

1st Hospital Nutrition State of the Art Summit

Setting Standards of Excellence in Hospital Clinical Nutrition Practices



Sponsored by the Abbott Nutrition Health Institute, the 1st Hospital Nutrition State of the Art Summit was held on June 29-30 in Manila, Philippines. The summit promotes state of the art hospital nutrition management. Over 50 nutrition leaders representing 13 hospitals in Asia and the Middle East participated in this pioneering event.

Dr Charanjeet Singh opened and facilitated the summit. Representatives visited Philippine Hospital Centers of Excellence during which Dr Jeff Inciong, Head of St. Luke's Medical Center and Dr Rey Resurreccion, Head of the Nutrition Support Team at The Medical City, provided an overview of the nutrition systems in place in their respective hospitals.

Participant learning was reinforced by the keynote presentations from Virtua Health System (Mt. Holly, New Jersey) including Dr Ninfa Sauders (Executive Vice President of Health Care Services and Chief Operating Officer) and Dr Jane Ryan (Director of Clinical Nutrition). They shared their valuable experience in implementing an efficient hospital nutrition care system. The two workshops conducted focused on 5 key areas: Nutrition Screening and Assessment, Nutrition Care Planning, Management, Nutrition System Surveillance and Resource Allocation.

SUMMIT HIGHLIGHTS

- Hospital malnutrition is common and associated with poor patient outcome and 44% in-patient mortality.¹⁻⁴
- The burden of cost for hospital malnutrition is estimated at £ 7 billion in the UK alone.¹⁰
- The St. Francis Hospital study has shown that effective hospital nutrition practices – nutritional screening, assessment and implementation of a nutritional care plan – can significantly improve patient outcomes.¹¹⁻¹²
- Summit organizers and participants are aligned on the goal to improve patient survival through delivery of quality hospital nutrition care.



June 29, 2010. Hospital Nutrition Summit Day One.

During day one of the Summit, Dr Charanjeet Singh gave an overview of hospital malnutrition and its impact on poor patient outcomes and increased hospital costs. This was followed by a tour of Nutrition Center of Excellence Hospitals, St. Luke's Medical Center and The Medical City, headed by Dr Jeff Inciong and Dr Rey Resurreccion respectively.

Facing the Global Challenge of Hospital Malnutrition – Improving Patient Outcomes through Effective Hospital Nutrition Care

Dr Charanjeet Singh, Medical Director, Abbott Nutrition

Dr Singh began the Summit with an overview of the problem of malnutrition in institutions and its impact on both patient health and health care costs. Dr Singh showed that, surprisingly, in-patient hospital malnutrition affects an estimated 40% of patients worldwide including developed countries in North America and Europe. Patients that are most at risk include those recovering from illness or surgery as well as the elderly. He went on to explain that nutritionally high-risk patients are known to have higher mortality rates (44%) compared to well-nourished patients (18%).⁵ Further, poor feeding often results in protein-calorie malnutrition, nutritional deficiency and a compromised immune system.⁶ There is also a 70% decrease in physical fitness and a 30% incidence of depression.

After establishing the patient health and recovery risks malnutrition can contribute to, Dr Singh addressed costs. He referenced the British Association for Parenteral and Enteral Nutrition (BAPEN) 2005 report showed that malnourished patients had 65% more out-patient consultations, 82% more hospital admissions and 30% more days of hospital confinement.⁷⁻⁹ In the United Kingdom, the financial burden of malnutrition amounts to 7.3 billion Pounds (Figure 1).¹⁰

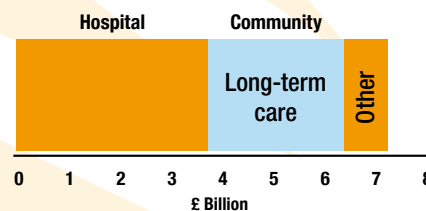


FIGURE 1: The Burden of Cost of Hospital Malnutrition in the United Kingdom

Dr Singh then showed that nutrition could make a difference in reducing cost. He referenced a 2-year nutritional study conducted at St. Francis Hospital in Delaware, USA which showed that nutritional screening upon admission and specific interventions initiated for nutritionally at-risk patients significantly reduced hospital stay, readmissions, mortality rates and complications. Total of savings amounted to \$1,000 per patient (Figure 2).¹¹⁻¹²

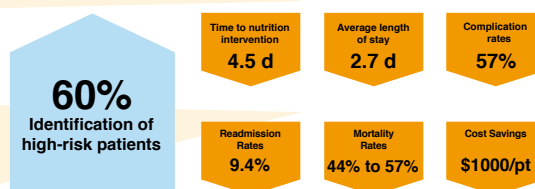


FIGURE 2: Outcomes of an Effective Nutrition Screening and Therapy Program: The St. Francis Study¹¹⁻¹²



Hospital Nutrition Practices Overviews: The Passion for Nutrition

PARTICIPATING HOSPITALS

The next part of the program gave participating hospitals the opportunity to share with the broader group information about their hospital and nutrition management practices including successes to date and challenges they face. Participating hospitals included:

1. United Christian Hospital, Hong Kong
2. Prince Court Medical Centre, Malaysia
3. Premiere Medical Center, Philippines
4. King Fahad Medical City, Saudi Arabia
5. Changi General Hospital, Singapore
6. Parkway Health Hospital, Singapore
7. Mackay Memorial Hospital, Taiwan
8. Yuan's General Hospital, Taiwan
9. Ramathibodi Hospital, Thailand
10. Siriraj Hospital, Thailand

The next part of the Summit enabled the group to take theory to practice. Participants visited two Nutrition Center of Excellence Hospitals for a first hand look at how their nutrition practices are managed – St. Luke's Medical Center and The Medical City. During this field trip, the participants had the opportunity to benchmark among each other and exchange information regarding their challenges and opportunities. They toured the hospitals and gained insights from presentations made at each venue.



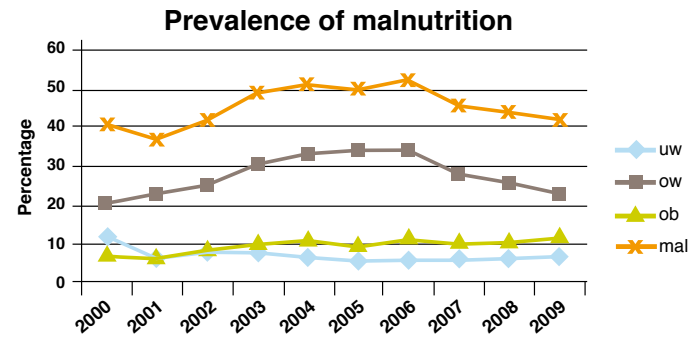
St. Luke's Medical Center The St. Luke's Medical Center Nutrition Support Team

Jesus Fernando Inciong, MD
Luisito Lido, MD
Reynaldo Sinamban, MD
Ruby Frane, Clinical Dietician
Donnabelle Faye Navarette, Clinical Dietician

St. Luke's Medical Center is considered a leader in nutritional management and training in the Philippines. The hospital's Nutrition Support Team (NST) has been in existence since 1992. In 2010, it was recognized as the independent Department of Clinical Nutrition. St. Luke's has produced graduates who have established their own nutrition support teams nationwide.

The NST has developed an efficient nutritional surveillance database system. Figure 3 shows the rate of in-patient malnutrition in St. Luke's over the years. Protocol includes measurements and recording of the patients' weight, height and BMI upon admission to determine their level of nutritional risk. High-risk patients are referred to the Clinical Nutrition Department and a nutrition care plan is prescribed. Calorie, protein and liquid volume targets are set in the

context of the patient's nutritional status and medical conditions. Ninety-four percent of caloric targets are achieved which equates to increased rates of patient survival. NST's success is reflected in the good compliance by physicians and other members of the hospital organization.



Summary of daily nutrition surveillance data from 2000-2009 at St. Luke's Medical Center.

UW - Underweight • OW - Overweight
 • OB - Obese • MAL - Malnourished

FIGURE 3: The Prevalence of Hospital Malnutrition in St. Luke's Medical Center.



The Medical City The Medical City Nutritional Management Services Team

Raymundo Resurreccion, MD
Marianna Sioson, MD
Christine Reyes, MD
Carol Hernandez, Clinical Dietician
Margarita Enriquez, Clinical Dietician

The Medical City has rendered 40 years of patient-centered care. It offers up-to-date services in Wellness, Cancer, Cardiovascular, Neuroscience and Regenerative Medicine.

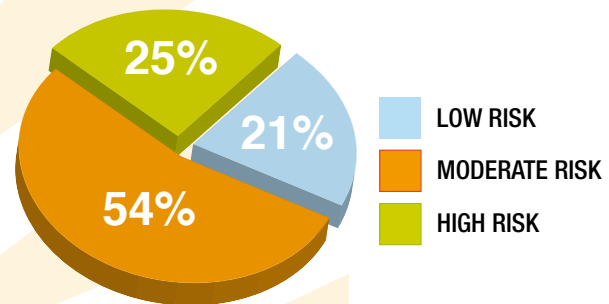


FIGURE 4: Nutrition risk score of patients who underwent nutrition assessment in 2009 (N=16,000).

Since 2008, screening, assessment and prescription of a nutritional plan are performed on all admitted in-patients. Nutritionally high-risk and moderate-risk patients are estimated at 25% and 54%, respectively (Figure 4). Management protocol includes screening by a nurse, followed by an assessment by a dietician and nutrition care plan by a clinical nutrition specialist. Enteral and parenteral feedings are implemented by nurses under the supervision of a dietician and a clinical pharmacist.

The NMS team has also developed its own training module for continued education for its staff. Cooperation from physicians for implementation of the program was obtained through information campaigns and dialogues.

June 30, 2010. Hospital Nutrition Summit Day Two.

Day two featured the keynote lectures from the US based Virtual Health Hospital System. Dr Ninfa Saunders, Executive Vice President & COO provided a compelling talk on the strategic vision of the institution and the importance of the patient experience in the evaluation of their success. Dr Saunders recognized that nutrition management is a critical part of that patient experience.

The Virtua Health System

*Ninfa Saunders RN, MSN, MBA, PhD
Executive Vice President for Health Services
Virtua Health System*

Dr Saunders began with information about the history of the Virtua Hospital System. Virtua Hospital System was formed in 1998 through a partnership between two community hospitals: the Memorial Health Alliance and the West Jersey Health System. A non-profit organization, Virtua Health is a sophisticated regional health care system that is currently the largest healthcare provider in Southern New Jersey. Virtua's Clinical Nutrition Services Department serves four hospitals: Berlin, Marlton, Memorial and Voorhees.

Dr Saunders then began to share what sets Virtua apart and how they achieved such high levels of patient care. What distinguishes Virtua is its Programs of Excellence (POE) in Cardiovascular Health, Stroke, Oncology, Pediatrics, Surgery, Women's Health and Orthopedics. These programs are benchmarked, evaluated and continually improved upon. By ensuring all services are of high quality, these POEs enhance the delivery of an outstanding patient experience.



Photo from left: Dr Ninfa Saunders, Eric J Skubish, Craig Scott and Dr Jane Ryan

Virtua is committed to its STAR Culture defined by five key factors: clinical quality and safety, excellent service, resource stewardship, a caring culture and hiring the best people (Figure 5). In the Virtua system, hospital administrators fully support and trust their people and emphasize employees as the "stars" of the company. All employees have an impact on patient care, and each is expected to uphold the STAR standards of behavior in all encounters with patients, families, co-workers and members of the community. Everyone is accountable for delivering an outstanding patient experience (Table 1).



FIGURE 5: Virtua Hospital System STAR Culture

Table 1. STAR Behaviors Deliver the Outstanding Patient Experience	
Best People	Hiring and keeping the best person for the job
Caring Culture	Showing understanding, empathy and compassion to patients and co-workers
Clinical Quality and Safety	Using evidence-based practices, national patient safety goals and continually seeking improvements
Excellent Service	Employing consistent, reliable, responsive processes and care
Stewardship	Making the most of our resources: money, time and materials

Virtua Clinical Nutrition Services

*Jane Ryan, PhD, RD
Director, Clinical Nutrition Services
Virtua Hospital System*

Making it Possible

Dr Saunders' presentation set the stage for Dr Jane Ryan's presentation focusing on nutrition management at Virtua. Dr Ryan took the participants through the entire process that she leads within this institution. She explained that the Virtua Nutrition Service provides nutritional management to its 4 acute care hospitals, 2 long-term and subacute facilities, a Center for Women, and 4 Ambulatory Centers for Nutrition and Diabetes Care. The service reports directly to Patient Care thereby increasing the visibility of the unit and integration of hospital resources. Staffing is flexible, allowing personnel to be moved from one location to another based on workload and the Veteran Affairs' Benchmarking Guidelines. The service is composed of nutrition coordinators, clinical dietitians, dietetic technicians, long-term care dietitians and a Women's Center dietitian. A centralized warehouse is used to facilitate storage and distribution of supplies.

How Virtua Does it

Dr Ryan then provided information on the entire process of nutrition management followed at Virtua. A comprehensive patient screening process takes place for 100% of all patients admitted to the hospital. This process includes a nutritional screening which is done by nurses within 24 hours of admission (Figure 6). Follow-ups are determined based on the level of care required and interventions are completed during the hospital stay. Advanced nutrition support and complete education of the patient and family are also provided.

Upon discharge, patients are provided with business cards to facilitate follow-up and communication. Communication with extended care, referral to outpatient services and provision for home care is performed to create a seamless transition.

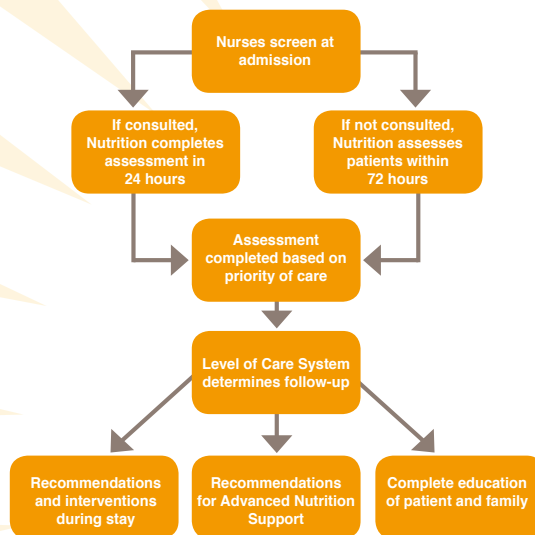


FIGURE 6: Algorithm of the VIRTUA Clinical Nutrition System

Dietitians also have ordering privileges. Oral supplements and prealbumins may be ordered without the need for physician consultation. Physician verbal orders pertaining to a patient's diet may be ordered by a dietitian who has demonstrated sufficient competency.

Dr Ryan emphasized that all these procedures are tracked and measured. Productivity records and quality monitors are kept and maintained, mostly online. Quality reports follow the DMAIC format: Define the objective, Measure, Analyze, Improve and Control.

Clinical competency is achieved and maintained through continuing education programs. There are even formalized written competencies for high-risk areas. These include calculating TPNs, energy needs and laboratory result interpretations, use of supplements and policies and procedure compliance.

Dr Ryan ended her presentation by graciously offering her continued expertise to any participants wishing to contact her after the Summit. She then provided copies of all screening and assessment tools to each participant in the Symposium. These tools included the Enteral Nutrition Formulary, BMI charts, Diagnosis Point System, Nursing Admission Database Form, and Interdisciplinary Plan of Care Form.

The Best Hospital Nutrition Practices: A Summary of Workshop Team Responses

The next phase of the Summit was intended to take the learning and experiences the participants had shared and translate those into the identification of Hospital Nutrition Best Practices. This began with a breakout workshop where four teams explored key areas of nutrition management practice in order to determine the best practice for each of these areas. These included Patient Screening and Assessment, Nutrition Care Planning, Discharge Procedures, and System Monitoring. Each group then provided a presentation to the Summit participants on their consensus best practices. Findings included:

- A nutritional surveillance system was encouraged in all participant hospitals. The need for benchmarking and reporting of prevalence and outcome of nutritionally high-risk patients in their respective institutions is critical.
- A follow-up or discharge nutritional care plan was emphasized. Some of the techniques discussed to be implemented were regular home visits, patient and caregiver education, and

coordination with social workers, homecare institutions and family members.

- Implementation and innovation of hospital nutrition care systems require hospital administration support for investment in staffing and other management systems. An open communication is needed between hospital clinical nutrition leaders and senior management for these proposed programs to be realized.

Formulating Hospital Nutrition Care Action Plans

The final activity for the Summit was for each hospital to create specific action plans for their hospital. Participants were provided with a planning template and were asked to identify key challenges and key next steps they would take. During this session, a key challenge shared broadly by the group was identified to be the difficulty in gaining Hospital Administration support. Dr Ninfa Saunders extemporaneously provided keen insights on how to present to senior level executives in order to achieve their goals. She provided inspiring direction and represented an example of a Hospital Administrator who had been convinced. Dr Saunders emphasized how fiscally sensitive their management team is, and that they have been convinced that the importance of nutrition is worth the investment in time and resources.

All of the participants shared a common goal of improving the status and clinical outcomes of their patients. Each of them also recognized that having a rigorous nutrition management system in place would not only improve patient outcomes, but would also save the institution money in the long run. They recognized the challenge of convincing Hospital Administrators of the value of providing Center of Excellence quality nutritional care for their patients, but had specific plans and energy to begin that process. They saw first hand how such a system was managed at St Luke's and Medical City and heard detailed information on how this is managed with the highest of standards at Virtua. Participants left the Summit with action plans and a determination to improve the management of nutrition within their institutions.

Hospital Nutrition State of the Art Summit: Future Directions

Given the success of this Summit, a 2nd Hospital Nutrition State of the Art Summit will be planned for calendar year 2011. Summit details are still being planned, but timing is targeted for June. Hospitals interested in participating to share and learn about state of the art nutrition practices are invited to contact their Abbott Nutrition representative.



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