and sore throat.
- Active Warming perioperative – cold ambient operating room temperature predisposes patients to develop hypothermia. Active warming ensures normothermia and improves patient response.
- Use of second generation Laryngeal Mask Airway in preference to endotracheal tube for airway protection – lesser airway invasion with acceptable airway protection reduces respiratory morbidity.
- Use of Low Flow Anesthesia – apart from economic benefits, this results in reduced pollution and lower respiratory morbidity.
- Use of regional anesthesia and non-opioid analgesia (NSAIDs) to supplement analgesia – reduces opioid consumption and thus prevents potential adverse effects of opioid use.
- Use of Short Acting Inhalational Anesthetics – use of less soluble inhalational agent like Desflurane ensures early washout of the agent and thereby prevents residual sedation and airway susceptibility. It is associated with a lower incidence of cognitive dysfunction.
- Reduced use of Neuromuscular Blocking Agents – residual neuromuscular blockade has been shown to be a major contributor to postoperative respiratory morbidity.
- Goal-directed perioperative fluid management – indiscriminate fluid administration based on fluid guidelines can result in inappropriate fluid homeostasis.
- Avoidance of post-operative drains and nasogastric tubes – presence of an indwelling catheter/tube may prevent discharge from hospital. They may also serve

as a nidus for infection.

- Early and structured post-operative mobilization – early mobilization helps the body milieu to normalize faster.
- Risk stratification of postoperative nausea and vomiting (PONV) and aggressive prophylaxis and treatment – regular use of anti-emetics and their administration at the appropriate time reduces PONV.

One unique thing about this initiative was the use of Low Flow Anesthesia, unique in India, wherein only Minimal Flow Anesthesia was used for all cases. This led to a reduction of greenhouse gas emissions through a reduction of unused surplus gas, which could amount to up to 90%. The significant reduction in gas flows lead to cost saving and a reduction in the patient's economic burden. There was a significant reduction in the workplace concentration of anesthesia gases in the operating room. This in turn reduced OT staff exposure to nitrous oxide and other inhalational anesthetic gases, which are ozone-depleting and heat-trapping greenhouse gases.

As a part of the improvement phase, an implementation plan was elaborated. It was acknowledged that the critical factor for this project's success was to change the mindset of people and to help them in overcoming traditional concepts, teachings and attitudes towards perioperative care. It was a Clinician-driven project, where clinicians took the lead and got involved in discussion with peer clinicians, providing them with evidence to change their mindset and helping them to overcome traditional concepts of anesthesia administration and perioperative care. The Anesthesiology team along with some senior surgeons acted as role models to motivate others to participate in the EARP. This all started with raising the awareness of Anesthetists, Surgeons and the support team which included dieticians, nurses, physiotherapists. Rigorous training and multiple awareness sessions were also conducted.

Informal One on One Interactions was organised with surgeons, and advantages of implementing EARP Care pathways were explained, supported by patient outcome indicator data presented in the monthly departmental meeting, to show the impact of EARP implementation on clinical outcomes. Periodic Audits were conducted to ensure compliance with the implemented Enhanced Anesthesia Recovery Program (EARP).

Results

About 6233 patients benefitted from the implementation of the EARP. Median Length of Stay in PACU was reduced from 26 minutes to 18 minutes. Early Return of Cognitive Functions (Early Recovery) was evident by a reduction in time for postoperative return of cognitive functions from 10 minutes to 3 minutes. The percentage of people requiring oxygen supplementation was reduced from 20% to 5%. The unplanned Re-intubation Rate was reduced from 0.05 to 0.02. The percentage of patients experiencing postoperative nausea and vomiting was reduced from 8% to 3%. This initiative also helped bring about approximately a 50%

reduction in costs of anesthetic agents for patients.

FIGURE 1: PROJECT PHASES
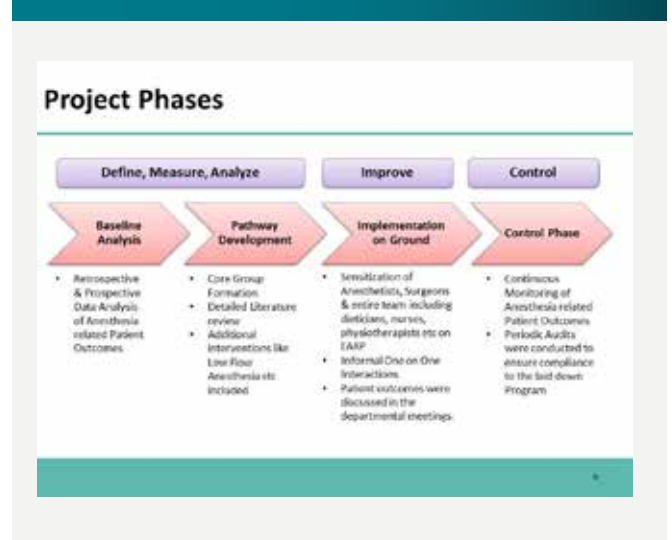
Conclusion

The Enhanced Anesthesia Recovery Program (EARP) is a unique anesthesiologist-led multidisciplinary quality improvement initiative which aims to reduce perioperative anesthesia-related complications and ensure early recovery, by reducing the physiological and physical stress of surgery. It focuses on improving peri-operative care by using evidence-based interventions in a structured manner in the form of care pathways. This initiative involved changing the mindset of people and helping them to overcome traditional concepts, teachings and attitudes towards perioperative care. Therefore ownership & buy-in from the clinicians played a vital role in the implementation of EARP. This initiative has not only improved patient-related outcomes, but also helped reduce the drain on resources in terms of bed days, length of stay and resultant hospital acquired complications.

BIOGRAPHIES

Dr. Mukul Chandra Kapoor is a clinician with an academic background. He is an avid writer with a number of scientific publications in peer-reviewed journals. He is the current President of the Indian Association of Cardiovascular Thoracic Anaesthesiologists. He regularly conducts workshops on Enhanced Recovery from Anaesthesia in India and South-East Asia.

Dr. Bindu Sharma is a post graduate in Hospital Administration. She has deep domain experience across various areas of Quality such as Patient Safety, antibiotics stewardship, clinical audits, infection control etc. She has been actively involved in various quality improvement initiatives and has also been involved in helping the organization win various awards in Clinical Excellence & Patient Safety at several external forums.

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Empowering the patient: Smart Card (SC) Integration with Electronic Medical Record (EMR)

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ABSTRACT: Tata Memorial Hospital (TMH) is a Comprehensive Care Centre for Cancer located in Mumbai, India. Patients from all over India and some from neighboring countries choose to travel to Mumbai (Bombay) to receive treatment at our centre. Given the geographical constraints, TMH has adopted Information Technology to reach out to patients in distant communities.

TMH has a home-grown Electronic Medical Record System, the contents of which are shared with patients and providers over the hospital-wide Intranet, and globally through our website. TMH has been carrying out paperless and filmless operations since 2013, enabling the real time exchange of information and ensuring a continuum of care. Paper Records preceding this year are scanned, archived and made available as part of the EMR.

Prior to Smart Card implementation, it was not uncommon to find patient or their relatives queuing up for services or payments. This had resulted in delays in providing services, and hardship for patients and their relatives. Overcrowding meant staff being stressed with a propensity for mistakes in data entry, resulting in a faulty service. This would compromise patients if unnoticed, or result in a repetition of service if noticed. In addition, hospital management was concerned about lengthy transaction times and deficiency of service.

It was in this context that in the year 2011, the Hospital Management took an initiative to integrate Smart Card Technology with the existing Electronic Medical Record (EMR) and Electronic Financial Record (EFR), to improve interaction between patients and the Institution. The strategy was to use Smart Card (SC), containing an embedded IC chip for patient identification, to carry out all transactions involving patient care, in order to minimize transcription errors and enhance patient safety. The implementation of this strategy involved process re-engineering and training of all staff members. The results of the past 4 years 2013-16 have been analyzed to determine the efficacy of this initiative.

Background. TMH registers around 200 new cancer patients and reviews 1500 patients every day. Given the numbers, the diverse population further complicated by varying patient literacy levels, service provision had become difficult, and at times chaotic. Under these circumstances, overworked staff was prone to making mistakes compromising patient safety.

Transaction times were lengthy since the business rules of the hospital had to be enforced. Counting cash at several service locations increased transaction times, with milling crowds and serpentine queues a common sight. Some patients complained that they were overlooked and that staff were wasting time and energy on non-essential activities.

Strategy & Implementation

To overcome the inherent deficiencies and streamline procedures, our Hospital Management decided to implement Smart Card Integration solution in phases.

Initially, Photo ID Smart Cards (SC) were issued to all patients, with no added functionality. Over a period of time, additional hardware was commissioned at all service stations, including Smart Card Printers, Smart Card Readers, PIN pads, Pole displays etc. (Pic 1).

The existing modules of Hospital Management Software were modified to integrate with Smart Cards in bidirectional interfacing, for seamless information flow in both directions. Staff was trained to use this new technology for the following services.

Registration

As part of the implementation and as depicted (Pic 2.) every patient registered in our hospital, past and present, received a Photo ID SC. The SC is personalized by capturing the photograph/demographic details of the patient and a Personal Identification Number (PIN). Simultaneously, an automated Smart Card Account (SCA) was generated for the registered patient to transact with the hospital.

IMAGE 1. HARDWARE AT SERVICE STATION

IMAGE 2. ISSUANCE OF SMART CARD

If the patient pays using cash, he/she is requested to pay an upfront deposit into the SCA from which payments for services are to be debited. If the patient is insured,

a credit facility for the authorized amount is extended. Once the Smart Card process is completed, the patient is directed to the Health Care Provider. An automated SMS is sent to the patient's Registered Cell Number.

Consultation

The patient approaches the Medical Secretary (MS) of the Health Care Provider (HCP) assigned and hands over the SC. The MS places the SC on the Smart Card Reader (SCR) and generates a work list for the HCP. The HCP uses the work list to call the patient and the same is displayed in the Patient Waiting Hall.

The HCP places the patient's SC on the SCR, and the demographic details captured at the time of Registration are populated in the Clinical Information System (CIS). The photograph of the patient captured at the time of Registration is displayed on the CIS screen to authenticate the patient.

The consultant records patient history and examination details on the CIS Screen and thereafter, orders investigations online on the Diagnostic Information System (DIS), or prescribes medicines online (PMS). The PMS system provides inventory details for the consultant so that he can order any medication which is physically available in the pharmacy. The consultant also enters other details of prescription such as the dose, frequency and method of administration.

If investigations are ordered, the MS generates a consolidated memo for all services and asks the patient to authenticate the transaction by using his/her PIN on the pin pad. This action debits the SCA account and the service is marked as paid. The MS directs the patient to the service provision area or the pharmacy as appropriate.

Diagnostic Services

As directed by the MS, patient approaches the Service provision area (Sample Collection or Imaging Services).

In the Sample Collection Area (Pic 3), the SC is placed on the SCR and in doing so, the patient is put on the work list and simultaneously, details are shared with an Automated Tube Labeler System (ATLS). The ATLS retrieves the test details from the DIS and prepares the appropriate vacutainers and affixes the appropriate labels. The tray containing labeled tubes for every patient is then sent to

IMAGE 3. SCREEN SHOTS AT SAMPLE COLLECTION

the phlebotomist. The generation of the tubes also triggers a waiting list for sample collection which is displayed in the waiting area.

The phlebotomist calls the patient as per the worklist and scans the SC and the barcodes on the vacutainers to ascertain concordance of patient identity and tests ordered, before proceeding with sample collection. Similarly, in the imaging facility, SC scanning generates an entry of the patient in the work list at the respective Imaging modality.

Samples thus collected are transported to the laboratories by way of Pneumatic Chutes to the respective laboratories, where they are processed and reported online.

The SC is scanned at all service gateways to ensure that patients are correctly identified and only samples for appropriate tests are collected. This has significantly reduced the collection of wrong samples and the need for repeat investigations. The date and time of each activity is captured for investigation Turn Around Time analysis.

Medication Management

If the patient requires prescribed medicines, our HCP uses the PMS to order online. Patient details are authenticated by the SC and the screen displays medicines in stock at our pharmacy. Details regarding the description, dosage and route of administration are entered by the HCP.

Patients are directed to the pharmacy where they await their turn to meet the pharmacist at the sales counter. The pharmacist asks for the SC and places it on the SCR to retrieve details of ordered medication and populate details on the Dispensing Screen.

The pharmacist retrieves the medicines from the shelves and ensures that only prescribed medicines are handed to the patient, along with the necessary advice.

A consolidated sales memo is generated and the patient is asked to authenticate the transaction using his/her PIN. Once authenticated, the patient's SCA is debited and the Pharmacy Inventory is updated.

Admission/Discharge/Transfer

Patients are put on the waiting list for Admissions once advised by the HCP. Patients can review the status of their waitlist using the Smart Card at Information Kiosks provided all over the hospital. Patients are admitted without insisting on a deposit, since the services are debited to the SCA. Services provided to the patient, including room tariff, are debited to the SCA on a real-time basis, facilitating rapid discharge based on consultant's advice.

Every financial transaction is recorded in the EFR and an SMS is sent to the patient on their registered mobile number.

Electronic Medical Record

Information Kiosks in strategic locations in the hospitals give patients access to their Electronic Medical Record and their Electronic Financial Record. Patients are now able to view clinician's entries and reports in addition to their bills, as soon as they are ready. Patients can view and print their bills online, resulting in enhanced transparency. The SC PIN number is also used to view records on line.

IMAGE 4. PATIENTS VIEWING THEIR EMR& EFR AT THE INFORMATION KIOSK

Results and Analysis.

The Smart Card Solution has been implemented in a phased manner to encourage acceptance from all stake holders. After 4 years since implementation, it was necessary to analyze data to ascertain the acceptance and efficacy of the Smart Card Integration.

The data shows that there is a progressive increase in Smart Card Transactions and a similar decline in Cash transactions.

Table 1. Service Provision (Laboratory & Imaging) over the years following Smart Card Implementation

	2013	2014	2015	2016
Smart Card in Service Transactions	40%	72.8%	83.4%	89.84%
Cash in Service Transactions	60%	28.2%	17.6%	11.16%
Service Transactions per day	2485	2750	3320	3717
Service Transactions per patient registered in the year	21.2	21.74	24.9	27.7

Table 2. Pharmacy Transactions over the years following Smart Card Implementation

	2013	2014	2015	2016
Smart Card in Pharmacy Transactions	45.7%	98.2%	99.72	99.73
Cash in Pharmacy Transactions	54.43%	1.8%	0.28	0.27
Pharmacy Transactions per day	1550	1966	2119	1948
Pharmacy Transactions per patient registered in the year	13.23	21.74	15.95	14.5

It is evident from the data that with the increase in Smart Card Transactions, the number of transactions per day and per patient has increased over the years. The data in the above tables indicates that the introduction of Smart Card Technology has improved organization productivity without requiring an increase in infrastructure.

From a patient's perspective, the lead time for Service Provision has shortened, and there has been a reduction in transcription errors. The need for repeat samples and wrong reports has been almost entirely eliminated. Patient satisfaction has improved due to transparent and prompt services. The scenario of milling crowds and serpentine queues associated with chaos has given way to more orderly conduct and belief in processes and systems. Information Kiosks have empowered the patients by high availability of information.

Hospital Management has benefitted from the increase in the number of transactions and a reduction in waitlists. Patient satisfaction has resulted in more patients coming to the institution and therefore increased revenue.

Plans include use of Smart Card for access control at hospitals and the incorporation of privilege rights with health care providers.

Conclusion

The adaption of Smart Card Technology with the Electronic Medical and Financial Record has brought about improvement in the interaction between our hospital and our patients. Patients are now empowered by unrestricted access to their Electronic Medical Record and Electronic Financial Record. This empowerment has improved patient confidence in the systems and processes, and therefore trust.

The concept and development of Smart Card Integration is home-grown and has been tweaked to meet our contemporary needs. Nevertheless, other institutions can embark on this journey with similar intent. It has also encouraged hospital staff to continuously innovate and seek solutions to problems, in the best interest of patient care.
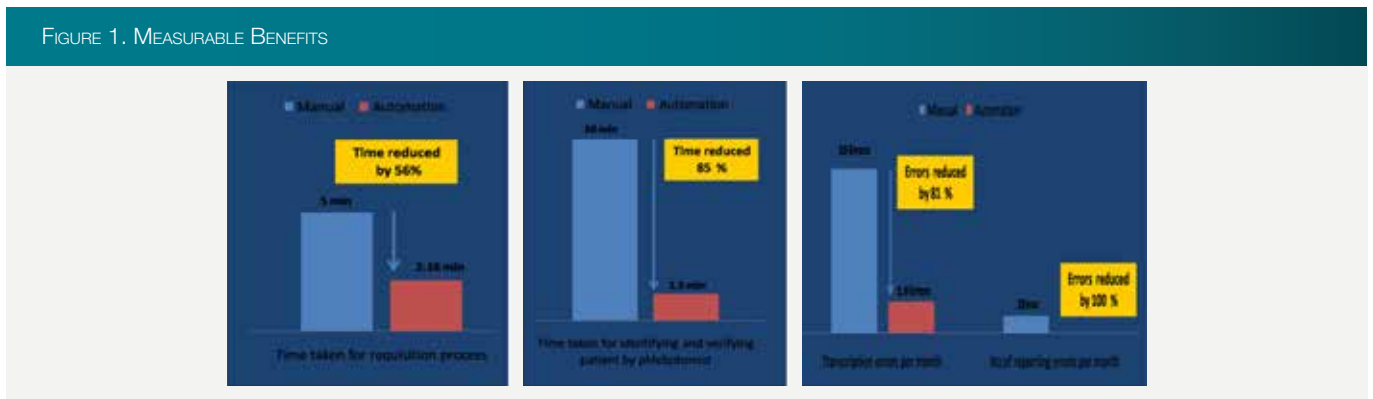
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Figure 1. Measurable Benefits

Key Interventions that Support the Realisation of Data Driven Hospitals

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ABSTRACT: The District Health Information System (DHIS) is used in South Africa to collect routine aggregated data. Analysis of hospital data in the DHIS revealed that reporting in hospitals (especially clinical data) is generally inconsistent and incomplete. The NDoH recognise these reporting and data quality challenges in hospitals and the impact they have on the ability to make informed management decisions and monitor the impact of health interventions.

A data quality improvement initiative was undertaken in ten of the biggest Central and Tertiary hospitals in South Africa. The methodology to identify areas of incomplete reporting, findings of the onsite visits and interventions implemented to improve reporting rates in these hospitals are all discussed.

This initiative demonstrated that well-designed and targeted interventions tested and refined in a few health facilities can easily be replicated in other facilities, making data quality intervention more cost effective in resource constrained settings.

Introduction. The World Health Organisation (2010) considers health information systems as one of the critical building blocks for the management of health services. South Africa is in the process of implementing National Health Insurance (NHI), and reliable health information is becoming an increasingly important issue. According to the NHI White Paper for the National Department of Health (NDoH) (2015), a key element of the NHI transition process is to progressively develop, implement and improve health systems so that reliable routine data is available at facilities. The quality of routine activity information is essential because it will be used as the basis for determining and refining global budgets for the fund. Hospitals are the biggest cost drivers of health care, therefore reliable, good quality routine health information for hospitals is fundamental to health care delivery.

According to the National Department of Health (2011) South Africa is faced with a quadruple burden of disease, with HIV and TB incidence, high maternal and child mortality and a high incidence of non-communicable diseases like hypertension and diabetes and injury and trauma. The impact of key interventions and health system reform in addressing these challenges are best measured in hospitals, for example institutional maternal, infant and child mortality rates. Accurate and timely data from hospitals is therefore vital in planning and monitoring cost-effective evidence-based interventions. Data-driven hospitals are premised on the idea that better data will lead to better patient outcomes and greater efficiency.

The District Health Information System (DHIS) is used in SA to collect routine aggregated data. The analysis of hospital data in the DHIS revealed that reporting in hospitals (especially clinical data) is generally inconsistent and incomplete. The NDoH recognises these reporting and data quality challenges in hospitals and the impact it has on the ability to make informed management decisions and to monitor the impact of health interventions. The decision was taken to perform a more in-depth assessment of the quality of hospital data in the DHIS, focusing on completeness. National feedback reports focusing on reporting rates for 51 key data elements were compiled on a quarterly basis. Although these reports pointed out problem

areas, reasons for incomplete reporting were not clear. To identify challenges and to plan appropriate data quality improvement interventions, a three-day on-site visit was conducted at ten of the biggest Tertiary and Central hospitals in the country.

The purpose of this paper is to discuss the methodology used to identify areas of incomplete reporting, findings of the onsite visits and interventions implemented to improve reporting rates at these hospitals.

Methodology

South Africa has a National Indicator Data Set (NIDS) defining data that is required for monitoring and reporting of national and global health goals and targets, that should be collected by all public health facilities. In this study 51 NIDS data elements reported by hospitals were assessed. These 51 data elements were specifically selected because they are used to report globally on Sustainable Development Goals and/or on National reports (see annexure 1 for data elements). The 51 data elements are divided in eight data element groups.

When monitoring completeness of monthly hospital DHIS data, the indicator Element Reporting Rate (ERR) is applied as a proxy indicator. The ERR is defined as:

Numerator: Number reporting units that reported/captured data in the DHIS for a specific data element over a specific period.

Denominator: Number of reporting units for which this data element is expected in the DHIS, over the same period.

The target of 94.5% was set for acceptable data completeness.

Ten of the biggest National Central and Tertiary hospitals were selected by the NDoH and provinces across the country for three-day onsite data quality improvement support visits. At least one hospital per province was selected to ensure representativeness and generalization of the results. A desktop analysis of the DHIS data for each hospital was carried out prior to the visit.

The visit included a feedback session with hospital managers to discuss data quality problems identified by a desk top analysis as well as a walk through in the wards and outpatient department (OPD). The support team assessed ward-specific data collection tools and procedures. The team also provided guidance to develop a data quality improvement plan.

Results
Baseline assessment of data quality

The average ERR was monitored in 10 hospitals as illustrated in Table 1.

Table 1: ERR% in 10 hospitals in South Africa

Hospital Province	ERR % 2013/2014	ERR % 2014/2015	Err % 2015/2016
Eastern Cape	70	76	100
Free State	67	81	95
Gauteng 1	76	91	100
Gauteng 2	46	53	90
KwaZulu-Natal	91	90	96
Limpopo	96	97	100
Mpumalanga	83	89	95

Hospital Province	ERR % 2013/2014	ERR % 2014/2015	Err % 2015/2016
Northern Cape	88	92	96
North West	51	29	98
Western Cape	88	90	99
Average for 10 Hospitals	76	79	97

Colour Code
Less than 69.5 % - critical
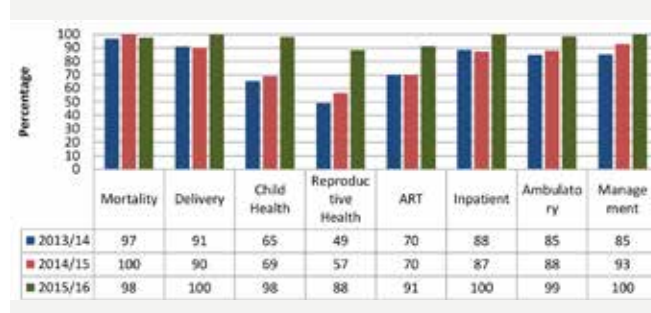**Between 69.5 % and 95 - improvement needed**
Above 95 - target met

The average baseline ERR across the 10 hospitals was 76%. However this was not consistent throughout the country. Three institutions had rates that were classified as poor, whilst only 1 had a rate above the target of 94.5%. After the implementation of interventions described below, there was a slight improvement in the following year, followed by a dramatic improvement in the third year. In the third year, all but one institution had ERR below the target (90%).

However, a further analysis of the data highlights the correlation between data quality and data element groups. At the start of the study inpatient data like admissions, mortality, discharges, delivery and OPD data was generally well reported, but reporting rates for data regarded as "PHC services", like ART and reproductive health, was generally poorly reported, even though these services are being rendered at hospitals.

Reporting of clinical inpatient data, child health diseases for example, was generally poor due to lack of standardised data collection tools/registers in hospitals. Hospitals also rely on patient information systems for reporting, and there are no standardised ways to extract clinical data from these systems, such as the use of ICD10 codes.

Figure 1 illustrates the ERR results for all ten hospitals by data element group, over the past three financial years. Although there has been a significant increase for all data element groups, data for reproductive health and ART is not 100% complete, mainly due to hospitals that are not rendering some of these services.

FIGURE 1: AVERAGE REPORTING RATES ALL TEN HOSPITALS BY DATA ELEMENT GROUP

	Mortality	Delivery	Child Health	Reproductive Health	ART	Inpatient	Ambulatory	Management
2013/14	97	91	65	49	70	88	85	85
2014/15	100	90	69	57	70	87	88	93
2015/16	98	100	98	88	91	100	99	100

Identification of factors impacting data quality during the onsite visits

The following additional problems were identified:
- Reporting in these big hospitals is also affected by patient-based information systems that are not aligned

to reports on all the NIDS data expected from hospitals.

❚ Although some hospitals have been reporting on all data elements, certain patient activities are not reported, for example patients screened at the emergency department that are not emergencies, and patients that receive repeat scripts, resulting in poor performance on key indicators like average cost per patient day equivalent (PDE).

❚ Many service points in hospitals have their own non-standardised registers or books to keep record of their activities, but it is difficult to collate data accurately for certain data elements and reporting periods from these "records".

❚ Clinical and administrative staff in hospitals are not aware that there are health information policies and standardised operating procedures (SOPs) that need to be followed, for example data from each service point is not validated and signed off. Most hospital personnel have not received training on NIDS data element definitions, and there are no copies of NIDS data definitions, health information policies and SOPs at service points, resulting in poor data quality and incomplete reporting.

❚ Role clarification and responsibility of different categories of staff for health information is not clear, for example doctors and nurses think data collection and validation of data is an "administrative" task and not part of their duties. After hour reporting, when there are limited data capturers or administrative staff on duty, is generally poor when clinical staff do not take responsibility for data collection.

Interventions

The following key interventions were undertaken:

❚ According to the NDoH District Health Management Information System (DHMIS) policy (2011), hospital Chief Executive Officers (CEOs) must ensure that each facility conducts at least one data quality audit using data quality tools in DHIS, and ensure that the findings of the audits are thoroughly drafted, and data quality improvement plans are drawn for the identified areas of concern. During their feedback sessions with hospital managers, the support teams emphasised the important role hospital managers play in improving data quality:

○ Leadership and support from hospital managers is crucial to speeding up implementation of corrective measures.

○ Hospital managers are accountable for the quality of their data and this includes ensuring that all the NIDS data elements are included on the input forms they sign before data is captured into the DHIS.

○ Managers should study the quarterly NDoH ERR feedback reports to identify causes of non-/ inadequate reporting, and implement rapid corrective measures and/or request support to do

so immediately.

○ The institutionalisation of the DHIS policy and SOPs will assist in addressing data collection, validation and capturing challenges.

○ Ensure that the hospital obtains standardised data collection tools and registers and that all reporting units in the hospital are using the correct data collection tools.

○ Ensure sufficient staff for effective Routine Health Information System (RHIS) management, with emphasis on database managers, information managers and data capturers (DHMIS Policy:32,33)

❚ The team developed, tested and standardised data quality assessment tools and feedback report formats that were used by all support teams. A SOP was also developed to ensure that all the support teams followed standardised procedures to conduct the data quality assessment and provide feedback to the hospital.

❚ The NDoH formally arranged support visits and accompanied teams on visits. Feedback reports were prepared by the support teams, reviewed and sent to hospitals by the NDoH, emphasising the buy-in of the NDoH and the importance of data quality improvement initiatives.

❚ To assess the capacity and needs of hospital staff with regards to information management, the team reviewed the hospital's data collection tools (paper and electronic) and data flow processes, assessed data validation, analysis, feedback and use of information, and evaluated hardware and software requirements. Where necessary, support teams addressed technical DHIS problems during their visits.

❚ To help hospitals to prepare for Auditor General audits, the support team worked with hospital staff to verify the facility's performance data along with its processes for record reviews, data quality checks and trace and verification. The team also assessed the hospital staff's understanding and implementation of relevant policies. Facilities were encouraged to continue doing these rapid internal performance data assessments (RIPDA) themselves, to improve and maintain their readiness.

❚ The support teams assisted hospitals in the development of a data quality improvement plan with regular follow-up to check hospital plan implementation.

❚ Hospitals received a formal feedback report on the findings from the support visit, with recommendations on how to improve data quality. The support teams then monitored progress to achieve target reporting rates and provided formal feedback reports every quarter.

Assessment of ERR% across hospitals

Across all 10 hospitals supported, the element reporting rate (ERR) improved by 21% - from 76% in 2013/14 to 97% (target 95%) in 2015/16, as depicted in Table 2.

Table 2: Hospital ERR summary by indicator group

Data Element Group	2013/14	2014/15	2015/16
Mortality	97	100	98
Delivery	91	90	100
Child Health	65	69	98
Reproductive Health	49	57	88
ART	70	70	91
Inpatient	88	87	100
Ambulatory	85	88	99
Management	85	93	100
Average All Indicators	76	79	97

Colour Code
Less than 69.5 % - critical
Between 69.5 % and 95 - improvement needed
Above 95 - target met

Conclusion

This initiative demonstrated that well-designed, targeted interventions that are tested and refined in a few health facilities can easily be replicated in other facilities, making data quality intervention more cost-effective in resource constrained settings.

We believe that regular follow-up and mentoring support, including a follow-up visit after six months, support in developing a data quality improvement plan and ongoing capacity building, were vital to achieving desired results. The results in Table 1 and Table 2 confirm this notion, where in the second-year progress was slow, but dramatic in the third year.

It is very important that hospital managers take responsibility for the quality of their data. Formal national quarterly feedback reports sent to provinces and hospitals encourage hospital managers to acknowledge data quality problems and take action. The ongoing involvement and strong leadership of the NDoH in all interventions contributed a great deal to the success of the initiative.

Annexure 1: List of 51 data elements used for the analysis

Data Element Group	Data Element Name
Mortality	Inpatient death 0-7 days
	Inpatient death 12-59 months
	Inpatient death 29 days - 11 months
	Inpatient death 8-28 days
	Inpatient deaths - total
	Maternal death in facility
Delivery	Born alive before arrival at facility
	Delivery by caesarean section
	Delivery in facility total
	Delivery in facility under 18 years
	Live birth in facility
	Live birth to HIV positive woman
	Live birth under 2500g in facility
	Still birth in facility
Child Health	BCG dose
	Child under 5 years with diarrhoea admitted
	Child under 5 years with diarrhoea death
	Child under 5 years with pneumonia admitted
	Child under 5 years with pneumonia death
	Child under 5 years with severe acute malnutrition admitted
	Child under 5 years with severe acute malnutrition death
	Infant given Nevirapine within 72 hours after birth
Reproductive Health	IUCD inserted
	Medroxyprogesterone injection
	Norethisterone enanthate injection
	Oral pill cycle
	Sterilisation - female
	Sterilisation - male
	Termination of pregnancy performed
	Sub-dermal implants

Data Element Group	Data Element Name
ART	Adult remaining on ART at end of the month - total
	Adult started on ART during this month - naïve
	Child under 15 years remaining on ART at end of the month - total
	Child under 15 years started on ART during this month - naïve
Inpatient	Inpatient beds - total
	Inpatient days - total
	Inpatient discharge under 1 year
	Inpatient discharge under 5 years
	Inpatient discharges - total
	Inpatient transfer out under 1 year
	Inpatient transfer out under 5 years
	Inpatient transfers out - total
Ambulatory	Emergency headcount total
	OPD headcount - total
	OPD headcount follow-up
	OPD headcount not referred new
	OPD headcount referred new
Management	Complaint received
	Complaint resolved within 25 working days
	Complaint resolved
	Expenditure total

BIOGRAPHIES

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Nurses Experiences Regarding In-Patient Suicide in a Specific General Hospital in Gauteng, South Africa

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ABSTRACT: When suicide occurs, it is regarded as an adverse event. Often, little attention is given to nurses who cared for the patients prior to that circumstances. Instead, affected nurses are expected to write statements and incident reports.
Patients who attempt suicide during hospitalisation remain a stressful and anxiety-provoking experience for nurses. This is because in most cases, even if the patient survives the ordeal, nurses blame themselves. The physiological effects of such stress and anxiety are found to be harmful to the well-being of nurses and therefore should be avoided.
The aim was to explore the experiences of nurses caring for patients who successfully committed suicide whilst admitted at a specific general hospital in Gauteng Province, South Africa. Qualitative exploratory research was conducted. Data were collected through in-depth interviews with a purposive sample of six nurses, and content analysis was carried out. Nurses experienced feelings of shock, blame and condemnation, inadequacy and a fear of reprisal. This study suggests a basis for the development of support strategies to assist nurses to deal with their emotions after experiencing adverse events.

Introduction and Background. The World Health Organization (WHO)'s global report on violence and health indicates that one person commits suicide every 40 seconds and that approximately one million people of all ages die from suicide every year (WHO, 2012).

WHO further estimated that by the year 2020, these figures may increase to one death every 20 seconds. A study on the profile of suicides in South Africa indicates that suicide accounts for 7.7% of all non-natural deaths in South Africa (Alberdi-Sudupe et al. 2011).

According to Burrows and Schlebusch (2008), 6500 suicides occur annually in South Africa. Gauteng province was dubbed the second leading province in South Africa in terms of high suicide rates (Uys & Middleton, 2010). However, there is limited literature on general hospital-based suicides in Gauteng province, except for incidents reported on the media.

Suicide is described as the act of taking one's own life. It is multi-factorial in nature, with associated risk factors such as demographic factors, psychiatric disorders, terminal or chronic medical conditions and recurrent unresolved psychological stressors (Masango, Rataemane, & Motojesi, 2008).

Different methods of committing suicide include shooting, hanging, poisoning, gassing, burning and jumping from heights. Suicide can be committed anywhere, at home or even in hospitals.

The Joint Commission (2010) indicates that 14.25% of suicides occur in the non-behavioural units of general hospitals, such as medical or surgical units. Knoll in 2012 stated that 'inpatient suicides do occur in medical settings and are viewed as the most avoidable and preventable because they happen near staff. Therefore, hospitals are faced with adverse events when patients commit suicide.

Some patients sustain serious injuries before or may die instantly. When suicide occurs in general hospitals, it poses challenges to health care workers, including nurses who witness or care for these patients before they die, as well as the patients' families, and hospital administrators (Knoll, 2012).

Patients include those who are admitted for conditions such as respiratory, cardio-vascular, endocrine, haematological and renal diseases, rather than mental illness. Whilst the cause of suicide is often unknown, some conditions may lead to confusion as some patients may not accept their disease status; and consequently, resort to suicide.

According to Cheng, Hu, and Tseng (2009), inpatient suicides often have devastating effects on survivors and staff morale. Unfortunately, there is limited literature on the experiences of nurses who care for patients that commit suicide in general hospital units, such as medical wards.

When a patient commits suicide in hospital, it is regarded as an adverse event. The National Core Standards for Health Establishments in South Africa explained that adverse events like this constitute a sub-domain of the Patient Safety, Clinical Governance and Clinical Care domain which includes support of any affected patients or staff (National Department of Health, 2011). The criteria in this sub-domain requires health establishments to actively encourage reporting of these adverse happenings. With this, each health establishment should design a procedure to report the adverse event.

In this specific hospital, management of such adverse events includes in-depth investigation of the incident. A procedure of writing incident reports, often called statements, file analysis by quality assurance coordinators, clinical managers and nurse managers, are followed in order to investigate an incident. Reports are written to assess the patient's clinical status prior to the incident, and to facilitate preliminary investigation. Inpatient suicide is an unnatural death that is reported to the South African Police Services (SAPS) who request further statements from nursing personnel involved. In case of successful suicide, post-mortem of the deceased is mandatory as part of investigation for confirmation of injuries that led to the patient's death.

Research Design and Method

A qualitative design was used, (Denzin & Lincoln, 2011), following interpretivism (Creswell, 2009). This design was deemed suitable because the researchers required a complete understanding of the experiences of affected nurses (Babbie, 2012; Burns, Gray, Grove, Behan, & Duvall, 2012). The epistemological assumption of this study was that to understand the experiences of nurses following patient suicide, it is important to allow them to narrate their feelings in the wake of such incidents.

The study was conducted at an urban general hospital in Gauteng Province, South Africa. The hospital is a five-storey high rise building. The medical unit is located on the third floor and contains twenty-five beds, with big glass windows devoid of shatter proofing, as well as cubicles with glass doors leading to the balcony. The balcony doors were kept unlocked as they were regarded as emergency exit doors. The hospital was chosen based on the four incidents of patient suicides which occurred during the period 2008-2012 (Gauteng Provincial Government, 2013).

Results

Five themes were identified. The participants reported their fears and emotional reactions in the aftermath of the suicide incidents.

Experience of disbelief and helplessness

The nurses expressed feelings of disbelief with reference to the unit as a health hazard that the patients found to be useful as a tool for committing suicide. Discovering the body of the patient who jumped out of the window made the nurses feel shocked as indicated:

- 'The patient *flew down like* a bird. That was shocking. I didn't even want to go down to see the patient, I was so shocked, shivering'.
- 'One patient just opened that door and went through. Just imagine, from third floor to lower ground. It is a shocking, depressing and frustrating experience'.
- 'That corpse was crushed. I always experience visual hallucinations

The experiences of disbelief were accompanied by feelings of helplessness as the participants indicated that they felt the institution exposed them to risks by disregarding patient safety, despite holding them accountable for the adverse events, as stated:

- 'Doors *leading* to the balcony are not locked. Suicidal patients can easily jump from the balcony and thereafter we are held accountable. Patient safety is truly compromised'.
- 'When these incidents happen, I am called to account. The fact that the unit is not safe is not even looked into'.

Feelings of blame and condemnation

The participants feared family's reaction to inpatient suicide, and the response to the loss of their loved one. The nurses experienced evidence of blame directed at them and were also condemned for the suicide. The participants felt threatened by the families as indicated:

- 'The family demanded answers from us as nurses and we didn't even know that the patient intended to kill himself'.
- 'I remember this woman who pointed a finger at me and said I will make sure that you will never work again'.
- 'This woman said you are responsible for my brother's death. Actually, your cruelty caused my brother to choose to jump through a window rather than to be

taken care of by you'.

Feelings of guilt and inadequacy

The participants indicated that they felt inadequate as they could not recognise altered behaviour that may lead to suicide. The participants' descriptions of suicidal patients indicated that the patients' behaviours were very unpredictable and self-destructive, and therefore the patients withheld their suicidal intentions from the nurses.

- 'Patients who successfully commit suicide appear normal. They never pre-empt what they will do, so no-one predicts'.
- 'Feelings of guilt and inadequacy overwhelmed me, I started asking myself what I could have done better if I had known that the patient was going to brutally kill herself like that'.

Emotional reaction

The findings revealed that the nurses were negatively affected by the experiences of patient suicide. The nurses' emotional reactions to suicide included stress, self-blame, emotional trauma and depression. The participants mentioned the following:

- 'I was stressed, my heart was painful and I could not sleep that day. I was just rolling in my bed seeing the picture of the patient.'
- 'It was traumatising and depressing. I'm still on anti-depressants now. I even dream about it'.

The participants felt responsible for the suicides and blamed themselves for the occurrence as indicated in the following extracts:

- 'I blamed myself, I could not sleep, I felt like I had killed the patient. I felt like the observation that I did the whole night was not enough'.
- 'I felt like I have failed the family because they trusted me with their family member'.
- 'It feels like whatever was done for the patient was not enough because now the patient has chosen to die rather than to be taken care of'.

Fear of reprisal

The participants indicated that they feared losing their jobs, based on the decision of the employer about the future of personnel involved.

- 'I thought I was going to be removed from the South African Nursing Council register'.

Recommendations regarding support for nurses practice and policy making

Develop a debriefing strategy for employees who experience inpatient suicide. If not already in place, the hospital should revive the employee and wellness assistant programme for nurses and refer them in case of adverse events. The hospital should move risky units to the lower ground floor and design layouts that will minimise risks, all in consultation with staff. The units should develop support strategies for the nurses and families of patients who commit suicide. The development of continuous in-service training for the nurses on patient risky behaviour is also essential.

Conclusion

The manner in which patients committed suicide brought shock and disbelief to the participants. A hospital is regarded as a refuge where patients are protected from their own self destructive tendencies and where hope for their future is communicated to them (Ballard et al., 2008). However, in this study the patients used the hospital as a place where they fulfilled their self-destructive behaviour by successfully committing suicide.

Neville (2013) recommends that suicidal patients should be nursed in an environment that is free from hazards that might be used as methods of committing suicide. McGuire (2011) revealed that weaknesses in environmental safety were the root cause of suicides. While patients in psychiatric units commonly commit suicide by hanging, those on medical wards commonly jump from heights (McGuire, 2011). A safe environment can be created by restricting access to heights, preventing rooftop access, locking doors and closing windows.

BIOGRAPHY

Mirriam Matandela is a Nurse Manager in Carletonville Hospital. She is a qualified nurse and midwife. Her qualifications include Comprehensive diploma in general, community, psychiatry and midwifery; B.A. Cur Health Service Management and Health Service Education. BA Honours in Health Service Management and Masters in Health Service Management. Currently, she is registered at the University of South Africa (UNISA) as a PhD student. She presented two research papers at the Prakash Vallabh Primary Health Care research conference. She also won a 3rd prize award for poster presentations in the IHF Congress held at Durban ICC last November 2016.

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IHF Recognition Awards for 2016 Volume 53 Number 1
Résumés en Français

Intégrer l'assistance médicale et l'aide sociale aux personnes âgées à Hong Kong - Innovations dans le domaine des services reposant sur un système et la technologie

Hong Kong est fier de la longue espérance de vie de sa population, mais le vieillissement rapide de la population est l'un de ses plus grands défis. L'Hospital Authority (HA) est la plus grande organisation de soins de santé à Hong Kong. Pour faire face aux défis, l'HA a formulé le « Cadre de services stratégiques pour les patients âgés», en mettant l'accent sur le développement de services intégrés multidisciplinaires pour les personnes âgées, l'implication des patients et des soignants et le renforcement de la collaboration avec les partenaires communautaires. Au cours des dernières années, l'HA a innové et réorganisé divers modèles de services pour fournir des soins appropriés basés sur les besoins stratifiés de chacun des patients âgés. Nous avons adopté une approche intégrée de prise en charge des cas pour répondre aux besoins multiples des personnes âgées à haut risque, améliorer la prise en charge des maladies chroniques et améliorer l'autothérapie. Les technologies de l'information ont joué un rôle important dans la transformation du modèle de service. L'évaluation des nouveaux programmes a montré des résultats encourageants dans la réduction des hospitalisations inutiles, l'amélioration des résultats de l'action sanitaire et la responsabilisation des patients.

Projet de prévention et de riposte au MERS de l'hopital Myong Ji (L'émergence d'un système de réponse aux maladies infectieuses émergentes)

Selon les rapports de l'organisation mondiale de la santé (OMS), les cas d'infection par le MERS des cinq dernières années se sont surtout produits en Arabie saoudite, mais plus de 180 cas ont été recensés en Corée en 2015. La raison réside dans la nature de la médecine coréenne, caractérisée par une accessibilité médicale élevée.

MERS a rapidement infecté un grand nombre de personnes en Corée en très peu de temps par infection nosocomiale. Dans ces circonstances, l'hôpital Myong Ji avait accepté des patients infectés par le MERS et n'a pas causé d'infection nosocomiale parce que l'hôpital avait préparé, formé et entraîné une équipe d'intervention spécialisée dans les maladies infectieuses émergentes, un an avant que tout ceci se produise en Corée.

Cependant, l'hôpital Myong Ji a sous-estimé le problème de la communication ; la mauvaise communication pendant la période du MERS a causé beaucoup de confusion parmi les gens. L'hôpital Myong Ji en a tiré deux leçons importantes pour faire face aux maladies infectieuses émergentes ; La première a été de préparer une main-d'œuvre, des installations, des manuels et des exercices spéciaux ; la seconde a été de préparer de bonnes méthodes de communication.

Impliquer la direction dans la transformation

Cet article décrit la visite de l'hôpital Tan Tock Seng (TTSH) en valorisant le personnel et les patients et se base sur un modèle favorisant le leadership.

Le système de santé devenant de plus en plus complexe et TTSH continuant à viser l'excellence organisationnelle, nous avons mis l'accent sur la santé organisationnelle en tandem - en valorisant notre personnel pour qu'il puisse répondre aux besoins de nos patients.

Nous avons construit un modèle favorisant le leadership basé sur les valeurs du personnel et des patients. Le leadership forge à la fois un capital humain et un capital social chez les personnes grâce à la mobilisation. De meilleurs soins commencent par de meilleures personnes. Les personnes sont plus impliqués et mieux équipés pour bien faire leur travail, elles apprennent chaque jour à faire mieux leur travail et à innover pour faire leur travail différemment. Le rôle du leader évolue d'une perspective de gestion à une perspective de leadership, du contrôle à la mobilisation et de la hiérarchie au niveau collectif. Nous envisageons de renforcer le leadership à tous les niveaux, à travers le concept de « leadership collectif », basé sur la mobilisation.

Donner du sang, Sauver des vies - un projet innovant d'utilisation rationnelle du sang

Les produits sanguins sont des composantes essentielles d'une gestion efficace des soins de santé. Cependant, ils sont coûteux et rares dans de nombreux pays en développement. En Afrique du Sud, plusieurs facteurs risquent d'aggraver ce problème à l'avenir. Le projet « Donner du sang, sauver des vies » est un système de soins de santé novateur qui promeut l'utilisation rationnelle des produits sanguins, l'amélioration de la prise de décision, la responsabilité et l'amélioration de la qualité. Il ne nécessite aucun budget et aucun personnel supplémentaire. Une fois implémenté, il ne prend que quelques heures par mois pour être exécuté. L'intégration d'une décharge de responsabilité innovante a contribué à son succès. Le projet a considérablement réduit l'administration inutile de produits sanguins, les dépenses et amélioré la délivrance efficace des produits sanguins aux patients qui en ont le plus besoin. Le projet a été adopté et reproduit avec succès dans plusieurs autres hôpitaux sud-africains et convient parfaitement aux pays en développement.

Programmes de santé complets sur la responsabilité sociale des entreprises : Fournir des soins de santé de qualité, abordables et accessibles aux patients ayant eu des difficultés financières (cadre privé de l'hôpital tertiaire)

En 2009, le Manila Doctors Hospital est devenu le premier hôpital aux Philippines à lancer et à investir dans une vision sociale. Depuis, la vision sociale a servi de guide pour la bonne gouvernance et un plan pour ses programmes sur la responsabilité sociale des entreprises (CSR) axés sur la santé, l'environnement et le sexe.

L'objectif du programme de santé complet RSE de cet hôpital est de rendre le droit fondamental aux soins de santé accessible aux patients marginalisés. Grâce à nos programmes de RSE, plus de 20 000 patients ayant des difficultés financières ont eu accès à des services médicaux de qualité chaque année. Ceci contribue directement au programme de développement sanitaire 2016-2020 du pays pour atteindre les objectifs SDG liés à la santé en termes de protection du risque financier, d'amélioration des résultats en matière de santé et de réactivité.

Le projet de décongestion de la pharmacie de l'hôpital R.K. Khan Un partenariat novateur en matière de prestation de services

Dans sa quête d'améliorer la prestation de services et de réduire la congestion, la très fréquentée pharmacie de l'hôpital R.K Khan a lancé un partenariat unique avec les organisations communautaires par lequel 13 établissements communautaires, incluant des salles communautaires, des temples et des églises, sont utilisés comme des

lieux pour la délivrance de médicaments chroniques aux patients. Les patients reçoivent initialement leurs soins à l'hôpital et sont ensuite orientés vers un établissement qui leur convient mieux pour renouveler leurs médicaments. Ils ne retournent à l'hôpital que six mois plus tard, le jour de leurs examens. Presque 24 000 patients par mois utilisent actuellement ce service. Les médicaments sont pré-dispensés, transportés et contrôlés par le personnel de la pharmacie. Il en résulte une situation gagnant - gagnant tant pour les patients que pour l'hôpital. Les patients en bénéficient en recevant leurs médicaments de manière rapide et pratique dans des centres proches de chez eux au lieu de faire la queue pendant des heures à la pharmacie. L'hôpital en bénéficie puisque la congestion est considérablement réduite.

Mise en œuvre du Programme de récupération améliorée en cas d'anesthésie (PREP) pour améliorer la qualité des soins prodigués au patient ayant subi une anesthésie & pour favoriser le rétablissement rapide

Le Programme de récupération améliorée en cas d'anesthésie (PRAA) est une initiative unique en son genre axée sur le patient et menée par un anesthésiste qui vise à réduire les complications liées à l'anesthésie postopératoire et à accélérer la guérison. On sait que les complications liées à l'anesthésie sont associées à de mauvais résultats pour les patients et à une morbidité/mortalité plus élevée. Ce projet a été conçu pour développer des protocoles visant ò améliorer la récupération suite à une anesthésie et donc la qualité des soins prodigués aux patients. Un examen détaillé des directives nationales et internationales a été réalisé et des parcours PRAA ont été mis au point pour intégrer les changements dans la gestion péri-opératoire, tout comme les conclusions des toutes dernières études cliniques, pour améliorer l'expérience du patient en cas de chirurgie, en garantissant une meilleure fonction cognitive postopératoire et une réduction de la morbidité postopératoire.

Suite à la mise en œuvre du projet, une amélioration remarquable a été observée dans le cadre des soins prodigués aux patients ayant subi une anesthésie, environ 6233 patients en ayant bénéficié. La durée médiane du séjour dans ce service a été ramenée de 26 minutes à 18 minutes Le retour précoce des fonctions cognitives (rétablissement précoce) a été mis en évidence par une réduction du temps de retour post-opératoire des fonctions cognitives, qui est passé de 10 minutes à 3 minutes. Le pourcentage de personnes nécessitant une supplémentation en oxygène a été réduit de 20% à 5%. Le taux de ré-intubation trachéale non planifiée a été réduit de 0,05 à 0,02. Le pourcentage de patients présentant des nausées et des vomissements postopératoires a été réduit de 8% à 3%. Cette initiative a également entraîné une réduction d'environ 50% des dépenses en anesthésiques pour les patients.

Responsabiliser le patient : Intégration de la carte Intelligente (CI) au dossier médical électronique (DME)

Le Tata Memorial Hospital (TMH) est un centre de soins complets du Cancer situé à Mumbai, en Inde. Les patients de toute l'Inde et certains des pays voisins choisissent de se rendre à Mumbai (Bombay) pour recevoir un traitement dans notre centre. Compte tenu des contraintes géographiques, le TMH a adopté la technologie de l'information pour atteindre les patients dans les communautés éloignées.

Le TMH dispose d'un système de dossiers médicaux électroniques, dont le contenu est partagé avec les patients et les fournisseurs sur l'intranet de l'ensemble de l'hôpital, et au niveau global via notre site Web. Le TMH effectue des opérations sans papier et sans film depuis 2013, en permettant l'échange d'informations en temps réel et en garantissant une continuité des soins. Les documents papier précédant cette année sont numérisés, archivés et mis à disposition en étant intégré au DME.

Avant la mise en œuvre de la carte intelligente, il était rare de trouver des patients ou des membres de leur famille qui faisaient la queue pour obtenir des services ou des paiements. Ceci a entraîné des retards dans la prestation de services et des difficultés pour les patients et leurs proches. La surpopulation provoquait du stress au sein du personnel avec une propension à commettre des erreurs dans la sai-

sie des données, ce qui entraînait un mauvais service. Ceci nuisait aux patients s'ils passaient inaperçus, ou entraîner une réitération du service s'il est notifié. En outre, la gestion des hôpitaux était touchée par des transactions longues et la carence de service.

C'est dans ce contexte que, en 2011, la direction de l'hôpital a pris l'initiative d'intégrer la technologie de la carte intelligente au dossier médical électronique existant (DME) et au dossier financier électronique pour améliorer l'interaction entre les patients et l'établissement. La stratégie consiste à utiliser la carte intelligente (CI), contenant une puce IC intégrée pour l'identification des patients, pour effectuer toutes les transactions impliquant des soins aux patients, dans le but de minimiser les erreurs de transcription et d'améliorer la sécurité des patients. La mise en œuvre de cette stratégie a nécessité la restructuration des processus et la formation de tous les membres du personnel. Les résultats des quatre dernières années 2013-16 ont été analysés pour déterminer l'efficacité de cette initiative.

Interventions clés qui soutiennent la réalisation d'hôpitaux basés sur des données

Le système d'information sanitaire de district (DHIS) est utilisé en Afrique du Sud pour collecter des données agrégées de routine. L'analyse des données d'hôpitaux dans le DHIS a révélé que les rapports dans les hôpitaux (en particulier les données cliniques) présentent généralement des contradictions et sont incomplets. Le NDoH reconnaît ces rapports et les problèmes de qualité des données dans les hôpitaux ainsi que l'impact qu'elles ont sur la capacité à prendre des décisions éclairées en matière de gestion et à surveiller l'impact des interventions sanitaires.

Une initiative d'amélioration de la qualité des données a été entreprise dans dix des plus grands hôpitaux centraux et tertiaires d'Afrique du Sud. Les méthodologies permettant d'identifier les domaines dans lesquels sont incomplets les rapports, les résultats des visites sur le terrain et les interventions implémentées pour améliorer les taux de reporting dans ces hôpitaux font toutes l'objet de discussions.

Cette initiative a démontré que des interventions bien mises au point et ciblées, testées et affinées dans plusieurs établissements sanitaires, peuvent facilement être reproduites dans d'autres centres, ce qui rend l'intervention sur la qualité des données plus rentable dans des contextes à ressources limitées.

Expériences d'infirmières chez un patient suicidaire hospitalisé à Gauteng, en Afrique du Sud

Lorsque le suicide se produit, il est considéré comme un événement indésirable. Souvent, peu d'attention est accordée aux infirmières qui ont soigné les patients avant ces circonstances. Au lieu de cela, les infirmières concernées devaient écrire des déclarations et des rapports d'incident.

Les patients qui tentent de se suicider pendant l'hospitalisation demeurent une expérience stressante et angoissante pour les infirmières. C'est parce que dans la plupart des cas, même si le patient survit à l'épreuve, les infirmières culpabilisent. Les effets physiologiques d'un tel stress et d'une telle anxiété sont jugés comme étant nuisibles au bien-être des infirmières et doivent donc être évités.

Le but était d'explorer les expériences des infirmières soignant des patients qui ont réussi leur tentative de suicide alors qu'ils ont été admis dans un hôpital général spécialisé dans la province de Gauteng, l'Afrique du Sud. Une recherche qualitative exploratoire a été menée. Des données ont été recueillies au moyen d'entretiens approfondis avec un échantillon ciblé de six infirmières et une analyse du contenu a été effectuée. Les infirmières ont éprouvé des sentiments de choc, de culpabilité et de condamnation, d'insuffisance et de crainte de représailles. Cette étude donne une base pour l'élaboration de stratégies de soutien pour aider les infirmières à faire face à leurs émotions après avoir connu des événements indésirables.

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Resumen en Español

Asistencia Médica Integral y Apoyo Social para los Ancianos en Hong Kong – Sistema y Tecnología permiten las Innovaciones del Servicio

Hong Kong está orgullosa de la prolongada expectativa de vida de su población, pero el envejecimiento veloz de la población es uno de sus grandes desafíos. El Hospital Authority (HA) es la mayor organización sanitaria de Hong Kong. Para afrontar los desafíos, HA formuló el «Marco Estratégico de Servicio para Pacientes Ancianos», enfatizando el desarrollo de servicios integrados multidisciplinarios para ancianos, involucrando al personal sanitario y a los pacientes y aumentado la colaboración con aliados comunitarios. En los últimos años, HA ha innovado y reingenierizado varios modelos de servicio para proporcionar un cuidado básico apropiado a las necesidades estratificadas de cada paciente anciano. Adoptamos un planteamiento integral en la gestión de casos para satisfacer las exigencias multifacéticas de los ancianos de alto riesgo, optimizando la gestión de las enfermedades crónicas y mejorando la ayuda para la autoasistencia. La tecnología informática ha jugado un papel importante en la transformación del modelo de servicio. La evaluación de programadores nuevos mostró resultados estimulantes en la reducción de hospitalizaciones innecesarias, mejoras en los resultados sanitarios y en la potenciación del paciente.

Proyecto de Respuesta y Preparación del MERS del Hospital Myong Ji (La creación de un sistema de respuesta a enfermedades infecciosas emergentes)

Según los informes de la Organización Mundial de la Salud (OMS), los pacientes de MERS de los últimos cinco años han surgido principalmente en Arabia Saudita, pero sólo en Corea, aparecieron más de 180 pacientes en 2015. Los motivos radican en la naturaleza del médico coreano, caracterizado por una elevada accesibilidad.

El MERS se expandió con rapidez infectando una gran cantidad de personas en Corea como infección hospitalaria y en un breve lapso de tiempo. Bajo estas circunstancias el Hospital Myong Ji aceptó pacientes de MERS y no se produjo ninguna infección hospitalaria porque el hospital había preparado, entrenado y formado un equipo de respuesta para enfermedades infecciosas emergentes, un año antes que MERS apareciera en Corea.

En cualquier caso, el Hospital Myong Ji subestimó el problema de comunicación; la comunicación inadecuada durante el período de emergencia por MERS causó mucha confusión entre la gente. El Hospital Myong Ji aprendió dos lecciones importantes respondiendo a enfermedades infecciosas emergentes; la primera fue preparar un formulario del personal, las instalaciones, los manuales y los simulacros; la segunda fue preparar los métodos de comunicación correctos.

Liderazgo Interactivo para la Transformación

Este estudio describe el Itinerario (TTSH) del Hospital Tan Tock Seng para valorizar tanto al personal como a los pacientes, basándose en un Marco de Liderazgo interactivo.

Dado que el panorama de la asistencia sanitaria se vuelve cada vez más complejo y el TTSH continúa esforzándose por la excelencia en la organización, nos hemos orientado conjuntamente en la organización sanitaria y en el valor de la prestación de nuestro personal de modo que ellos puedan valorizar a nuestros pacientes.

Construimos un Marco de Liderazgo Interactivo basado en la valorización del personal y del paciente. A través de la participación de la gente, el liderazgo construye capital humano y capital social. La mejor asistencia sanitaria empieza con mejores personas. Las personas están más comprometidas y capacitadas para realizar bien su trabajo, aprendiendo cada día a realizar mejor sus trabajos e innovando para realizar sus trabajos de manera diferente. El papel del líder se extiende desde una perspectiva gestional a una perspectiva de liderazgo, desde la vigilancia a la contratación y de la jerarquía a la colectividad. Prevemos crear líderes en todos los niveles mediante el concepto de «Liderazgo Colectivo», construir basándonos en el compromiso.

Ahorrando Sangre, Salvando Vidas - un proyecto racional e innovador sobre el uso de la sangre

Los productos hemoderivados son componentes esenciales de la gestión eficaz de la asistencia sanitaria. Sin embargo, son costosos y escasos en muchos países en desarrollo. En Sudáfrica, muchos factores previsiblemente intensificarán este problema en el futuro. El Proyecto "Saving Blood, Saving Lives" es un innovador sistema de asistencia sanitaria que promueve el uso racional de los productos hemoderivados, perfecciona la toma de decisiones, la responsabilidad y el mejoramiento de la calidad. No requiere presupuesto ni personal adicional. Una vez implementado, requiere simplemente unas pocas horas al mes para ponerse en funcionamiento. La inclusión del innovador «formulario de responsabilidad» ha contribuido a su éxito. El proyecto redujo de modo significativo la administración innecesaria de productos hemoderivados y los costos y mejoró la eficiencia de envío de los productos hemoderivados a aquellos pacientes que más los necesitaban. El proyecto ha sido adoptado y repetido con éxito en muchos hospitales de Sudáfrica y es idealmente adecuado para el mundo en desarrollo.

Programas Sanitarios de Responsabilidad Social Corporativa: Garantizando Calidad, Atención Sanitaria Asequible y Accesible para Pacientes con dificultades financieras (Ámbito Hospitalario Terciario Privado)

En 2012 el Hospital Manila Doctors se convirtió en el primer hospital de Filipinas en lanzar y comprometerse con un Enfoque Social. Desde entonces, este Enfoque Social ha servido como guía para la buena gestión y como modelo para sus programas de Responsabilidad Social Corporativa (CSR) focalizados en la salud, el medioambiente y el género.

El éxito del programa sanitario CSR del Manila Doctors es el poner a disposición de los pacientes marginados el derecho fundamental a la atención sanitaria. A través de nuestros programas CSR, más de 20.000 pacientes con dificultades financieras tienen acceso anualmente a servicios médicos de calidad. Esto contribuye de manera directa en el programa 2016-2020 de desarrollo sanitario del país para alcanzar los Objetivos asistenciales SDG de Protección del Riesgo Financiero, Mejores Resultados Sanitarios y Capacidad de Respuesta.

Proyecto de Descongestión Farmacéutica en el Hospital R.K. Khan: Una Asociación Innovadora en la Prestación del Servicio:

En la búsqueda de mejorar la prestación del servicio y reducir el

congestionamiento, la concurrida Farmacia del Hospital R.K. Khan se lanzó a una colaboración exclusiva con las organizaciones comunitarias, donde 13 instalaciones comunitarias incluyendo salones comunitarios, templos e iglesias, se emplearon como espacios para entregar medicinas para pacientes crónicos. Los pacientes reciben su primer suministro en el hospital y luego se los envía a la instalación que más les conviene para recoger sus medicinas periódicas. Sólo deben volver al hospital después de seis meses, para la revisión de sus datos. Casi 24.000 pacientes por mes están utilizando actualmente este servicio. Las medicinas son preparadas, transportadas y controladas por personal farmacéutico. El resultado es una situación mutuamente beneficiosa tanto para el paciente como para el hospital. Los pacientes beneficiados reciben sus medicinas con rapidez y debidamente en los centros cercanos a sus hogares en lugar de realizar colas interminables en la farmacia. El hospital se ha visto beneficiado con una reducción significativa de la aglomeración.

Implementación del Programa para Favorecer la Recuperación de la Anestesia (EARP) para mejorar los resultados de asistencia de pacientes bajo Anestesia y favorecer la pronta recuperación

El Programa para Mejorar la Recuperación de la Anestesia (EARP) es una iniciativa, centrada exclusivamente en el paciente, para mejorar la calidad llevada a cabo por anestesiólogos y estudiada para reducir las complicaciones post-operatorias debidas a la anestesia y para acelerar la recuperación. Las complicaciones relacionadas con la anestesia se sabe que están asociadas a malos%% resultados para los pacientes y elevada morbilidad/mortalidad. Este proyecto fue diseñado para desarrollar protocolos para mejorar la recuperación de la anestesia y de ese modo la calidad de los resultados en los pacientes. Se realizó un examen detallado de las directrices nacionales e internacionales y se designaron vías EARP para incorporar cambios en la gestión perioperativa, según resultados de investigaciones clínicas recientes, para mejorar la experiencia quirúrgica del paciente, garantizando una mejor función cognoscitiva y una reducción de la morbilidad post-operatoria.

Siguiendo la implementación del proyecto, una notable mejora se apreció en los resultados de atención al paciente que benefició a cerca de 6233 pacientes. El tiempo de permanencia en PACU se redujo de 26 a 18 minutos. La Pronta Recuperación de las Funciones Cognoscitivas (Pronta Recuperación) fue evidente mediante una reducción del tiempo debido a una recuperación post-operatoria de las funciones cognoscitivas de 10 a 3 minutos. El porcentaje de personas que requirieron oxígeno suplementario se redujo del 20% al 5%. El porcentaje de re-intubación traqueal imprevista se redujo de 0,05 a 0,02. El porcentaje de pacientes que experimentaron la náusea y vómitos post-operatorios se redujo del 8% al 3%. Esta iniciativa generó también la reducción del 50% de los gastos en agentes anestésicos para los pacientes.

Fortaleciendo al paciente: Integración de la Smart Card (SC) con el Registro Médico Electrónico (EMR)

El Hospital Tata Memorial (TMH) es un Centro de asistencia Integral para el Cáncer situado en Mumbai, India. Pacientes de toda India y de algunos países vecinos eligen viajar hasta Mumbai (Bombay) para recibir el tratamiento en nuestro centro. Dadas las limitaciones geográficas, el TMH adoptó la Tecnología Informática para llegar a pacientes situados en comunidades distantes.

El TMH cuenta con un Sistema de Registro Médico Electrónico Nacional, cuyos contenidos se comparten con pacientes y proveedores mediante la Red Intranet del Hospital y globalmente mediante nuestro sitio web. El TMH ha estado llevando a cabo operaciones sin papel y sin película desde 2013 alcanzado un intercambio de información en tiempo real y asegurando una asistencia continua. Los registros impresos anteriores a este año han sido escaneados, archivados y puestos a disposición como parte del EMR.

Antes de la Implementación de la Smart Card, no era raro encontrar pacientes o sus parientes haciendo cola para los servicios o para realizar los pagos. Esto implicaba la demora en la prestación de los servicios y penurias para los pacientes y sus parientes. El personal destinado estaba saturado y estresado con una propensión a cometer errores en la introducción de los datos, dando como resultado un servicio con fallos. Esto afectaba a los pacientes si pasaba desapercibido o resultaba en una repetición del servicio si se advertía. Por otro lado, la gestión del hospital se veía afectada por tiempos de tramitación prolongados y deficiencias en el servicio.

Fue dentro de este contexto que en el año 2011 la Dirección del Hospital tomó la iniciativa de integrar la Tecnología Smart Card con los Registros Médicos Electrónicos (EMR) existentes y con los Registros Financieros Electrónicos (EFR) para mejorar la interacción entre los pacientes y la Institución. La estrategia fue la de emplear Smart Card (SC) con un chip IC incorporado para la identificación del paciente, para realizar todas las transacciones relativas a la atención del paciente a fin de minimizar los errores de transcripción y mejorar la seguridad del paciente. La implementación de esta estrategia incluye un proceso de re-ingenierización y capacitación de todos los miembros del personal. Los resultados de los pasados 4 años de 2013-16 se analizaron para determinar la eficacia de esta iniciativa.

Intervenciones claves para Apoyar la Realización de Hospitales basados en Datos

El Sistema de Información Sanitaria del Distrito (DHIS) se utiliza en Sudáfrica para recoger los datos agregados de rutina. El análisis de los datos del hospital en el DHIS reveló que los informes en los hospitales (especialmente los datos clínicos) son en general inconsistentes e incompletos. El NDoH reconoce estos problemas de informes y de calidad de los datos en los hospitales y el impacto que tienen en la capacidad para tomar decisiones de gestión fundadas y en supervisar el impacto en las intervenciones sanitarias.

La iniciativa de mejoramiento de la calidad de los datos se tomó en diez de los más grandes Hospitales Centrales y Terciarios de Sudáfrica. La metodología para identificar las áreas de informes incompletas, los resultados de las consultas en el lugar y las intervenciones implementadas para mejorar el porcentaje de informes en estos hospitales se están discutiendo.

Esta iniciativa demostró que las intervenciones focalizadas y bien diseñadas probadas y perfeccionadas en unas pocas estructuras sanitarias pueden fácilmente reproducirse en otras estructuras, haciendo que la intervención de la calidad de datos tenga mayor rentabilidad en entornos con recursos limitados.

Experiencias del Personal de Enfermería relativas a Pacientes Suicidas en un Hospital General Específico en Gauteng, Sudáfrica

Cuando se produce un suicidio, es considerado como un acontecimiento adverso. A menudo, se dedica poca atención al personal de enfermería que ha asistido a pacientes antes de estas circunstancias. En su lugar, al personal de enfermería afectado se le solicita que redacte exposiciones e informes sobre el incidente.

Los pacientes que intentan el suicidio durante la hospitalización se convierten en una experiencia estresante y generadora de ansiedad para el personal de enfermería. Es por ello que en la mayoría de los casos, si bien el paciente sobrevive al sufrimiento, el personal de enfermería se culpa a sí mismo. Se ha encontrado que los efectos psicológicos de este estrés y la ansiedad son nocivos para el bienestar del personal de enfermería y por lo tanto deben evitarse.

El objetivo fue explorar las experiencias del personal de enfermería a cargo de pacientes que cometieron suicidio mientras estaban hospitalizados en el hospital general específico de la provincia de Gauteng en Sudáfrica. Se realizó una investigación cualitativa exploratoria. Se tomaron datos mediante entrevistas detalladas con un muestreo intencional de 6 enfermeras y se realizó el análisis de contenido. El personal de enfermería experimentó conmoción, culpa, repudio, incompetencia y miedo a las represalias. Este estudio sugiere las bases para el desarrollo de estrategias de apoyo para asistir al personal de enfermería para afrontar sus emociones después de pasar por acontecimientos adversos.

IHF Recognition Awards for 2016 Volume 53 Number 1

中文摘要

香港老年人医疗和社会支助整合项目通过系统和技术实现的服务创新

香港一直以其较长的人口平均寿命引以为豪，但同时又面临着人口迅速老龄化这一严峻挑战。医院管理局（HA）是香港最大的卫生保健组织。为了应对挑战，医管局制定了"老年患者战略服务框架"，以多学科综合老年人服务、患者和护理人员的参与、加强与社区合作伙伴的协作为重点课题。近几年来，医管局进行创新，重新设计了多种服务模型，根据每位老年患者的不同层次需要给予相应护理。我们通过综合个案管理方法，以满足高风险老年人的多方面需要、改进慢性疾病管理并提高对生活自理的支助。信息技术在转变服务模式方面起到了非常重要的作用。新程序评价的结果显示，减少了不必要的住院治疗，健康结果和患者权益也得以改善。

明知医院中东呼吸综合征（MERS）应对计划（新发传染病紧急状况响应系统）

根据世界卫生组织（WHO）的报告，过去五年中东呼吸综合征患者大多出现在沙特阿拉伯；但2015年的情况比较特殊，韩国的患者数量超过了180名。究其原因，与韩国的医疗普及度较高的特点有很大关系。

由于院内感染，短时间内MERS在韩国迅速扩散，大量人群被感染。在这种情况下，明知医院接收了MERS患者，而且没有造成任何院内感染；这是由于在MERS在韩国爆发的一年之前，该院已经进行了针对新发传染病的准备、培训工作，并组建了一个响应团队。

但是，明知医院还是低估了交流障碍的问题；MERS期间，沟通障碍导致人们出现了混乱。从中，明知医院吸取了关于新发传染病的两条重要教训：一是在要在人员、设施、手册和演习方面都做好准备；二是要准备好适当的沟通方法。

参与式领导转型

本文介绍了陈笃生医院（TTSH）通过参与式领导框架，向工作人员和病人传递价值的过程。

随着医疗保健环境日益复杂，陈笃生医院持续追求其组织的精益求精，我们将着眼点放在了组织延续健康度上 —— 将价值传递给我们的工作人员，以便他们可以将这些价值传递给我们的患者。

我们建立了以工作人员和患者价值为核心的参与式领导框架。领导层通过参与建立人力资本和社会资本。更好的护理来源于更好的人。人们以最好的状态参与工作、为做好本职工作做准备，每天学习新的知识以做得更好，并在工作上进行创新。领导层的角色，从管理的角度转变为领导的角度，从控制转变为参与，从层级化转变为集体化。我们的愿景，是通过在参与基础上的"集体式领导"，打造所有层次的领导力。

捐'血'一袋，救人一命—— 创新血浆合理利用项目

血液制品是有效医疗管理的重要组成部分。但在许多发展中国家，这些产品既昂贵，又稀缺。在南非，由于一些因素，这一问题还有可能在将来更为严重。"捐'血'一袋，救人一命"项目是一个创新的医疗体系，旨在促进血液制品合理使用、改进决策、问责制，提高品质。它不需要预算或是额外的工作人员。一旦实施，它只需要每个月运行几个小时即可。这一项目的成功，源于其纳入了创新的"问责制形式"。项目极大降低了血液制品不必要的管理和开支，让它们能以更快的速度送达那些最需要的患者。该项目已实施并在几个其他南非医院成功复制，非常适用于发展中国家。

综合企业社会责任健康计划：为经济困难的患者提供优质低价的全民健康护理（针对私营三级医院）

2012年，马尼拉医生医院（Manila Doctors Hospital）成为了第一所在菲律宾开办、致力于社会愿景的医院。自彼时起，该院一直将社会愿景作为其良好治理的导向和其企业社会责任（CSR）计划的蓝图——该计划的主题涉及健康、环境和性别。

马尼拉医生医院综合CSR健康计划的目标，是让处于社会边缘地位的患者能享受到基本的保健服务权利。每年，有超过20,000名经济困难的患者通过我们的CSR计划获得优质医疗服务。这一计划为本国2016-2020年的健康发展议程作出了直接贡献，实现的健康相关SDG目标包括：金融风险保护、更好的卫生结果和响应能力。

R.K.Khan医院药房拥塞缓解项目：服务伙伴关系的创新

为了改进服务提供方式和减少拥堵，人满为患的R.K.Khan医院药房着手与社区组织建立专门的合作，利用社区会堂、寺庙、教堂等13处社区设施，作为向患者发放慢性药物的场所。患者刚开始从医院取药，然后转到最方便达到的社区设施取用后面的药物。他们只在六个月后的复诊日，才需要再次回到医院。每个月有近24,000名患者从这项服务受益。药品的预配发、运输和控制由药房工作人员负责。这一计划产生了患者和医院双赢的结果。患者可以从家附近的各个中心快速方便地取药，不用再在药房排队几个小时。医院的交通拥堵状况也得到极大改善。

麻醉复原增强计划（EARP）改善麻醉相关的患者护理成果并提高早期复原率

麻醉复原增强计划（EARP）是一项在麻醉师带领下进行、以患者为中心的质量改进计划，旨在减少术后麻醉相关并发症，加速患者复原。众所周知，麻醉相关并发症治疗成效甚微，发病率/死亡率较高。EARP计划的目的，是通过制定协议，改善麻醉复原状况，从而提高患者疗效。对此，我们对各项国家及国际准则进行了详细审查，根据最新的临床研究结果

制定了专门的EARP流程以处理在围手术期管理过程中遇到的问题，以提高患者的手术体验，确保提高术后认知功能并减少术后并发症。

项目实施后，麻醉相关患者护理成果显著改善，惠及约6,233名患者。患者在麻醉后恢复室（PACU）停留的时间从26分钟缩短到18分钟。在早期认知功能恢复（早期复原）方面的明显效果体现在时间上——术后的认知功能恢复时间从10分钟缩短至3分钟。患者需要补氧的百分比由20%减至5%。计划外的气管再插管率从0.05降至0.02。患者发生术后恶心和呕吐情况的百分比从8%降至3%。这一举措也造成了患者麻醉药物使用量上大约50%的削减。

赋予病人权益：智能卡（SC）集成与电子医疗档案（EMR）

塔塔纪念医院（TMH）　是设在印度孟买的一家综合癌症护理中心。我们的患者来自印度各地以及和一些周边国家，他们千里迢迢来到孟买，在我们的中心接受治疗。由于地理环境的限制，TMH采用了信息技术来帮助偏远地区的患者。

该院使用一个自己开发的电子医疗档案系统，通过医院内网将其共享给患者和供应商，并通过医院网站使其可被全球用户访问。TMH自2013年起实行无纸化和无胶片行动，实现了信息实时交换并确保持续照护。今年以前的纸质记录经过扫描、存档，也并入了电子档案。

在实现智能卡之前，这些对于患者或其家属而言都是很难想象的——他们总是排着长队，等候服务或交费。这种情况的结果，就是患者不能及时得到服务，患者和家属也非常麻烦。人满为患，导致工作人员倍感压力，输入数据时容易出错，从而也可能引发服务质量问题。如果忽略了这些问题，就会危及患者；如果留意到了，又需要花时间来进行纠正。此外，医院管理方面，也有交易时间冗长、服务质量不尽人意的问题。

鉴于上述背景，2011年，医院管理层主动开展了智能卡技术与现有的电子医疗档案（EMR）和电子金融记录（EFR）的整合工作，以改善患者与院方的互动。具体的方法，是使用内嵌用于确定患者身份的IC芯片的智能卡，来进行涉及病人护理的所有交易，以尽量减少抄写错误，提升病人的安全。这一战略的实施涉及流程再造和所有工作人员的培训。对过去4年（2013年-2016年）的结果进行了分析，以确定这一计划的效果。

支持数据驱动型医院实现的关键干预措施

地区卫生信息系统（DHIS）在南非被用于收集常规聚合数据。DHIS的医院数据分析显示，医院的报告（尤其是临床数据）通常都缺乏一致性和完整性。NDoH承认，这些医院报告和数据的质量问题，及其对制定可靠管理决策和监控健康干预措施的影响，确实存在。

南非十家最大的中央和三级医院开展了一项数据质量改进计划。本文讨论了这些医院识别不完整报告和旨在改善报告率的实地访视和干预措施取得的结果。

本计划表明，精心设计并有针对性、且在少数几个卫生机构进行测试和优化的干预措施，可以在其他机构轻松复制，从而在资源有限的条件下节约数据质量干预的成本。

护士对于南非豪登省专科总医院住院患者自杀事件的心理感受

自杀事件发生时，会被归类为不良事件。通常情况下，很少有人关注发生这些事件前为患者提供护理的人员。与之相反的事实是，受到事件影响的护士们还要要写事件陈述和报告。

住院期间自杀未遂的患者，给护理人员留下的是充满压力和焦虑的体验。这是因为在大多数情况下，即使患者幸免于难，护理人员仍会有自责心理。研究发现，这种压力和焦虑的生理效对护理人员的健康不利，应予以避免。

本项目的目的，是研究护理人员对于南非豪登专科总医院住院患者自杀事件的心理感受。研究使用了定性探索法。通过以有意选取的六名护理人员为样本，对他们进行深入访谈，收集数据并进行内容分析。护理人员经历的感受包括：震惊、自责和负罪感、无能感和害怕报复。本研究表明，应制定一系列策略来帮助经历了不良事件的护理人员进行情绪处理。

IHF events calendar

2017

IHF

41st World Hospital Congress
November 7 – 9, Taipei, Taiwan
For more information, contact 2017congress@ihf-fih.org

2018

IHF

42nd World Hospital Congress
October 9 – 11, Brisbane, Australia
For more information, contact 2017congress@ihf-fih.org

2017

MEMBERS

AUSTRALIA
AHHA Think Tank
Discover the work the Deeble Institute for Health Policy Research and our partner universities are undertaking on a wide range of health policy topics
May 3, Brisbane
Australian Healthcare & Hospitals Association
https://ahha.asn.au/events/think-tank-deeble-discovery

Joint 2017 ACHSM/ACHS Asia-Pacific health leadership congress
The winds of change – adjust your sails
Wed – Fri Sep 29, Hilton Sydney, 488 George Street, Sydney NSW 2000, Australia
Australasian College of Health Service Management
http://achsm.org.au/congress

BRAZIL
5° CONAHP – (Congresso Nacional dos Hospitais Privados) Brazilian Private Hospitals Conference
The Hospital of Future: the future of hospitals
November 22 -24, Convention Center – Hotel Sheraton WTC - São Paulo, Brazil
Associação Nacional de Hospitais Privados
http://www.conahp.org.br

CANADA
2017 National Health Leadership Conference
Value-based healthcare: Embracing a patient and family-centered approach
June 12-13, Vancouver, British Columbia, Canada
HealthCareCAN
http://www.nhlc-cnls.ca/

Future conference dates:
June 4-5, 2018 – St. John's, Newfoundland
June 10-11, 2019 – Toronto, Ontario
June 15-16, 2020 – Edmonton, Alberta
http://www.cchl-ccls.ca/site/nhlc#sthash.WXVnRcNi.dpuf

FRANCE
Paris Healthcare Week
May 16-18, Porte de Versailles - Pavilion 1
Fédération hospitalière de France
http://www.parishealthcareweek.com

GERMANY
Provision of Healthcare in the EU
May 19, Berlin
German Hospital Federation
http://www.dkgev.de; www.deutscherkrankenhaustag.de; www.medica.de

European Hospital Conference
November 16, Düsseldorf Fairgrounds
German Hospital Federation
http://www.dkgev.de; www.deutscherkrankenhaustag.de; www.medica.de

German Hospital Conference
November 13-16, Düsseldorf Fairgrounds
German Hospital Federation
http://www.dkgev.de; www.deutscherkrankenhaustag.de; www.medica.de

HONG KONG
The Hong Kong Hospital Authority Convention 2017
The Hong Kong Hospital Authority's core values, viz. "People-centred Care", "Professional Service", "Committed Staff" and "Teamwork"
May 16-17, Hong Kong Convention and Exhibition Centre, Wanchai, Hong Kong
Hong Kong Hospital Authority
www.ha.org.hk/haconvention/hac2017

MEXICO
10th Directive Session
Creating the first Private Health System in Mexico
May 24 to 26, Grand Fiesta Americana. Coral Beach; Cancún, Quintana Roo. Mexico
Gerencia de Calidad y Análisis de Información
http://www.cmh.mx/

SWITZERLAND
H+ Congress 2017
Humanity and Technology: Digital Dynamics without boundaries?
November 8, Kursaal Bern, Kornhausstrasse 3, 3000 Bern, Switzerland
H+ Les Hôpitaux de Suisse
www.hplus-kongress.ch

For further details contact the: IHF Partnerships and Project, International Hospital Federation, 151 Route de Loëx, 1233 Bernex, Switzerland; E-Mail: info@ihf-fih.org or visit the IHF website: https://www.ihf-fih.org

2017 IHF TAIPEI

41st World Hospital Congress

"Patient-friendly & Smarter Healthcare"

November 7-9 | Taipei International Convention Center

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