Getting down to BUSINESS
Editorial

PHA’s Aria

At the end of his term, Dr. Joel Abanilla, now the immediate past PHA president, has delivered his most outstanding aria. He has sung from his heart with all the *vibrato* and *tremolo* as his piece chronicled the crescendos and decrescendos of the Philippine Heart Association (PHA) for the past year.

After considerable time, the PHA has belted out in allegro the 2014 *Philippine Clinical Practice Guidelines for the Management of Coronary Artery Disease*. A monumental achievement in itself, its release has paved the way for the PHA to compose our own local practice guidelines.

But beyond the release of such guidelines, what is remarkable is the level of maturity that the PHA has taken forward to improve the delivery of heart health care. Now, the Filipino cardiologist knows his patient better and has acted accordingly.

Research has taken its accelerando and lentando for the past year. The PHA through the different councils has embarked on ambitious nationwide scientific investigations and registries. We are expecting to derive local data that will definitely influence our local practice of cardiology as soon as investigations on CPR outcomes among adult cardiac arrest patients and registries on heart failure, cardiac catheterization and congenital heart diseases are done.

Moreover, the society’s support to promote research like the LIFECARE Study and Good Clinical Practice workshops is laudable.

However, research from the different training institutions has taken a dive. Compared to previous years, performance in terms of papers accepted for presentation for the 46th PHA Annual Convention and Scientific Meetings was, in general, less sterling. Blame it perhaps on a more stringent screening, the fact remains that numbers are dwindling.

Cardiology fellowship training under Dr. Abanilla has stepped up to allegro. Formats for conferences have been revised to provide the current needs of fellows in training. The refresher course intended as a specialty board review has been beefed up to meet expectations of examinees. True enough, efforts to improve fellowship training have paid off as the recent Diplomate board examinations posted the highest passing rate of 81% in recent history.

Membership has sung more dynamically *ala mezzo forte*. With the creation of the newest chapter, the Cagayan Valley Chapter is a testament of an undying commitment of the PHA to forge partnerships, not only in the promotion of health benefitting the patient in general, but for the protection of the cardiologist’s interests too.

Among the most meaningful feats the Abanilla Administration can be proud of is its launch of its advocacy to promote women’s cardiovascular health. To take no less than celebrity actor-turned-politician Vilma Santos at the forefront of its campaign is proof of the PHA’s serious thrust to propel the advocacy forward. *Marcato*, it is indeed!

To cap 2014 for the immediate past administration, the recent 46th PHA annual conference is by itself a resounding success: *colossale et largemente*!

The record breaking attendance, both by local and foreign delegates, is solid validation that as a medical society, the PHA remains to be one of the most, if not the most, respected and trusted authorities in the practice of medicine in the country.

The international roster of well-respected speakers has claimed for the PHA a berth in global cardiology. The innovations introduced in the last convention were attestations to the zest and promise the PHA leadership is fueled with to bring us on to a more promising future.

But amidst these achievements by the

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Record high attendance
With a 1,898 turnout this year’s convention also gathered the biggest number of health pros from different disciplines.

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Dr. Mariano Alimurung lecturer tackles Philippine echocardiography’s transformation and triumphs.

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Chip off the old block

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A cornucopia of the PHA’s remarkable feats
Editor’s Note

As we culminate the 63rd year of the Philippine Heart Association (PHA), we bring you the last issue of the PHA NewsBriefs under Dr. Joel Abanilla’s term. This issue focuses on the proceedings of the recently held Annual Convention.

With a record 1,898 attendees including foreign delegates and speakers, this year’s meeting was definitely one worth remembering and one worth writing down to include in the history of the PHA.

We feature the President’s report and the achievements of the Association this past year, the articles on the scientific sessions, the highlights of the social events and special ceremonies, and the write-ups on the recipients of the different awards.

This part of the year draws excitement among members of the PHA. This yearly convention serves as a reunion of colleagues, friends, former co-trainees, and mentors. It is also a time when the membership gets to elect the Board of Directors who will steer the PHA for the coming year, and a time when a transition in leadership takes place. Whilst this change in leadership is constant in the life cycle of the Association, the advocacies and thrusts of the society remain the same. Finally, it is also a time when a new group of cardiologists are formally inducted as diplomates of the Association after successfully hurdling the specialty board examinations. The PHA therefore will not only undergo a transformation in terms of its officers, but will likewise grow in terms of numbers.

With new members and new leaders, new obstacles emerge. As in the past, membership engagement continues to be a challenge.

Aply titled “Getting down to Business”, this edition’s cover illustrates the focus and no-nonsense attitude of the PHA Board during the Annual Business Meeting. It also serves as a call and a challenge to the incoming Board, the current members, and the new diplomates and fellows to get down to business. A challenge to maintain the momentum that has been established by the current leadership, overcome the difficulties that the society faces now and will face in the future, and move the Association further towards its goals.

This will also be my last edition as Editor-in-chief of the PHA NewsBriefs as I turn over the reins to my Associate Editor, Dr. Don Robespierre Reyes who will lead the PHA newsletter, which will assume a new name, the PHA HeartNews & Views in the coming year. I thank the Association for the opportunity to serve as head of the PHA’s news publication for one year, as well as all the writers and contributors who have shared their time, talent and dedication in ensuring that we come up with quality publications that are not only newsworthy but something the members look forward to.

Mighty ♥

About the Cover

PROJECTED P2.7-M
REVENUE AFTER TAX —
PHA top brass (fr. L) Drs. Joel Abanilla, Alex Junia and Raul Lapitan, report an excess of revenue over expenses after tax of P2.7M and the electoral results during the 46th PHA Annual confab Business Meeting. ♥
Every leader is unique and these guidelines and principles are freshly interpreted and at times, made more relevant by the inventiveness and variety each head brings to the PHA leadership table.

VALEDICTORY ADDRESS

JOEL M. ABANILLA

Closing Ceremonies
46th PHA Annual Convention
& Scientific Meeting
May 29, 2015
Edsa Shangri-La Hotel, Mandaluyong City

I am about to leave this high ground -- the presidency, the promontory of the PHA echelon, and before me sprawls the vista that stretches to the horizon of my term as PHA president. From this point, I see the road, both straight and winding, that led me here. I also seriously look at the trails blazed by my esteemed predecessors and marvel at the twists and turns that we need to negotiate to get to this point.

Now, I feel a great sense of elation on how we travelled this exciting and at times, treacherous journey. I strain my eyes to find the others who travelled with me from the beginning of my leadership term only to find all of them standing behind me. This elation is tempered by a great sense of gratitude and humility knowing so fully well that I did not get there by myself but WE MADE IT ALL TOGETHER! And allow me to say "What a ride it was!"

To these many selfless and untiring men and women who shared precious time, brilliant ideas and sheer hard work, "PHA IS SO PROUD OF YOU". You have significantly helped strengthen the very foundations of the association. Among the many, I can not allow this night to pass without recognizing their important and outstanding contributions:

1. Dr. Nelson Abelardo and Dr. Delia Pelaez -- the completion of the Cor Curriculum for Adult and Pediatric Cardiology, respectively will provide the mantra for better training programs of our fellows in the years to come.

2. Dr. Butch Recto -- the changes you have initiated in our Subspecialty Diplomate Examination will translate to a more reliable and fair evaluation of our graduating fellows.

3. Dr. Vic Lazaro -- your leadership in completing and disseminating our CAD Guidelines will help improve treatment of ACS in the country.

4. Dr. Adriel Guerrero -- your meticulous work in crafting our Lipid Guidelines make us proud that we can come out with a set of guidelines that is at par with the best in the world.

5. Dr. Leni Iboleon Dy -- the effort you poured into the women’s advocacy and its successful launching at Meralco is simply priceless.

6. Dr. Paul Reganit – your infectious enthusiasm in working on our own Heart Failure Registry will definitely help improve the management of heart failure cases.

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Trusting his instincts and his predecessors’ admonition, Dr. Joel Abanilla adhered to the existing Priority Programs of past PHA presidents. He worked with them as a member of their Board of Directors. The PHA pillars’ advice: To keep continuity, to keep pace with trends, inject the element of innovation into the ongoing noble undertakings. This way, the PHA can save time, effort and capitalize on logistics invested. Among the legacies of the Abanilla administration is posting P2.7-M profits after tax, the completion and embarking on quality research from guidelines to registries/surveys, standardization of training programs, progressing training the trainors, interactive case discussions, etc.

The Abanilla legacy

A. Embark on Quality Research

His term is synonymous with the coming out of the 2014 PHA Philippine Clinical Practice Guidelines for the Management of Coronary Artery Disease, the beginning of the Heart Failure, Cardiac Catheterization and Congenital Heart Disease Registries, the CPR Outcome among Adult Cardiac Arrest Patients in Tertiary Hospitals in the Philippines: A Prospective Study and the Survey on Echocardiography Practice in the Philippines. Research initiatives like the LIFECARE Study Philippines, research papers that were accepted for presentation in regional/international scientific meetings got financial support from PHA. In October 2014, the Good Clinical Practice Workshop was conducted for members who were interested in the guidelines on the ethical aspects of a clinical study. Conducted by Drs. Jorge Sison and Alisa Bernan, chair of the Scientific and Research Committees, respectively, it was also held as a reminder to all the members that they have to be well equipped with the tools when involved with clinical studies.
B. Standardization of Training Programs

Conceptualized and launched during the term of Dr. Eugene Reyes (2013-2014), the Core Curriculum Training Program Guidelines for Adult and Pediatric Cardiology, is to standardize the cardiology training program that is acceptable and applicable in all the PHA accredited training institutions. The objective is also to ensure that graduates of the training programs are competent, qualified, humane and civic-oriented physicians.

The thrust of the 7th National Basic Life Support and Advanced Cardiac Life Support Training the Trainors is to decrease the time from the onset of cardiac arrest to the onset of CPR, which often occurs outside the hospital. The survival outcomes among cardiac arrest patients will improve; to review doctors on their knowledge/techniques on how to conduct trainings and the conduct of the Training the Trainors outside Metro Manila.

On Interactive Case discussions, the CEPC Sub-Committee adopted a new format to cover all aspects of diagnosis, treatment and diagnostic modalities in the presentation of interesting cases.

The scope of the 9th Annual Refresher Course lecture was reformatted based on the comments of previous participants.

C. Membership Activation/ Continuing Medical Education

Some provincial-based members deemed it important to create a new chapter to accomplish the projects and programs relevant to their locality and members and aligned with the PHA Mission and Vision of the Association. There are now 11 PHA Chapters with the Cagayan Valley Chapter as the latest addition.

The new set of guidelines for members to remain in active status and good standing are: attendance to the annual convention/business meeting and payment of annual dues. For Chapter members, the national office ask the Chapter officers to issue a certification to members of good standing.

Newly-inducted diplomats are encouraged to actively participate in the activities of the Association by applying for membership or actively participating in the activities and/or projects of any of the 17 councils or the 11 chapters.

The CORE-give project (CME to reinforce and Generate Drive for Excellence) provides an opportunity for the chapters to conduct CME activities for their members, generate revenue for the chapter and promote camaraderies among their members. For this year, the following CORE

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The 46th Philippine Heart Association Annual Convention and Scientific Meeting from May 27-29, 2015 posted a turnout of 1,898 composed of cardiologists, internists, family practitioners, cardiovascular surgeons, trainees, and allied medical professionals from the country and around Asia, according to Dr. Raul Lapitan, PHA secretary and over-all chair of the 46th annual meeting.

This year’s annual conference holds the distinction of gathering the biggest number of delegates and multi-specialists hedged on the theme “Changing Healthcare Environment: New Perspectives and Evolving Strategies.”

“The ultimate distinct goal of delivering the best possible health care services prevails,” Lapitan emphasized, considering a myriad of emerging facts and theories, guidelines, recommendations, strategies and techniques complicated by differences in cultural and socio-economic factors.

PHA President Dr. Joel Abanilla noted the role and impact of Philippine cardiology in the evolution of “global cardiology.” He further hopes that the proceedings of this conference will help the Filipino doctor to “narrow the gap between global quality cardiovascular care, local human touch approach and affordability.”

1,898 flock to 46th PHA confab
**PHA ushers in new fellows, diplomates, associate fellows**

SIXTY-one new cardiology fellows, 80 diplomates and 74 associate fellows were inducted by Abanilla as part of the Convocation and Opening Ceremonies of the 46th PHA Annual Convention and Scientific Meeting.

Of the new fellows, 54 are adult cardiologists and seven are pediatric cardiologists who have maintained good standing with the PHA for at least one year after passing their respective diplomate board examinations.

The new diplomates consist of 74 adult and six pediatric cardiologists. The new adult cardiology diplomates passed the Board last April 18, 2015 while the new pediatric cardiologists took their certifying examinations last March 26-27, 2015.

The 72 new adult cardiology and 2 pediatric cardiology associate fellows come from the 16 different training institutions across the country. They were inducted into the PHA after completing at least one year of training in cardiology.

The inductees were presented to the PHA and conferred the titles by Dr. Cesar Recto III, chair of the Specialty Board of Adult Cardiology and Dr. Maria Rhodora Garcia-De Leon, chair of the Specialty Board of Pediatric Cardiology.

PHA President Dr. Joel Abanilla inducted the new members of the PHA.
OPENING CEREMONIES

May 27, 2015 | Edsa Shangri-La Hotel | Mandaluyong City
Santos presents Phil Echo’s evolution

By Myla S. Supe, MD

“I remember his sartorial elegance. His demeanor. His lectures, an oratorical delivery.”

Such was the ode Dr. Romeo J. Santos gave to his teacher Dr. Mariano Alimurung for the former’s lecture delivered for the latter’s dedicated memorial lecture during the convocation and opening ceremonies of the 46th PHA Annual Convocation and Scientific Meeting.

Santos, the 52nd PHA president and a former student of the founding PHA president Dr. Alimurung provided the imagery of the man whom most of this generation’s cardiologists owe much, but know very little of.

A native of Nueva Vizcaya, he talked on the beginnings of Philippine echocardiography to what it is now. Tracing the history of Philippine cardiology intertwined with the beginnings of the “ultrasound cardiology,” the first clinical application of ultrasound, a term which fell to disuse in favor of Feigenbaum’s echocardiography, Santos took pride that he was among those who were able to use all the permutations of the echo machines, from M-mode, to the one-beat 3D transesophageal echocardiography.

Santos further narrated how clinical echocardiography has become the most widely used and comprehensive cardiac imaging modality in most clinical situations ever since it was first established in the Philippine Heart Center for Asia.

The development of clinical echocardiography in the Philippines can arguably be gleaned from the practice of echocardiography at the Philippine Heart Center not only through the years of acquisition of innovative machines but more so for the enhancement of clinical diagnostic skills, the echocardiography expert noted. The former PHA president further recalled how the Philippine Society of Echocardiography (PSE) was later organized by Dr. Homobono Calleja (Father of Echocardiography in the Philippines) in 1990. Thereafter, in 1996, the PHA developed the Council of Echocardiography.

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Drs. Abanilla & Santos
Dr. Rodolfo C. Soto Professorial Lecture

Ready for the MitraClip?

By Timothy C. Dy, MD

Sweden's topnotch interventionist Dr. Magnus Settergren delivered a comprehensive and informative lecture on mitral regurgitation for the Rodolfo C. Soto Professorial Lecture.

Settergren is the director of Interventional Cardiology at Karolinska University Hospital in Stockholm, Sweden, and one of the world's foremost authorities on percutaneous mitral valve repair.

Settergren presented pertinent information on functional mitral regurgitation (MR), its impact on survival in patients with congestive heart failure (CHF), particularly the poor prognosis of these patients even when treated optimally medically or when subjected to open mitral valve annuloplasty.

The Swedish interventionist further elaborated on other causes of MR and the shortcomings of current surgical techniques in addressing the needs of all MR patients.

Based on articles cited, a fair segment of patients with significant MR and CHF are left untreated for various reasons, or treated without significant long-term benefits. Because patients like these exist, lesser invasive techniques have become necessary to ensure these patients are not left untreated, Settergren said.

The MitraClip device was then introduced as well as its indications (functional and degenerative MR) and contraindications, along with the concept on how it reduces MR, tracing its roots to a surgical procedure called the Alfieri stitch.

Videos on how the procedure is performed were showed. The trials that support the use of MitraClip were then presented. Of particular interest was the EVEREST II (Endovascular Valve Edge-to-Edge Repair Study) trial, which looked at the patients randomized to MitraClip versus open-heart surgery. The trial showed poorer MR reduction in the first year with MitraClip, indicating that if MitraClip was to fail, it does so in the first 6-12 months.

However, in patients whose MR was minimal after the first year of MitraClipping, their MR reduction paralleled that of surgery. Settergren also pointed out that the procedure requires a learning curve and the centers that participated in the trial were all starting their respective MitraClip programs, thus MR reduction may not have been maximized.

Despite the difference in MR reduction however, it is of note that the mortality rate and rates of CHF were similar in both groups all the way up to 4-yr follow-up. This suggests that MR reduction need not be down to zero or 1+ to effect clinical improvement, and that a reduction from severe MR to mild to moderate MR has a huge clinical impact.

A high-risk registry (HRR) sub-study within the EVEREST II trial was also presented. In patients who are no longer surgical candidates, MitraClip showed significant survival benefit over medical therapy (75% versus 55%).

Settergren went on to report that to date, approximately 18,000 MitraClip procedures have been performed globally for a wide array of indications. Various percutaneous therapies that are either available or still being studied were likewise reported. These include percutaneous annuloplasty, percutaneous chordae insertion, and percutaneous mitral valve replacement. With each technology presented, limitations were discussed and cited as reasons why these therapies have yet to be widely used.

Despite some early technical difficulties in simulcasting his slides in all three screens in the plenary hall, Settergren did more than just discuss MitraClip. He expertly took the audience through the landscape of MR and all the therapies available for its treatment, then highlighted the place MitraClip holds within this spectrum.

Given the over-all picture that Dr. Settergren painted, it is quite clear that we are indeed ready for the MitraClip and that in time, it will likely prove to be mainstream therapy for carefully selected patients with severe MR.

The Rodolfo C. Soto lecture of the annual scientific sessions of the Philippine Heart Association traditionally tackles new or controversial developments in the field of interventional cardiology.
The body is always kept in a state of homeostasis but oxidative stress disturbs this balance. This was the primary message sent before a large crowd by nutritional biochemist Dr. Shawn Talbott in his talk.

**Dr. Ramon F. Abarquez Professorial Lecture**

**Talbott: Free radicals trigger oxidative stress**

By Lauren S. Valera, MD

US-based Talbott, who holds a PhD in Nutritional Biochemistry, kept the audience’s attention with his simplified version of an otherwise convoluted subject.

The American health and fitness advocate defined oxidative stress as exposure to free radicals which are highly reactive chemical entities containing a single unpaired electron in the outermost orbit. These are generally unstable and highly toxic to cells.

The formation of superoxides use up 2-4% of the oxygen in the mitochondrial respiration, and have lethal effects if not quickly quenched.

Among the free radicals, superoxide is the most damaging. Free radicals participate in various enzyme catalyzed reactions in the body such as signal transduction, gene expression, activation of nuclear transcription factor, ageing and disease. Administration of high doses of antioxidants such as the vitamin E and C completely counteracts these free radicals. Too much of antioxidants leads to accelerated catabolism of free radicals in tissues.

Oxidative stress is viewed as the gap between exposure to free radicals and the body’s ability to protect the person from the effects of the exposure.

To manage the cellular stress, the body’s first defense is to produce antioxidants via the activation of the Nrf2 pathway.

Phytonutrients modulate its actions. Whenever there is oxidative stress, Nrf2 is released from KEAP1 and binds to ARE forming a complex.

A Fellow of both the American College of Sports Medicine and the American College of Nutrition, Talbott asserts one of the most potent activator of the Nrf2 pathway is exercise. "Physical activity amplifies Nrf2 activity threefold. Aging, on the other hand, contributes to its decline."

Not only does Nrf2 activation reduce systemic oxidative damage, it offers further protection of the cardiovascular tissues by activating anti-atherosclerosis genes that reduce ventricular fibrosis, block intimal hyperplasia, and improve cardiac output.

"Each antioxidant is dedicated to a specific free radical, and works synergistically to quench oxidative stress in a manner that maintains balance between the two," explained the chief science officer of LifeVantage.

While the protective effects of antioxidants are often touted in disease prevention, Talbott warns consumers against taking high doses of stand-alone antioxidants.

"Too high levels of interference with internal system of protective antioxidant enzymes," warns Talbott. He supports his claims with several studies illustrating the ill effects of high dose antioxidants. Among those he cited was the correlation of prostate cancer with high doses of Vitamin E.

A marathoner and many a time ironman participant, Talbott promotes exercise as the most potent activator of the NRF2 pathway.

However, Talbott revealed that some nutrients called phytonutrients can also activate NRF2 pathway in all the tissues of the body. Examples of phytonutrients are the catechins from green tea, tumeric and ashwaghanda. Protandim is a supplement that is a combination of phytonutrients.

Studies have shown that protandim prominently increases the protective enzymes in the body. The age related increase in free radicals is completely abolished by protandim. Oxidative stress is reduced by about 40%. Protandim protects the cardiovascular tissues by increasing antioxidant enzymes, decreasing oxidative damage, decreasing cerebrovascular leakage, decreasing fibrosis and intimal hyperplasia and increase in cardiac output.

His take-home message: “Don’t take antioxidants; make antioxidants. It is more efficient and more effective.”

Talbott is an athlete himself and has participated in several marathons including the Iron Man. He is part of US First Lady Michelle Obama’s “Let’s Move!” campaign to fight childhood obesity.

The Dr. Ramon F. Abarquez Professorial Lecture is a biennial event during the PHA annual convention and scientific meeting. The lecture, held in honor of one of the pillars of Philippine Cardiology, focuses on the applied science of coronary artery disease, heart failure and microcirculation. *(with reports from Karen Arellano, MD)*
With the recent advances in cardiovascular technology, cardiologists now find in their hands a whole gamut of cardiac imaging techniques providing more precision and ease in the diagnosis of varied cases. Is Echocardiography, the forerunner of cardiac imaging, still relevant amidst these diagnostic armamentarium?

**Dr. Homobono B. Calleja Professorial Lecture**

**AMIDST AN ARRAY OF TOOLS**

**Echo: No. 1 non-invasive imaging technique**

*By Ma. Lourdes E. Bunyi, MD*

Dr. Chai Ping of National University Heart Center Singapore delivered this year’s Dr. Homobono Calleja Professorial Lecture and talked about “The Role of Echocardiography in the Multimodality Imaging Era.” He is an expert in non-invasive imaging of which echocardiography is only one of those. Cardiovascular MRI and Cardiac CT scan are included in his expertise.

Ping submits that echocardiography is still the most important non-invasive imaging technique in this era where a wide array of imaging tools have surfaced. While most cardiologists get excited with advancements in Cardiac MRI and CT scan, and despite increasing utilizations of these tools, echocardiography still continues to grow. Showing the practice of American cardiologists, echocardiography remains the number one procedure that is performed, according to his charts. This establishes the position of relevance of the said tool. According to him, echocardiography’s portability and versatility make it the “only imaging modality that allows cardiovascular assessment at the bedside, for the most critically-ill patient, without complications, unrestricted by arrhythmias, cardiac devices, renal failure, claustrophobia, or pregnancy.” He further emphasized its direction toward miniaturization-- from large machines to laptop portability to hand-held devices, the latter of which are predicted to replace the stethoscopes in the future. The shift is already felt in Singapore where students are already trained to use the hand-held device. Whether we like it or not, it seems that bedside auscultatory skills will be pushed aside by this technology.

Ping went on to show interesting cases where echocardiography either has clinched the diagnosis or has initiated the discovery of peculiar things from routine studies leading to diagnosis of interesting cases.

Echocardiography remains the first choice in evaluating left ventricular function at the bedside. He cited inaccuracies of echocardiography due to poor image quality or the use of some geometric assumptions causing a high level of variability in the different methods in getting ejection fraction. These, according to him, are offset by improvements like the use of echo contrast agents to improve image resolution and the utilization of 3D echocardiogram to reduce the variability of LV volume measurements. A meta-analysis was presented comparing 2D against 3D echocardiogram on measurement of LV volumes and ejection fraction, with cardiac MRI as the gold standard. Results showed that LV volumes are more underestimated in 2D than 3D echocardiogram, but there is not much difference when it comes to ejection fraction. While citing the importance of 3D echocardiogram, Ping was quick to point its setbacks like lower image quality and lower spatial and temporal resolution. Echocardiography, he added, is also well established in assessing wall motion abnormality during rest and stress without the hazard of radiation. Contrast echo helps in improving resolution. He pointed out though that there are already highly specialized centers that use stress MRI.

Heart failure, one of Ping’s many interests, is one area where echocardiography remains the primary diagnostic tool. He cited the Class 1 recommendation for its use in such case given to it in American cardiology. Other modalities have landed in the Class 1-2 category but these are generally utilized after echocardiogram when discrepancies arise. He cited specific cases highlighting that the strength of echocardiography is in the assessment of diastolic function. An interesting study presented is the high sensitivity of echo findings of an Ea less than 15 and EF of 68% and above in predicting genotype of preclinical hypertrophic obstructive cardiomyopathy. He went on to discuss other modes like speckle tracking, strain and tissue Doppler imaging to stress different tools of echocardiography in assessing diastolic function. He also noted that echocardiogram is the only non-invasive tool that can measure pulmonary artery systolic pressure.

Other areas mentioned where echocardiography is classically useful is the evaluation of valve hemodynamics, 

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Mabilangan notches top 2015 College Awards

Looking back -- in 1992, my beloved PHA named me Distinguished Teacher Awardee. Then in 1998, I received the Most Distinguished Science Award. This time, I am being given the Distinguished Fellow Award.

What can I say? Thank you. Thank you. Thank you for the three awards.

To my young colleagues, fellows, diplomats and associate fellows, Be good and be great.

There has been a paradigm shift. The patients are no longer uncritical, are no longer subservient and no longer reluctant to ask questions, demand rationale or explanations of procedures and effects of treatment.

Let me quote Dr. William Osler, the great medical scholar and master clinician: “The good physician treats the disease. The great physician treats the patient.”

The heart is what separates the good from the great.

Distinguished Fellow Award

PEDIATRIC cardiologist Dr. Luis Mabilangan led the PHA league of PHA College Awardees during the Convocation and Opening ceremonies.

A clinician, university professor and researcher for the past 50 years, Mabilangan was bestowed the honor of being this year’s Most Distinguished Fellow. He was PHA Most Distinguished Teacher in 1992 and Distinguished Scientist in 1998.

A pioneer in the diagnosis and treatment of pediatric heart disease and an authority in Rheumatic Fever and Kawasaki Disease, he has authored medical books and numerous scientific articles.

Now retired, he still continues to inspire not only the University of the Philippines College of Medicine, his alma mater, but the entire national medical community.

The Distinguished Fellow Award is the most prestigious and highest among the PHA College Awards and is conferred to a fellow of the College who has received any two of the College Awards and is qualified to receive a third award. In lieu of the third award, the Distinguished Fellow Award is given.

Distinguished Fellow Award
Dr. Joel Abanilla, president of the Philippine Heart Association, distinguished officers and members of the Board of Directors, fellow cardiologists, fellow physicians, friends, ladies and gentlemen, good morning.

I am honored to receive this award and to be counted among those who received this award before me. For this, I thank the Cebu Chapter for nominating me and the Awards Committee and Board of Directors for giving their approval.

I also thank all my mentors at the UP-PGH, many of whom have been recipients of the Distinguished Teacher Award, and who serve as my role models in teaching;

And to God Almighty for all the blessings He has showered on me and for keeping me in good health that I may continue my vocation.

Distinguished Service Award

Thank you so much for this Award which I dedicate to the dynamic and enterprising PHA NewsBriefs Team.

When I took on the job which was elevated to greater heights by my predecessors, all I had was a love for writing and a little talent. The PHAN editorial staff which grew as the publication evolved through the years, further stirred up my passion to write and explore makeover concepts.

I know that there is so much talent in this huge room, there are a lot of future editors that can be tapped.

To all the past presidents, thank you for giving me the opportunity to serve PHA and to the PHA Board and the Awards Committee, thank you so much for this award.

Competent and compassionate

Cebu-based cardiologist Dr. Enrico Gruet received the Distinguished Teacher Award.

The dean of the Cebu Doctors’ University Hospital is highly revered for his competence and compassion as a physician that define his being an astute clinician and an effective teacher.

Gruet is known as a no-short cut clinician. He has inculcated in his students, trainees and colleagues the value of taking histories, doing physical examination and managing patients in an organized and efficient manner. His mild demeanor has opened doors for better discussions and interactions during learning activities.

The Distinguished Teacher Award is given to a fellow of the College who, because of his/her demonstrated abilities as outstanding teacher, is considered to have made contributions to cardiology through the teaching and mentoring of students at the undergraduate or post-doctoral levels.

First in PHA history

Dr. Erlyn Piedad Cabanag-Demerre, the longest-serving, PHA Newsbriefs editor in chief was accorded the Distinguished Service Award.

She selflessly and generously served as EiC from 2006 to 2014. She is responsible for transforming the official publication of the PHA from a newsletter into a glossy, hip and lay-friendly magazine that it is today. She has been writing for the PHAN since 2002.

With her at the helm, the PHA Newsbriefs did not only bring news about the PHA to readers but it also carried the different advocacies of the society forward.

The Distinguished Service Award is given to any physician, scientist, lay person or institution who by individual or concerted effort has made profound contributions to cardiology through delivery of services and the furtherance of the goals of the PHA in the national or international level for at least 10 years.
Distinguished Scientist Award

Thank you, Dr. Bongosia, for trying to convince me that I am indeed a worthy recipient of this prestigious award and for believing in me more than I believe in myself. With full trust in the collective wisdom of the members of the Awards Committee and the officers of the PHA, I am humbly accepting this award for which I will be eternally grateful.

If there is a scientific work that could probably justify this award is my research on atrial fibrillation that provided an answer to the chicken or egg question whether atrial dilatation is the cause or the consequence of atrial fibrillation.

I would like to recognize the presence of my family led by my beloved wife and three of our six children, and openly thank them for supporting me in all of my undertakings not just for earning a living but also for living a life. Thank you to all my mentors and colleagues in the PHA. Have a blessed day.

Saga of a sagacious cardio

With four volumes on electrophysiology published, Dr. Edgardo Timbol is this year’s Distinguished Scientist.

Trained in electrophysiology in Australia, Timbol has published four volumes of “Dysrhythmic Tales from the Heart.” His books have simplified the complexities of the electrocardiogram for the student and the teacher as well.

The Pampanga-based cardio-electrophysiologist has likewise published several researches and has been a regular columnist for the PHA Newsbriefs.

The Distinguished Scientist Award is given to an individual who must have contributed significant scientific knowledge in the field of cardiovascular diseases, pioneered in diagnostic and therapeutic procedures in the management of cardiovascular diseases or published original papers in reputable local or international journals.

Most senior cardio in practice

Perhaps the most senior actively practicing cardiologist in the Philippines, Dr. Florina Kaluag received the PHA Loyalty Award.

Considered to be a “rose among the thorns” in the fifties, Kaluag returned to the Philippines to set up her cardiology practice after training in the US. She is credited for staging the first international cardiology forum in the country that was attended by experts from the American College of Cardiology and thousands of Filipino doctors.

The first secretary-treasurer of the PHA, she is also known for her passion in teaching students and trainees. She was awarded PHA Distinguished Fellow in 1990.

The Loyalty Award is bestowed on a past president or past director or officer of the PHA or any of its chapters who has not been a member of the board of directors for the last five years. The awardee must have continuously served the PHA in various capacities to the furtherance of its goals. He or she must be an exemplary source of support and inspiration for PHA members.

Loyalty Award

Dr. Joel Abanilla, president of the PHA, members of the Board, distinguished guests, fellow physicians, warmest greetings. I am, without doubt, humbled and honoured by this award. I am humbled because I saw the early days of the PHA, with the likes of Drs. Alimurung, Samia, Barcelona, Perteirra, Dayrit and Herrera. They were giants in those days of Cardiology. And I have seen this organization pass through new leaders and younger members, and evolve into what it is today: a prestigious and respected society of specialists in cardiology. And I am honored that you deem me fit for this loyalty award. I am loyal because I believe in this organization and all it stands for. I am loyal because of my love for endless learning. I am loyal because you are the wellspring from which flows all that I am today. Thank you again for this award.
Conventional program undergoes makeover

DELEGATES to the 2015 PHA annual conference were surprised and delighted with the new look of the convention souvenir program.

The novel form is easy to hold and open for a quick browse anytime. The program book measures 4.25” x 9” and is printed in full glossy color. The book contains all the usual parts of a traditional souvenir program of the PHA convention.

According to Dr. Raul Lapitan, overall chair of this year’s annual meet, the new form was designed to conform with souvenir program books in international conventions.

Pages of the book are color coded for easy reference. Pages for pre-convention activities are in beige, convocation and opening ceremonies in green, morning sessions in magenta, afternoon sessions in yellow, luncheon symposia in grey, dinner symposia in pink, poster presentations in violet and the closing rites in cyan.

The program book has a false cover and infold pullouts that contain the three-day program at a glance and guide to the location of exhibit areas.

Abstracts of scientific researches accepted to this year’s convention are contained in USB which is inserted in a specially-designed pocket at the inside back page of the book.

Moreover, the newly designed book carries the first logo and slogan for a convention of the PHA. The logo which bears the number 46 is uniquely Filipino as it shows the colors, the sun and stars of the Philippine flag.

The logo is accompanied by a caricature named “Happy Pinoy” that shows a cartoonized heart and Filipino doctor at the center.

From this convention on, the PHA will carry the slogan “Because your heart matters.” The slogan is placed on the left side of the PHA official logo.

The new logos were rendered by a commissioned artist based on the ideas of Lapitan and Dr. Jorge Sison, while the slogan was conceived by Dr. Marcellus Francis Ramirez. All three are prime movers of this year’s annual meeting.

Now, every lecturer is virtually ubiquitous in all the sessions

The PHA Website team has made a way for interested individuals to have that chance of listening to different scientific lectures and discussions in their own convenient time and place.

PHA Convention Website chair Dr. Marcellus Francis Ramirez made sure that major sessions were uploaded onto the PHA website at least an hour after the session.

He further said that the PHA website is user-friendly. Icons that will direct website visitors can be identified easily on the home page. Sessions are sorted according to the day these were conducted.

This uploading of sessions to the website is on its fifth year. It was conceptualized to cater to the growing needs of physicians who cannot physically attend symposia and lectures to get abreast with the latest in the field of cardiology.

Selected sessions during the past four annual conventions can still be accessed and viewed at the PHA official website.

Interested individuals can log in at the new convention website www.46th.phihcart.org or the PHA official website at www.philheart.org.
Junia: 64th PHA president

3rd Chapter member to clinch the top post

By Bernadette Santiago-Halasan MD

Dr. Alex T. Junia is a fastidious worker, no-fuss, down-to-earth and a good-natured person. A leader who walks the talk, his track record is just but exemplary and his work ethics is impeccable, thus his presidency was a very much expected landslide victory at the national level.

The Leyteño by blood and Cebuano by birth Dr. Alex T. Junia is the third and youngest Chapter member to ascend to the highest position of the PHA. The first chapter president was the late Dr. Ernesto Namin (Bacolod) while the second one was Dr. Anastacio Aquino (Baguio).

Dr. Eugene Reyes, chair of the Elections and Nominations Committee made the announcement before members of the PHA during the 46th PHA Annual Convention Business Meeting on May 28, 2015 at Isla 1-3, Edsa Shangri-La Hotel in Mandaluyong City.

PHA Secretary and Organizing Committee Chair Dr. Raul Lapitan said that the very successful convention drew 1,898 delegates from the different parts of the country.

The other officers who made it to this year’s electoral derby are: Raul Lapitan, vice president; Jorge Sison, secretary; Helen Ong-Garcia, treasurer; Nanette Rey, Aurelia Leus and Orlando Bugarin, directors.

Bugarin is the newest and the youngest member of the PHA Board of Directors.

Bugarin’s active involvement with the PHA Council on CPR began during his first year as a fellow in training. He served as CPR Council chair from 2011-2013. His latest project is the ongoing registry on CPR Outcome among Adult Cardiac Arrest Patients in Tertiary Hospitals in the Philippines: A Prospective Study”. ♥
Determined to be a doc @ 8

His roots can be traced to Calubian, Leyte. Junia was born in the decade that saw the affluent mothers from the Visayas Region giving birth in Cebu’s modern hospitals. For the self-effacing Junias, their mere concern was to ensure the well-being of mother and child.

He was born at the Chong Hua Hospital in Cebu on October 16, 1969 and spent his first nine years in Calubian, Leyte.

Just like his peers, he was into the usual pastime like patintero, piko, tumbang preso, sipa, etc.

But what made him different from his brother, cousins and other kids his age was, at 8, he had a real medicine cabinet which he made sure never ran out of first-aid meds. And he was a bookworm who would read a book from cover to cover overnight.

Focused, conscientious and firm, he was a doctor material. And he has always been so lucky to have a family and relatives who share and nurture his dreams.

He was Cebu-educated from grade three till college and all throughout medical school, internship to internal medicine training. It was at the Philippine Heart Center in Quezon City where he pursued cardiology and sub-specialized in vascular medicine.

After his post-grad training in Manila, he went back to Cebu to establish his medical practice. Now, Junia is one of the most respected cardiologists/vascular medicine practitioners in the Queen City of the South.

To date, he has held assumed various crucial roles in key organizations, and has been a dedicated member of the PHA Cebu Chapter and PHA Board.

His colleagues and buddies outside of the medical field admire him for being “a constant friend who will always be there when you need him. A flexible person and man of few words, he is direct to the point in many ways. He always makes sure that one is comfortable and well taken care of.”

As a teacher and a mentor, he is superb. He stimulates his students to excel, encourages them to believe in their self-worth and remind them that everyone has the potential to become a brilliant doctor, regardless of his origins and beginnings.
Together, our accomplishments were all summarized in my Annual Report, relating them once again will be boring and redundant. But, we have initiated and completed so many important projects that will require a lot of money. Fortunately, as if providential, the revenues came (especially from our 6 CORE-GIVEs, special thanks to Drs. Raul Lapitan and Helen Ong-Garcia) this fiscal year we registered the highest ever percentage rise in revenue and the biggest ever asset.

So, to the incoming Board of Directors, as I reflect on my leadership journey, I have gathered some insights that I would like to share with you:

1. Fulfillment is earned. Oftentimes, at such a high cost. Take for instance my own trip to the presidency. It is an open book that it was long and punctuated by agonizing bumps. At times, I felt like swimming against the current. Your challenges may be different from mine in many ways, but they will surely come and at times overwhelming. But take heart, because of your persistence and positivity, your victories will be sweeter.

2. The PHA book is full of guidelines and principles that is hinged on best practices, made even richer by experiences shared by our predecessors. But then again, every leader is unique and these guidelines and principles are freshly interpreted and at times, made more relevant by the inventiveness and variety each head brings to the PHA leadership table. Let us therefore give room to this uniqueness and diversity. How drab will our dress cabinet be if all our clothes will be of the same color and style.

3. My own wealth of experience during my presidency may all be altogether exciting but I feel I have no right at all to impose any of it to the next leadership. You may have already mapped out your own trip according to your own expectation of your own journey. You have your own unique style. I look forward excitedly to see you spread your own wings amply as you can. Heaven knows what heights you can possibly take the PHA to.

Let me thank once again all my mentors and the past PHA Presidents most of whom I have already acknowledged last year during my inaugural speech. Your precious teachings and good examples are indelibly marked in PHA history and in my heart.

Lastly, to my family (my brothers, sisters, cousins, and most especially, Mama); Your love and support will forever be treasured in my heart. Thank you and goodnight.
23rd PHA President’s Cup Pre-Convention Golf Tournament

May 26, 2015
Valley Golf and Country Club
Dr. Jaime Alfonso Aherrera’s (UP-PGH) paper on the “Risk of Death & Adverse Outcomes in Adult Filipinos Admitted for Infective Endocarditis: A Prospective Cohort” placed first in the 2015 Young Investigator Award.

In the Servier Research Award, the first prize went to Dr. Jose Benjamin Quito’s (Philippine Heart Center) for his work entitled “Effectiveness of an Accelerated Phase 2 as Compared to the Standard Cardiac Rehabilitation Program in Improving Exercise Capacity & Quality of Life”.

Sixty-one out of the 156 entries received by the Research Committee qualified as official entries for the Young Investigators Award, Meta Analysis, Case Report and Poster Contests.

**PHA-Servier Research Award**

1st **Quito, Benjamin Jose C., MD**  
*Philippine Heart Center*  
Effectiveness of an Accelerated Phase 2 as Compared to the Standard Cardiac Rehabilitation Program in Improving Exercise Capacity and Quality of Life

2nd **Lasco, Jun Maximo, MD**  
*Philippine Heart Center*  
Predictors of short term outcome of percutaneous coronary intervention among patients with multi-vessel coronary artery disease and severe left ventricular dysfunction

3rd **Gumatay, Wilbert Allan G., MD**  
*University of the Philippines-Philippine General Hospital*  
Prevalence of Elevated Heart Rate Among the Philippine LIFECARE Cohort (LIFT-LIFECARE Study)

**Young Investigator’s Award**

1st **Aherrera, Jaime Alfonso M., MD**  
*University of the Philippines-Philippine General Hospital*  
Risk of Death and Adverse Outcomes in Adult Filipinos Admitted for Infective Endocarditis: A Prospective Cohort

2nd **Ines, Philipp C., MD**  
*Philippine Heart Center*  
The Clinical and Procedural Outcome of Patients Undergoing Trans-Radial Approach Versus Trans-Femoral Approach in Percutaneous Coronary Intervention

3rd **Valdez, Bernadette B., MD**  
*Philippine Heart Center (Pedia)*  
Comparison of the Clinical Outcome and Cost of Transcatheter Device Occlusion and Surgical Closure of Isolated Ventricular Septal Defect
People's Choice
Santos, Jenn Rachelle, MD
University of Santo Tomas Hospital
Effects of Administration of Dual Antiplatelet Therapy (DAPT) for Three Months vs. Twelve Months on Clinical Outcomes of Patients After Drug-Eluting Stent (DES) Implantation: A Metaanalysis

Best Moderated Poster - CASE REPORT
Divinagracia-Alban, Aileen DM., MD
Makati Medical Center
Myocarditis Mimicking Acute Coronary Syndrome Secondary to Eosinophilia

Best Moderated Poster - META-ANALYSIS
Santos, Jenn Rachelle, MD
University of Santo Tomas Hospital
Effects of Administration of Dual Antiplatelet Therapy (DAPT) for Three Months vs. Twelve Months on Clinical Outcomes of Patients After Drug-Eluting Stent (DES) Implantation: A Metaanalysis

Best Moderated Poster - RETRO/PERS
Sasil, Roy Jr., MD
Philippine Heart Center
Predictive Value of 6-Minute Walk Distance on Major Adverse Cardiovascular Events 180 Days Post-Discharge Among Acute Coronary Syndrome Patients

Best Moderated Poster - RETRO/PERS
Aherrera, Jaime Alfonso, MD
University of the Philippines-Philippine General Hospital
The Neutrophil-Lymphocyte Ratio Predicts Severity of Stable Coronary Artery Disease Determined by the SYNTAX Score

The Judges:

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Dr. Edgar Wilson G. Timbol (UP-PGH) bested three contenders who like him, have just finished their training recently and passed the Diplomate Board Exams.

During his Fellowship training, Timbol has produced at least 15 researches, some of which were published in local publications. Most of his works were presented in international conferences in Hong Kong, Indonesia, India and Australia. A prolific scientific investigator, he has bagged awards in several research competitions. This year, he placed second in the Meta-Analysis contest.

It was a tough match. The four contenders went through an interview with the PHA Awards Committee headed by Dr. Saturnino Javier.
Lifespan of MI survivors reduced by 10 years

By Sherrywin Simon, MD

Patients with prior myocardial infarction (MI) remain at high and persistent risk for another heart attack and one in five patients who are event free for the first year post-MI will suffer an MI, stroke or death within three years. He added that life expectancy, as based on life course analysis of the Framingham Heart Study, has been reduced by 10 years in patients who suffered an acute MI.

Treatment is made easier with the mnemonics ABCDE which stands for A- aspirin, antianginals, ACE inhibitors; B- beta-blockers and blood pressure control; C- cholesterol control and avoidance of smoking; D- diet and diabetes mellitus control; and E- education and exercise.

This statement was made by Dr. Eduardo Tin Hay, chair of the PHA Council on Cardiac Catheterization and Interventions during the 46th PHA Annual Convention and Scientific meeting Lay Forum on May 26, 2015.

Aside from talking about “recognition and Treatment of Heart Attack”, Tin Hay also talked about the anatomy of the coronary arteries, plaque formation and the pathophysiology of heart attack.

He stressed that it is very important to point out the need to further investigate atypical symptoms of heart attack, putting emphasis on patient-based delay in recognition of acute coronary syndrome and activation of the emergency medical service (EMS), the factors that often constitute the longest period of delay as stated in the 2010 American Heart Association Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care Science.

He ended his talk with a quote from Aristotle regarding the importance of the heart, that is—“the heart is everything and everything is the heart.”

Give Modules were developed – Clotting Institute (Bayer), Hypertension Peak (Menarini), Cardiovascular Continuum (Servier), Cardiology Syndrome, Heart Failure Academy (Pfizer) and Cardiology Compendium (Sandoz). Each of this Coregive module will be decked to 10 Chapters. This also turns out to be a significant source of revenues to finance research and more CME activities.

D. Advocacy

Purposely for the lay, the World Heart Day 2014 at the St. John Parish, Don Bosco Makati Compound, Makati City and Heart Month 2015 in Iloilo City, generated impressive lay attendance and the usual pharma and media support. The value and urgency of CPR and defibrillation with the use of an automated external defibrillators during these events, as well as 52–100 to prevent the onset of cardiovascular diseases, were relentlessly underlined during these events.

The launching of the PHA Council on Women’s Cardiovascular Health’s first of a series of infomercials titled “Pansinin Mo Naman ang Puso Mo” featuring actor-politician incumbent Batangas Gov. Vilma Santos-Recto, at the Meralco Theatre was a hit. The media launch at the PCP Health Forum @ Annabel’s drew good attendance.

On its third year, 52–100, the PHA’s precious and timeless tagline has had made the rounds in the country and made great strides. The campaign was promoted in all the advocacy activities of the PHA such as the World Heart Day Camp Brave Heart, BP ng Teacher Ko… in Metro Manila and provincial sorties, TV and radio guestings and thematic events.

Quad media exposure was valued at PhP157 million. It does not include the re-broadcast of news/programs via the TFC Channel and GMA Pinoy TV in the US, Canada, Europe, Australia, New Zealand, the Middle East, Hong Kong and Japan; publicity on FB and online news.
“This short exercise consists of 10 counts each of jumping jack, modified jumping jack, wall push ups and forward lunges. All you need to do is repeat this cycle and make sure to adhere to the four-minute time frame. Put on the timer. It is a form of 4-minute daily exercise, plus 52-100, a boon exercise that is accessible to all and does not entail any costs,” said the Saret couple.

Four minutes is short, but it is effective. It is the best approach to get people started with psychological component encouraging. Offering an exercise regimen beyond four minutes doesn’t sound exciting, Jim also said.

Jim tells, “Trust us, this has worked on a lot of people from all walks of life. But of course, after doing this 4-minute exercise, you have to apply the 52-100 (five servings of fruits and vegetables, not more than two hour of video time, 1 hour of daily physical activity, zero sugared-drinks and zero smoking) daily.”

The Sarets, who gained prominence as icons of physical education, presented an animated and a very educational lecture on exercise and healthy lifestyle. Both were part of the all-doctor panel of speakers at the 46th PHA Annual Convention 2015 Pre-Convention Lay Symposium on May 26, 2015 at Isla Ballroom I, EDSA Shangri-La, Makati.

GPGagelonia ♥

4-minute daily exercise, plus 52-100, a boon

Tori & Jim Saret

This is good news for people who cannot go to the gym or are always rushing. Doing 4-minute daily exercise as soon as you wake up induces the release of happy hormones and burns as much as 600 calories a day, according to husband-wife tandem of health and fitness Coach Jim and Toni Saret. Women enjoy cardiovascular disease (CVD) “immunity”. The truth is heart disease kills more women than all cancers combined and that it is also the leading cause of death in women of all ages.

Women’s health advocate and cardiologist-interventionist Dr. Aileen Cynthia De Lara confirmed this in a talk delivered last May 26, 2015 before a group of lay composed mainly of women.

De Lara, co-chair of PHA Council on Women’s Cardiovascular Health, said that Project EVA (Evaluation of the Knowledge, Attitudes and Practices of Filipino Women in Metro Manila on Cardiovascular Disease and Risk Factors,) betrayed the ignorance of 80% of women in Metro Manila about the fact that CVD is the leading cause of death. EVA is a joint project of the PHA, Department of Social Welfare and Development (DSWD) and the Department of Health.

She stressed that women often exhibit less intense and sometimes, atypical symptoms of cardiac disease particularly heart attack, may be due to the fact that women tend to downplay their cardiac symptoms compared to that of men. They tend to have smaller
HbA1c needs follow-up – German DM expert

A German endocrinologist warns against the use of HbA1c as the only basis for good sugar control among diabetics.

Prof. Stephan Jacob said that Type 2 Diabetes Mellitus (DM) is a complex, vascular disease which exhibits multiple cardio-metabolic risk factors, thus HbA1c is not enough basis for control.

Jacob, a respected authority in endocrinology in Europe, emphasized that a vascular lesion requires three major aspects of control, namely glucose, LDL and blood pressure that decreases cardiovascular mortality by 2.9%, 8.2% and 12%, respectively.

Glucose control is usually monitored through HbA1c measurement.

Targeting HbA1c on the other hand showed no “legacy effect”. While effective intensive treatment for DM type 1 proved to be beneficial, this does not hold true for DM type 2.

In a Cochraine metaanalysis, intensive glycemic control (HbA1c <6.5%) among type 2 DM patients did not significantly decrease the cardiovascular event. The probable explanation is that HbA1c does not reflect the daily fluctuation in blood glucose and patients with alternating hypoglycemia and hyperglycemia can have a near normal HbA1c and yet does not necessarily mean good glycemic control. Therefore, HbA1c should be supplemented with regular measurement of pre- and post-prandial glucose to have a more realistic picture of a patient’s glucose control.

Jacob advocates to stop focusing on HbA1c but rather take on a physiologic approach. Hypoglycemia poses major problems in diabetics, he warns. Hypoglycemia is associated with increased risk for dementia and occurrence of arrhythmias. It increases the risk for bradyarrhythmia by up to nine times. About 74% of hypoglycemic episodes occur during the night. It is during sleep that hypoglycemia is undetected. Fluctuations in blood sugar levels leads to vascular endothelial dysfunction.

Intensive glucose control is also associated with intermittent episodes of hypoglycemia. Studies have shown that severe hypoglycemia (ie. CBG <50mg/DL) is also associated with increased cardiovascular death, accelerated dementia among elderly, and various arrhythmias (particularly ventricular tachycardia and bradycardia).

Individualized treatment approach to blood sugar control cannot be overemphasized. There are a variety of drugs to choose from. The new ones such as the GLP 1 agonists (liraglutide) and SGLT2 inhibitor (dapagliflozin) were shown to decrease blood pressure. Dapagliflozin decreases blood pressure by 4mmHg, a level in which studies have shown significant reductions in mortality. Their incidental blood pressure lowering effects were greater than that of the thiazide diuretics.

In the Philippines, only 2.5% of patients are achieving good diabetes management. Jacob concluded that early extensive risk management is a must. Isolated correction of HbA1c is not advocated. Lauren S. Valera, MD | Sharon R. Pascua, UP-PGH

Dr. De Lara

coronary arteries than men. She further discussed gender differences in atherosclerosis and disease presentation.

She also introduced the audience a comprehensive guideline for heart disease prevention in women that was conducted in 2004 by the American Heart Association (AHA). The guideline was easy enough to remember with its mnemonics, ALOHA which stands for: A- assess your risk, L- lifestyle recommendations are priority, O- other interventions prioritized according to expert panel rating scale, H- highest priority for therapy are women at highest risk, A- avoid medical therapies called Class III (postmenopausal hormone therapy, antioxidants and aspirin for low risk patients).
In a series of lectures and discussions during the Pediatric Cardiology Pre-convention activities, six clinical cardiologists, interventionists and heart surgeons discussed dilemmas encountered in patients with significant mitral valve problems.

Rheumatic Heart Mitral Valve Disease was the earliest indication for elective cardiac surgery. In the 2014 AHA ACC Guidelines for Rheumatic Mitral Stenosis, there is only one indication for surgery and almost all of the rest would require an interventional cardiologist to come in.

Single Valve Replacement Clinical Pathway
A proposed pathway used in the Philippine Heart Center for valve surgery was also presented. The goal of the pathway is to set standards of care and to be able to standardize care for our single valve replacement patients. The protocol is summarized as follows:
- Day 1-2: Pre-op labs
- Day 3: OR day
- Day 4: SICU stay,
- Start on Warfarin
- Day 5: Transfer to Ward
- Day 6: Transfer to

PTMC parameters
Studies have shown that Percutaneous Transmitral Commissurotomy (PTMC) is not inferior to any type of surgical modality in the treatment of RHD patients with mitral stenosis. Moreover, in patients who have mitral stenosis but asymptomatic, PTMC is not warranted. PTMC can be performed in pregnant patients after 20 weeks age of gestation for it poses minimal to no-risk to the fetus.

“A surgeon will always be a part of his patient once he/she has undergone mitral valve replacement.”

RF-RHD still a worldwide bane

Rheumatic Fever-Rheumatic Heart Disease (RF-RHD) remains a global concern in the Asia and the Pacific Region even in the advent of modern medicine. This was the heart of the lecture presented by the president of the Philippine Society of Pediatric Cardiology, Dr. Eden Latosa. She presented a summary of the findings and challenges faced by the different RF-RHD prevention and control programmes being implemented in countries considered endemic for RF-RHD.

The pediatric cardiologist estimated the global burden of RHD in 2005 at almost 20 million existing cases, and an approximate global incidence of 282,000 cases per year.

Emerging echocardiographic data suggest that the true prevalence of RHD might be several times higher than the 2005 global estimate. Around 200 to 450 thousand patients die from RHD each year, hundreds of thousands of people are disabled by this disease and its long term complications.

A comprehensive RHD control program can be divided into primordial, primary, secondary and tertiary prevention.

Primordial prevention is a program on the improvement of the environmental, social and economic conditions of the populations at risk of RF/RHD while primary prevention includes treatment of acute streptococcal pharyngitis with antibiotics to reduce the incidence of RF.

Secondary prevention is the use of antibiotic prophylaxis to reduce the recurrence of RF in people with history of RF or RHD and tertiary prevention includes the medical and surgical treatment of the complications of RF/RHD.

This approach is exemplified by the Awareness, Surveillance, Advocacy and Prevention (ASAP) comprehensive approach. The program has four key elements such as education, primary prevention, secondary prevention and disease surveillance.

The biggest challenge in RHD control is to translate what we already know into practical RHD control. There are many opportunities to intervene RHD, especially now that we have a lot of pediatric cardiologists distributed all over our country who could help in the implementation of the program.

To further this goal, Latosa proposed a comprehensive registry-based RHD control program that will also ensure a universal access to Benzathine Penicillin g, improve health worker training on the detection and management of RHD and encourage development of a group A beta hemolytic streptococcal vaccine.

In the final analysis, the key to a successful implementation of the program is an active collaboration between the government, private sectors and stakeholders, Latosa declared.
Pediatric cardiologist Dr. Pacita Jay Lopez-Ballelos outlined the echocardiographic morphological findings in establishing diagnosis of rheumatic associated valvular lesions.

Lopez-Ballelos enumerated that in acute mitral valve changes, the following were noted – annular dilatation, chordal elongation, chordal rupture resulting in flail leaflet with severe mitral valve regurgitation, anterior (or less commonly posterior) leaflet tip prolapse, presence of beading or nodularity of leaflet tips. In chronic mitral valve changes (not seen in acute carditis) – leaflet thickening, chordal thickening and fusion, restricted leaflet motion, calcification. Leaflet thickening of anterior mitral valve is described as ≥3mm in ages < 20 years old, ≥4mm in 21-40 years old, ≥5mm in > 40 years old. In aortic valve changes in either acute or chronic carditis – irregular and focal leaflet thickening, coaptation defect, restricted leaflet motion and leaflet prolapse.

Pathologic mitral regurgitation (all four doppler echocardiographic criteria must be met) – seen in two views, seen in at least 1 view, jet length ≥2cm, velocity ≥3m/s in early diastole, pan-diastolic jet in at least 1 envelope.

Pathologic aortic regurgitation (all 4 doppler echocardiographic criteria must be met) – seen in 2 views, seen in at least 1 view, jet length ≥2cm, velocity ≥3m/s in early diastole, pan-diastolic jet in at least 1 envelope.

The lecture was delivered last May 26 at the Isla Ballroom of the Shangrila Hotel as part of the reconvention activities of the PHA 46th annual conference.

The diagnosis of Rheumatic fever is made if any two major criteria were met, or any one major manifestation plus any two minor criteria.

Rheumatic Fever may be suspected if symptoms or clinical presentation do not completely fulfill criteria as major manifestations or only minor manifestations were present.

Rheumatic Heart Disease, as a diagnosis is made is when 2D echocardiography supports the diagnosis that includes presence of Mitral regurgitation (jet >2cm, velocity >3m/s for 1 complete envelope, pansystolic jet in at least 1 envelope); Mitral stenosis (MS mean gradient >4mmHg), presence of morphologic MV abnormalities (anterior mitral thickness >3mm, chordal thickening, restricted leaflet motion or excessive leaflet motion); aortic regurgitation (jet length >1cm, velocity >3m/s in early diastole, pandiastolic jet in at least 1 envelope), morphologic AV abnormalities (presence of thickening, coaptation defect, restricted leaflet motion, prolapse).

Treatment should be initiated if diagnosis for Rheumatic Fever/Heart Disease has been made. Primary prophylaxis would include either single dose intramuscular injection of Benzathine Penicillin G or oral Penicillin V 50mg/kg/day for 10days, or if allergic to Penicillin, Erythromycin 50mg/kg/day for 10days. If in activity, anti-inflammatory treatment should be given Aspirin 60-70mg/kg/day (max 3grams/day) if arthritis is major symptom.
and Prednisone 1-2mg/kg/day for 4 weeks then taper in 2 weeks. If signs of heart failure are present, referral to tertiary care is a must.

**AHA Echo classification of valve disease defined**

Dr. Ronald Cuyco, pediatric cardiologist from the Philippine Heart Center underscored the importance of echocardiography in valvular heart disease (VHD) assessment.

In his lecture delivered last May 26 for the preconvention activities of the 46th annual convention, Cuyco said that echocardiography is important in verification of presence of VHD, establishing type of and etiology of VHD, determining severity of valve lesion, assessment of hemodynamic consequences, determine prognosis and evaluate timing of intervention.

He further differentiated the stages of progression of VHD into four.

Stage A (with risk factors for development of VHD), stage B (progressive, mild to moderate severity and asymptomatic), stage C (asymptomatic severe, with or without decompensation of the right or left ventricle), stage D (symptomatic severe, with symptoms as a result of VHD).

The bases for classification of the stages are the valve morphology or anatomy, valve hemodynamics, hemodynamic effects and patient’s symptoms.

Rheumatic heart disease echo-morphologic findings as described were leaflet calcification with or without subvalvar apparatus, leaflet thickening, commissural calcification and fusion, restriction of leaflet or cusp motion, retracted and rolled-up leaflet/cuspal margins, leaflet mal-coaptation and presence of infective endocarditis vegetation.

Mitrval stenosis is commonly caused by rheumatic heart disease and described as thinned and calcified mitral leaflets with subvalvar involvement, “hockey-stick” appearance of anterior mitral valve leaflet, restricted fixed and upright posterior leaflet, fish-mouth mitral valve orifice in the short-axis view due to commissural fusion.

Stages of mitral stenosis are based on Wilkins-Palacios echocardiographic score index with regards to leaflet mobility, leaflet thickening, subvalvar thickening and calcification.

Mitral regurgitation is described as leaflet thickening and calcification with or without restriction of motion, retracted and rolled-up cuspal edges/margins, mal-coaptation to non-coaptation of MV leaflets during systole and usually with concomitant valve lesions.

Aortic stenosis is characterized by commissural fusion on top of a calcified and restricted cusp and presence of hypertrophied left ventricle with probable diastolic dysfunction. Aortic regurgitation is characterized, on the other hand, as cuspal calcification and commissural fusion, and rolled-up cuspal edges creating a central echo-free space during diastole in severe cases.

Tricuspid regurgitation is seen as thickened leaflets with areas of calcification, rolled-up edges and/or destroyed leaflets causing mal-coaptation during systole and dilated tricuspid valve annulus. All conditions mentioned were staged according to patient’s symptomatology and severity of involvement of valve leaflets and presence of right or left ventricular dysfunction.

**PHIC benefits discussed**

The Philippine Health Insurance Company benefits that can be accorded to patients with rheumatic fever and rheumatic heart disease was presented in a series of lectures for pediatric cardiologists.

Dr. Juliet Balderas from the Philippine Heart Center centered on the national government’s thrust for RF/RHD patients.

Gearing towards control of rheumatic fever/heart disease in the Philippines for 2015 and onwards, the involvement of government support through legislation and universal health care for primary and secondary prevention is shown in the conceptual framework for RHD control program.

With the burden of disease data (poverty, overcrowding, malnutrition and access to healthcare), there is multidisciplinary approach with government engagement in the baseline health system, community education for primary prevention, RF/RHD registry in the secondary prevention and medical/interventional/surgical management of RF/RHD in tertiary prevention.

Proposed pre-authorization checklist as evaluated by the attending pediatric cardiologist, include age, clinical pathway summary and echocardiogram findings. If findings were met, it is the discretion of the attending pediatric cardiologist to either approve or disapprove the pre-authorization request.

Once approved, the patient is then entered into the proposed RF/RHD Registry. For the mandatory service in secondary prophylaxis – Rheumatic fever without carditis, presence of arthritis (acute or subacute), Benzathine Penicillin IM injection every 28 days for 5 years and Rheumatic fever with carditis/valve involvement, Benzathine Penicillin IM injection every 21 days until age 18-40 years old or whichever is longer.

Actuarial cost for laboratory exams (CBC, ESR, CRP, ASO titer, 2d echocardiogram) P5,905.00 and cost of treatment for every 28 days (13 BPN injections per year) P8,324.87 per year and for every 21 days (17 BPN injections per year) P9,069.38.

The aim for the development of Philhealth Benefit Secondary Prophylaxis is for the national program for prevention and control of RF/RHD.
Ramirez deplores local CPR delivery

While Filipinos are known to be resilient to survive the strongest of typhoons, we remain helpless against sudden cardiac death. Dr. Marcellus Francis Ramirez took note of several barriers to the implementation of appropriate CPR programs in the country.

In a lecture during the preconvention sessions of the 46th PHA Annual Scientific Meet, the former PHA CPR Council chair enumerated several obstacles to an ideal environment for delivering CPR that include the absence of an organized universal emergency medical system (EMS) and the seemingly hopeless heavy traffic in the metropolis.

Automated External Defibrillators are not readily available in public areas, if not available at all, and the absence of a good samaritan law are definitely snags in attaining a CPR ready Philippines, Ramirez pointed out.

Moreover, the lack of sufficient government funding for research and CPR education are likewise detrimental to the goal of increasing survivors of cardiac arrest. The lack of integrated critical care both in government or private institutions is likewise lamentable.

In the Philippines, the highest likelihood of survival by probability from a sudden cardiac arrest is in a casino. It is because it is complete with surveillance systems, alert staff certified in CPR and an AED readily available.

Very much similar to the US and to most of our southeast Asian neighbors, heart diseases remains to be the number one killer in our country, accounting for close to 20% of all causes of death according to the latest Department of Health statistics. Sudden cardiac death is the single largest categoric cause of natural death in the US, and probably also in the Philippines, and it is the most common mode of death in patients with coronary artery disease, according to Ramirez.

Ramirez further bemoans the reality that it will probably take a long way before the Philippines achieves the same status as Singapore, Japan, Taiwan or Korea in terms of resuscitation science.

However, he remains hopeful, that with present steps taken by the PHA CPR Council, the country can inch its way forward to what is ideal. He notes that with the active participation of the PHA in the Resuscitation Council of Asia and hosting its 15th annual summit, the Philippines is on its way to become in the forefront of resuscitation science.

In the present day, the council continues in its tireless efforts in improving resuscitation education at the hospital and primary care level, as well as CPR knowledge and skills for our paramedics, EMTs and allied specialties.

With different resources and tools to teach CPR, there is a published Filipino CPR instructional leaflet and booklet, a hands-only CPR easy to follow pamphlet, a CPR video for lay established in our PHA website, and the official manual on BLS and ACLS used for trainings.

Under the leadership and guidance of former PHA president Noe Babilonia and Board of Director Joel Abanilla, the council collaborated with the councils on CVS and RF-RHD to establish a course in emergency training for GK volunteers, and in the process, helped publish a Filipino first aid guide. With the support of the Board, the PHA is actively pursuing and lobbying for the availability of AEDs in public places to improve the chain of survival on site.

Current and future projects include CPR and ACLS courses, trainors certification, mass CPR Trainings and Awareness (Heart Month, World Heart Day), CPR Research/Resuscitation Registry, local CPR guidelines, CPR in school curriculum, CPR on wheels and across the islands, campaign for Public Access Defibrillation (AED) and CPR-Ready Philippines. Lendry L. Quizon, MD | The Medical City ♥
**Cinco zeroes in on critical CPR techniques**

The science of CPR/ACLS is moving forward and there are many advances for in-hospital CPR/ACLS moments. In his talk last May 26 under the preconvention lectures of the PHA annual convention, cardiologist-intensivist Dr. Jude Erric Cinco highlighted some of the most of important advances in the science of resuscitation.

Cinco emphasized that chest compression is still the most important and necessary part of the CPR. To this, he said that it is necessary to offer CPR training courses regularly.

In the real world, compressions may be ineffective mores if the provider may be physically unable to sustain such strenuous manoeuvre. He suggested that it might be better to change the provider before fatigue sets in compromising the quality of CPR.

Due to advent of new technologies, an automated chest compressor was developed which is available now in the market, to counteract the self-reported fatigue of those doing the chest compression.

In a study done by Field, et.al., the use of an electronic decision support tool improves management of stimulated in-hospital cardiac arrest. Among patients with cardiac arrest requiring vaspressors, combined vasopressin-epinephrine and methylprednisolone during CPR and stress-dose hydrocortisone in post-resuscitation shock resulted in improved survival to hospital discharge with favorable neurological status compared with epinephrine in a study done by Buddineni et.al.

On the other hand, the administration of dextrose during in-hospital cardiac arrest is associated with increased mortality and neurologic morbidity, Cinco added. The rescue-thrombolysis should be considered and started in patients with pulmonary embolism and cardiac arrest, as soon as possible after cardiac arrest onset.

These new modalities in the treatment of patients who went into cardiac arrest would be most helpful particularly for those families who aren't yet ready to accept the fate of their loved ones. *Lendry L. Quizon, MD | The Medical City*

**Ramboyong: Mechanical CPR is beneficial**

Mechanical cardiopulmonary resuscitation may save more lives in patients suffering from cardiac arrest in the hospital setting.

Dr. Raul Ramboyong discussed the in-hospital moments. He also extensively mentioned the conditions associated with sudden cardiac arrest as previously mentioned. In cardiac arrest during coronary intervention, it is difficult to perform effective, high quality chest compressions.

Ramboyong, a former PHA CPR Council chair, mentioned that mechanical CPR can be done to provide maintenance of circulation while continuing percutaneous coronary intervention. This, he said, is a class IIA recommendation.

He further elaborated that cardiac arrest can also happen during heart surgeries, and usual causes are ventricular fibrillation, hypovolemia, cardiac tamponade and tension pneumothorax.

Resternotomy can be done, and studies of patients treated with this and internal cardiac compression have reported improved outcome compared with standard protocol.

Moreover, ethical issues are always a concern, and issues of futility for resuscitation remain controversial. Circumstances in which it is acceptable not to begin resuscitation are patients with advances directives and if with signs of irreversible disease.

However, it is important to remember that there is no ethical justification for the practice of slow, inefficient resuscitation. It is either no or full resuscitation instituted, according to ACLS guidelines, the speaker emphasized. *Ailen Albana, MD | UST Hospital*
Bugarin underscores need for lay CPR

Cardiopulmonary resuscitation is a necessary skill not only among healthcare providers but also to lay persons. It can save lives. This was the strong message delivered across by former PHA CPR Chair Dr. Orlando Bugarin last May 26 during the preconvention activities of the PHA annual convention.

Bugarin cited data that 80% of sudden cardiac deaths occur at home and witnessed by relatives. These relatives usually do not know how to deliver basic CPR during such emergencies. Unfortunately, only 4 – 6% of these victims survive this ordeal because witnesses do not know how to deliver such life-saving technique, the Bataan-based cardiologist lamented.

He further warned that sudden cardiac death can happen to anyone, anywhere and at any time. Older persons, especially with pre-existing heart disease, are at the highest risk but it can happen even to the younger individuals with no history of heart disease.

He outlined that in order for more lives to be saved, the delivery of CPR ideally should follow the so-called Chain of Survival, namely early Access, Early CPR, early defibrillation, early advance cardiac life support, and integrated post-cardiac arrest care.

Bugarin highlighted the unique and special situation where CPR may differ depending on the needs of the afflicted person outside of the hospital setting.

Among the many special conditions and situations he discussed included some fairly common ones and some that might seem right out of fiction novels.

Asthma, being a fairly common disease presents a significant challenge to the responding individual. Apart from the usual CPR protocol, one must consider the disease itself. The use of steroids and bronchodilators were highlighted in Bugarin’s lecture with regards to this special case. Oxygen and respiratory management would differ in these patients especially since Auto-PEEP (elevated positive end-expiratory pressure and dynamic pulmonary hyperinflation caused by insufficient expiratory time or a limitation on expiratory flow) is severe in asthma patients and the use of respiratory support by mechanical ventilators may offer help in these patients.

With other situations, the speaker highlighted unique adjustments to standard therapies in these unique cases. In anaphylaxis, epinephrine can be administered intramuscularly in the anterolateral aspect of the middle third of the thigh, and airway management should not be delayed.

In pulmonary embolism, he discussed how fibrinolytic therapy can be life-saving. In pregnancy, patients should be treated differently the mother is the priority patient. Moreover, the challenges of managing the airway of an obese patient were tackled as well. Girard Eric G. Abragan MD | Chinese General Hospital

“80% of sudden cardiac deaths occur at home and witnessed by relatives. These relatives usually do not know how to deliver basic CPR during such emergencies. Unfortunately, only 4 – 6% of these victims survive this ordeal because witnesses do not know how to deliver such life-saving technique”
FoCUS echo beneficial in cardiac arrest patients

By Ailen Albana, MD | UST Hospital

Can we utilize echocardiography in cardiac arrest patients? Dr. Chee Tek-Siong of Singapore recommends the use of echocardiography for rapid diagnostic evaluation of potentially treatable or reversible causes.

FoCUS is a focused examination of CV system done in an emergency situation in an arrested patient as an adjunct to physical examination. It is used to recognize a narrow list of potential diagnoses and provides a quick snapshot view of the heart at bedside.

FoCUS is designed to interpret significant abnormalities as present or absent and to characterize pathologies into severities of abnormality. The subxiphoid view is the most commonly used cardiac view so as not to interfere with ongoing chest compressions during a code.

In cases of cardiac arrest, echo can be used for rapid diagnostic evaluation for potentially treatable or reversible causes. Echocardiography is versatile, can be done bedside, cost-effective, with minimal discomfort and no ionizing radiation/ contrast media risk. It is most suited for patients with unstable CV diseases particularly in emergency and cardiac arrest settings.

The International Liaison Committee on Resuscitation recommends adequate training in performing echo during cardiac arrest. However, the operator must be aware of the importance of interrupted chest compressions, and where appropriate, timely defibrillation. For patients presenting with undifferentiated hypotension, the primary advantage of FoCUS is in determining whether the shock is cardiogenic. FoCUS should be limited to licensed physicians, with a formal structured training program. The program should include didactic education, hand-on image acquisition and image interpretation. *(With reports from Ingrid Marie Y. Gatmaitan, MD | The Medical City.)*

ECMO boosts up outcomes in OHCA

By Girard Abragan, MD | Chinese General Hospital, The Medical Center

Extracorporeal membrane oxygenation (ECMO) may improve the short- and long-term outcome of out-of-hospital cardiac arrest with VF or pulseless VT, a Japanese emergency medicine specialist said Tuesday during the 15th Resuscitation Council of Asia Summit.

Dr. Tetsuya Sakamoto, head of the Cardiopulmonary Resuscitation Committee of the Japan Foundation of Emergency Medicine, explained that ECMO may be useful to maintain patient’s oxygenation and circulation for the unstable post cardiac arrest syndrome especially during therapeutic hypothermia.

ECMO Cardiopulmonary Resuscitation (CPR) is synonymous with Extracorporeal Cardiopulmonary Resuscitation (ECPR) or Percutaneous Cardiopulmonary Support (PCPS), in which therapeutic hypothermia for post- cardiac arrest syndrome is included in the treatment protocol.

This strategy was introduced in 1960s that resulted in favorable outcomes reported frequently in Japanese journals in the late 1980s. Cases of favourable outcome...
The results of PARADIGM-HF, the latest biggest trial on heart failure patients, were presented and analyzed in a special session on late breaking trials.

Former PHA President Antonio Sibulo discussed the new drug LCZ696, an angiotensin receptor neprilysin inhibitor (ARNI). The new agent simultaneously inhibits neprilysin (via LBQ657) and blocks AT1 receptors (via valsartan) enhancing vasorelaxation. Thissresult in decrease in blood pressure, sympathetic tone, aldosterone levels, fibrosis, and hypertrophy, and would increase natriuresis diuresis.

The PARADIGM-HF was a prospective comparison of ARNI with ACEI designed to determine the impact on global mortality and morbidity in heart failure.

This is the first study to test the effect of LCZ696 on morbidity and mortality in patients with HFrEF. Key inclusion criteria were (1) chronic HF NYHA II-IV with LVEF <= 40%, (2) BNP (or NT-proBNP) levels of >= 150 or >= 100 and a hospitalization for HFrEF within the last 12 months, (3) >= 4 weeks' stable treatment with an ACEI or an ARB, and a beta-blocker, (4) aldosterone antagonist should be considered for all patients.

The primary objective of the study is to evaluate the effect of the LCZ696 200 mg BID compared with enalapril 10 mg BID, in addition to conventional HFrE treaent, in delaying time to first occurrence of either CV death or HF hospitalization.

Annual event rate was estimated based on the CHARM-Added trial, adjusting for expected higher use of beta-blockers and mineralocorticoid receptor antagonist (MRs). The sample size was based on CV mortality and was an event driven study.

The primary outcome revealed 20% reduction in the CV death or HF hospitalization with LCZ696 compared with enalapril.

Secondary outcomes also noted 16% reduction in all-cause mortality with LCZ696 vs enalapril. It is also more superior in reducing symptoms and physical limitations of HF.

The summary of results showed the superiority of LCZ696 over enalapril which was not accompanied by important safety concerns.

The investigation was done considering the extensive research and medical management, the mortality rate of Heart failure still remains to be alarming with approximately 50% of patients dying within five years of diagnosis, Sibulo explained.

At the end of lecture, there were questions on the dosage of the medication that would lead to hypotensive events. It was reiterated by several investigators of the study that such events are of minimal concern because the Filipino subjects were able to tolerate the standard dose without any compromise in their blood pressure.

As mentioned in the NEJM editorial, Indeed, PARADIGM-HF may well represent a new threshold of hope for patients with HF. The beneficial results seen in PARADIGM-HF may apply to a wide spectrum of patients, even those who are currently receiving the best possible therapy. Marlon C. Loquias, MD | St. Luke’s Medical Center – Global City ♥
Myocardial viability: Best patient for revascularization

Revascularization in patients with acute coronary events improves outcomes, much more than medical therapy alone, according to Dr. Oliver Alix, a nuclear cardiologist at the Perpetual Help Delta Medical Center.

However, he countered that not all patients may benefit from such revascularization procedures when myocardial viability or status is not defined.

There are several non-invasive tests that could help the clinical identify subset of patients who would benefit more from revascularization. One of these is checking myocardial viability. Alix added these benefits can be translated or objectively quantified using some important parameters.

Two important factors are the recovery of segmental contractile function and improvement of heart failure symptoms and exercise capacity. He further purported that markers of improvement in contractile reserve function are better predictors than markers of preserved membrane function.

Among the several non-invasive tests for myocardial viability include dobutamine stress echocardiography, stress myocardial perfusion imaging using Technetium, and cardiac MRI. Dobutamine stress echocardiography appears to be the most specific, Alix said.

Likewise, a reduction of about 13% in all-cause mortality as compared to medical treatment alone was evident in patients who were revascularized and were found to have viable myocardium on the aforementioned imaging tests.

Moreover, the relation of myocardial viability and heart failure symptom improvement, after revascularization, however, may not be clear, but there appears to be a promising positive outcome correlation. Jezreel L. Taquiso, MD | UP-PGH

On pre-excitation, resynch therapy

By Michael Agbayani, MD

Pertinent issues in cardio-electrophysiology for the general cardiologist during the Electrophysiology and Pacing session were tackled by three experts.

Dr. Joy Mercader discussed asymptomatic pre-excitation. She went through the electrocardiographical and physiologic aspects of ventricular pre-excitation then continued to present the natural history of asymptomatic patients with Wolff-Parkinson-White ECG.

The risk of syncope or sudden cardiac death due to ventricular fibrillation (due to rapid conduction of atrial tachycardias through the accessory pathway) was identified as a concern for these patients. Risk stratification methods, both invasive and non-invasive, were discussed, as well as indications for radiofrequency ablation in this subset of patients.

Dr. Luigi Segundo, updated the audience on the local experience with cardiac resynchronization therapy. The first part of the lecture reviewed the pathophysiology of ventricular dyssynchrony in heart failure with reduced ejection fraction (HFrEF).

Segundo also proceeded to summarize the pertinent trials showing the clinical benefits of cardiac resynchronization, focusing on the REVERSE trial, MADIT-CRT and RAFT. Using data from the Asia Pacific Heart Rhythm Society (APHRS) and device companies, Segundo showed that while there is a steady growth in the number of CRT implants, cardiac resynchronization remains underutilized in the country.

To cap the session, Dr. Joji Saligan took to the stage to deliver a lecture about the electrocardiographic markers for sudden cardiac death.

In her talk, Dr. Josephine Saligan described the electrocardiographic and clinical aspects of various electrophysiologic disorders, including Long QT Syndrome (LQTS), Short QT Syndrome, Cathecholaminergic Polymorphic Ventricular Tachycardia (CPVT), Early Repolarization Syndrome, Brugada Syndrome and Hypertrophic Cardiomyopathy. She ended the lecture by touching on the recent guidelines regarding ECG screening for competitive athletes and the utility of early repolarization pattern, QT dispersion, and filtered QRS duration in risk stratification.

Dr. Erdie Fadreguilan and Dr. Thad Ciocson chaired the session.
“EFFECTIVE preventive measures are needed -- but do we have any?” this was the question posted by Prof. Helena Gylling after she stressed that cardiovascular disease (CVD) remains the single most important cause of death worldwide.

In the plenary session on Dietary and Lifestyle Behaviors in Cardiovascular prevention: Beyond Statins, Gylling presented several studies that showed strategies to effectively decrease the risk of death. In the EOIC-Norfolk UK trial, the cumulative survival was higher with a four-fold difference in individuals who practice healthy behavior such as abstinence from smoking, taking at least five servings of fruits and vegetables daily, doing physical activities for 30 minutes a day and moderate alcohol consumption.

Gylling further mentioned three international guidelines for reference in dietary lifestyle changes. These include The ESC/EAS guideline for the management of Dyslipidemia released in 2011, the 2012 European guidelines on Cardiovascular disease Prevention in Clinical Practice and the IAS position paper: Global recommendation for management of Dyslipidemia.

In her talk, Gylling likewise presented a case history of how one can implement changes based on recommendations. Highlighted was the use of plant sterols as adjunct to help further LDL reduction.

She further urged physicians to remind their patients on healthy lifestyle habits that can have a great impact on survival.

Gylling is a professor at the University of Kuopio and University of Helsinki, both in Finland. She has been active in clinical trials investigating the role of plant stanols in reducing risks for coronary heart diseases. Jennifer Doria-Del Castillo, MD

The American professor discussed five salient points on the management and diagnosis of hypertension or high blood pressure (BP).

Messerli said the paradigm of salt reduction continues to be an enigma and that until enough evidence arises, it is probably safe to have an optimal sodium consumption of three to six grams per day.

He also discussed hydrochlorothiazide, which by far has been the most recommended first line therapy from JNC I to VII, but may not, after all, be that beneficial. Stroke remains the most devastating complication of hypertensive CVD. Hence not only is the BP level a risk, but fluctuations in BP also pose a risk for stroke, the professor elucidated.

“Let’s not forget chocolate!” Messerli exclaimed. He said that there is after all implied causative association with chocolate intake as it increases cognitive function in elderly subjects with mild cognitive impairment.

Further, he talked about compliance that remains a challenge to clinicians as even the well-educated can falter. Maria Nadith L. Pe, MD

Dr. Messerli

HL & diet: Perfect combination for better CV survival — Finnish prof

HTN Guidelines: Are we on track?

Cardiovascular disease (CVD) continues to be the number one cause of death worldwide said Dr. Franz Messerli, who impressed the audience with his witty insights on systemic arterial hypertension that remains to be a global burden.
From being “archaic, Jurassic, outdated,” the government is automated high-speed. Engineer Jovita Aragona, the DOH Director of Knowledge Management and IT Service, presented the government’s move towards E-Health during the Information Technology Session.

Gov’t is automated and techie

By Raniel Nievera, MD | UST Hospital

Working with DOST and PhilHealth, she is spearheading the implementation of the PhilHealth Information Exchange.

Under this program, accredited hospitals using electronic medical records will be provided a standardized format that will be placed on secure cloud servers managed by PhilHealth, allowing for inter-hospital sharing of the medical records of its members.

This is cost-effective because it reduces manpower needed to record repeated medical information like history-taking. Since it prevents unnecessary laboratory work-up, it has an impact on lessening medical costs.

Making the patient’s comprehensive medical record available online will improve the coordination of care and aid in reporting.

Aragonas reiterated that every effort will be made to ensure that these data will remain secure.

“TSEK-AP,” is a Filipinoized derivation of the term “medical check-up,” and has come to mean to most Filipinos as the act of availing of the services of a physician. It also stands as an acronym for Tamang Serbisyo sa Kalusugan ng Pamilya.

Angelito Abando, IT consultant to the office of the president and CEO of PhilHealth said that TSEKAP is an evolution of the Primary Care Benefit program of the national government.

“Medical consultations, diagnostics and medications will be subsidized by the government,” added Abando, who explained that a Multi-Agency Technical Working group which includes the World Bank, WHO, UNICEF, DOH, and DOST will be collaborating together to make this project see fruition.

With subsidies amounting to P1,800 per family, the target of its initial phase will be indigent citizens identified by the DSWD and senior citizens. Plans to expand coverage to include all PhilHealth members are being studied. The implementation of the program will be heavily reliant on Electronic Medical Records, thus the need for EMR, stressed Abando.

Dr. Ryan Banez, Chief Medical Information Officer of HealthInformatics, could not agree more. “Hospitals need good Electronic Medical Records in order to comply with international standards,” he said. “A paperless transaction benefits the hospital with lowered costs and improved efficiency. Going paperless benefits the environment as well.”

Litonjua tackles, benefits of DPP4 inhibitors

Dr. Antonio Litonjua, one of the country’s leading endocrinologist said that DPP4 inhibitors increase the risk of cardiovascular adverse events among diabetic patients.

In a metaanalysis of different DPP4 inhibitors, Litonjua showed that saxagliptin and alogliptin carried a risk for having an increase risk for hospitalization due to heart failure compared to vildagliptin and sitagliptin.

With these findings, Litonjua reiterated that the increase in hospitalization for heart failure is not a class effect for all DPP4 inhibitors. He further
Scientific Sessions

SHOULD novel oral anticoagulants (NOACS) replace warfarin as first choice for patients with non-valvular atrial fibrillation (AF)? In a symposium, Dr. Andrew McGavigan from Australia noted that, NOACS, or rather DOACS (Direct oral anticoagulants) is now specified in all guidelines.

The professor from the Flinders University underscored the ESC 2012 guidelines saying that DOACS is preferred as first line for AF. Limiting the use of DOACS would be increased risk of bleeding among patients with metallic valves and its cost, being more expensive than warfarin, he added.

In his lecture, McGavigan noted the development of NOACS has proved promising as a viable alternative to warfarin in treatment of patients with Atrial Fibrillation.

Numerous trials such as the RE-LY, ROCKET and ARISTOTLE trials proved superiority of NOACS over Warfarin in treatment of patients with Atrial Fibrillation. Yet, there are still doctors who remain hesitant in using NOACS in patients with AF.

Warfarin is one of the first anticoagulants used for atrial fibrillation. Major disadvantages of this drug are its narrow therapeutic index and its interactions with many drugs. In fact, the ROCKET Study mentioned, showed that only 57% of patients on Warfarin are able to target an INR of 2 to 3. The symposium aimed to address the different myths and pitfalls in the use of NOACS based on clinical trials.

It was stressed that among patients with atrial fibrillation who are not on any anticoagulation, there is an increase likelihood of stroke and an increase in mortality in patients already with stroke.

With warfarin, there is a 50-65% risk reduction of stroke when compared against placebo but with a 1-1.5% risk of developing major hemorrhage. With that, three different trials were discussed which compared DOACS against Warfarin, The RE-LY trial which compared Dabigatran against Warfarin, the ROCKET trial which compared Rivaroxaban against Warfarin and finally ARISTOTLE trial which compared Apixaban against Warfarin.

One question raised during the open forum touched on the different kinds of DOACS available in the market and which of them would prove superior among AF patients.

McGavigan mentioned that it was "tempting" to do a cross trial comparison among the three mentioned trials. But because of the different drug profiles, patient populations and trial designs, such comparison would not be possible at this time. It was stressed that the use of each DOACS should be tailored based on the clinical situation and on patient’s preference.

Part of the discussion tackled patients with increased thrombotic and bleeding risks. Using the HAS-BLED score, patients with more risk factors means a higher risk for bleeding. Despite that, a high HAS-BLED score should not be a contraindication in using OACs. It was also noted that, antiplatelets have very limited role in AF and the use of dual antiplatelet therapy proved inferior when used in patients with AF when compared to Warfarin but with similar bleeding risks.

Among patients with coronary artery disease and atrial fibrillation, the use of OACs with ASA or Clopidogrel is likely to be safe. There is an increased risk for bleeding when OACs, ASA and Clopidogrel are used at the same time (Triple therapy). In patients with AF who develop bleeding due to use of DOACS, there is currently an antidote being undergoing trials known as Andexanet alfa.

When dealing with patients with AF with a decrease in renal function, it was recommended to monitor Creatinine Clearance (CrCl) annually. If CrCl is 30-49 ml/min, it was recommended to reduce the dose. If CrCl is at 15-29, caution in the use of DOACS should be noted and in patients with CrCl less than 15, DOACS should be discontinued. As to better compliance, once a day dosing proved better adherence among patients with AF.

Despite the promising benefits in the use of DOACS in patients with AF, anticoagulants still remain underutilized especially among doctors unfamiliar with these novel drugs.

The symposium, sponsored by Pfizer, aimed at addressing the different myths and pitfalls in the use of NOACS based on clinical trials. Francis Solomon

M. Claridades, MD | The Medical City
A study on the clinical profile of adult Filipinos showed that Filipino males have more risk factors for cardiovascular events. This is because dyslipidemia and obesity were higher in the male population who are most likely employed and college graduates, said Prof. Nina Castillo-Carandang. These findings highlight the prevalence of cardiovascular risk factors among asymptomatic, “apparently healthy” Filipino population.

Citing the results of the LIFECARE Study (Are Adult Filipinos Truly “Apparently Healthy?”: Clinical Profile and Policy Insights from the Philippine the LIFECourse study in CARdiovascular disease and Epidemiology Study), the UP-PGH based clinical epidemiologist further revealed the findings were derived from 3,072 apparently healthy individuals from different regions in the Philippines aged 30 to 50 years old, married, employed and high school graduates. The investigation was done in Manila, Bulacan, Batangas, Quezon and Rizal.

Traditional cardiovascular risk factors were also observed to be more common in the male, older and employed participants. Being male, employed, living in urban areas, and those who reached elementary education were more predisposed to develop systemic arterial hypertension.

Moreover, the prevalence of cardiovascular risk factors and metabolic syndrome in relation to socio-demographic factors among Filipinos is more pronounced in the Filipino male population.

Dr. Rody G. Sy, head of the Department of Internal Medicine in UP-PGH, revealed that cardiovascular diseases has increased significantly in the last five years, reaching to 94.5% prevalence and 64.3% vascular diseases.

Males had higher systolic and diastolic blood pressures, fasting blood glucose, triglyceride levels, low HDL levels compared to the female population. Females, on the other hand, were more obese, had increased HDL and LDL levels, and higher body mass index, the former PHA president added.

The prevalence of Peripheral Artery Disease (PAD) in the studied population is 2%, the LIFECARE study also showed.

Dr. Paul Ferdinand Reganit, clinical associate professor at the UP-PGH College presented that the female gender, being a non-smoker, low BMI, and increased LDL–C levels were associated with increased incidence of PAD.

He said that these are non-conventional risk factors for PAD and that these may be explained by the malnutrition inflammatory complex system, Endotoxin–lipoprotein Hypothesis, survival bias, and time discrepancy among competitive factors.

Reganit emphasized the prevalence of PAD in this population showing a prevalence of 2%. In the Univariate Analysis of the study, female gender, non-smoker, low BMI, and increased LDL –C levels were associated with increased incidence of PAD. In the multivariate analysis, female, low BMI and increased LDL showed increased incidence of PAD. This are significant non-conventional risk factors for PAD. Reganit added that this may be explained by the Malnutrition Inflammatory Complex System, Endotoxin–Lipoprotein Hypothesis, survival bias, and time discrepancy among competitive factors.

The LIFECARE study is a community-based cohort study, with a five-year follow up which includes apparently healthy population, aged 20-50 years old and aims at determining the prevalence of cardiovascular risk factors, effects of socio-economic status, psychosocial, health care utilization, and educational status.

Filipino males more prone to CVD

By Michael Anthony C. Estur | UP-PGH
Cardiomyopathy is a vast clinical entity that affects the population globally. Hypertrophic cardiomyopathy (HCM), one of the many kinds of cardiomyopathy, is characterized by left ventricular hypertrophy without dilatation that is present in the absence of other disease states that could explain the hypertrophy.

It may be asymptomatic or may present with angina, syncope, dyspnea, palpitations or sudden cardiac death. Over the many years, its treatment has evolved, encompassing pharmacologic and surgical. If pharmacologic therapy like beta blockers and calcium channel blockers do not suffice to alleviate the obstructive physiology, surgical interventions like septal myomectomy and alcohol septal ablation are done to improve outcomes.

In a recent study, symptom-free survival for septal ablation is higher compared to that of surgical myomectomy. Based on the ACC/ESC Expert Consensus, septal myomectomy is better than percutaneous alcohol septal ablation in terms of a very low risk of sudden death and usual effectiveness despite anatomic variability; the two aforementioned parameters are uncertain in percutaneous alcohol septal ablation. Operative mortality for both is one to two percent; the two interventions decrease objective and subjective symptoms. Recently, specialists have favored the use of implantable cardiac defibrillator (ICD) in HCM patients based on the success of such approach in other structural heart diseases.

Based on the 2011 AAF/AHA Guidelines for the Diagnosis and Treatment of HCM, ICD placement is a class I recommendation for patients with HCM with prior documented cardiac arrest, ventricular fibrillation, or hemodynamically significant VT. Class IIa recommendations of ICD placement include HCM patients with sudden death presumable caused by HCM in 1 or more first degree relatives, a maximum LV wall thickness greater than or equal to 30 m, and one or more recent, unexplained syncopal episodes. However, ICD will cause harm (class III) when the ICD placement will be a routine strategy in patients with HCM without an indication of increased risk; when it is done to permit HCM patients to engage in competitive athletics.

One of the more commonly encountered cardiomyopathy in the clinical setting is dilated cardiomyopathy (DCM). DCM refers to a large group of heterogeneous myocardial disorders that are characterized by the dilation and depressed myocardial contractility in the absence of abnormal loading conditions such as hypertension or valvular disease. Majority of DCM is idiopathic (50%); myocarditis causes 9% of DCM and ischemic heart disease 7%. Less common causes of DCM include infiltrative diseases, hypertension, HIV infection, peripartum, connective tissue disorder, doxorubicin use and substance abuse. If DCM is symptomatic, mortality is estimated to be 25% at one year and 50% at five years.

Modalities like 2D echo, cardiac MR, CXR and ECG have all contributed to the
diagnosis of this condition. When patients present with respiratory distress or impaired systemic perfusion and clinical assessment is inadequate, invasive hemodynamic monitoring (use of PA catheter) should be performed (class I). Routine endomyocardial biopsy is not recommended in all cases of heart failure due to its given limited diagnostic yield. This is best performed in patients with fulminant heart failure unresponsive to GDMT, new onset CM to exclude lymphocytic or giant cell myocarditis, and to determine chemotherapy for primary cardiac amyloidosis. In terms of invasive therapy, in a study by Gasparin et al, cardiac resynchronization therapy (CRT) has improved LVEF and reduced NYHA class greater in non-ischemic DCM than ischemic CM.

Mechanical circulatory support like the LV assist device has also been used as a bridge to decision, bridge to candidacy, bridge to transplantation, bridge to recovery and bridge to therapy. HeartMate I study has shown 52% one-year survival rate and 23% two-year survival rate compared to optimal medical therapy, 25% and 8% respectively. In the age of molecular medicine, stem cell therapy seems to be a promising therapeutic arm for DCM based on a seemingly positive effect on LVEF, NYHA functional class and quality of life.

A clinically significant disease entity affecting cardiac morbidity is pulmonary hypertension. In the Nice Conference in 2013, pulmonary hypertension can be divided into four categories – 1. Pulmonary arterial hypertension (PAH), 2. Pulmonary hypertension due to left heart disease, 3. Pulmonary hypertension due to lung disease and/or hypoxia, and 4. Chronic thromboembolic pulmonary hypertension (CTEPH). For PAH, therapy includes general measures and supportive therapy, pulmonary vasodilators and interventional procedures. Pulmonary vasodilators consist of calcium channel blockers, prostacyclin, PDE type 5 inhibitors (e.g. Sildenafil), and endothelin receptor blocker (e.g. Bosentan).

The PATENT-1 trial has highlighted the role of a novel drug, Riociguat, a soluble guanylate cyclase agonist, in the treatment of PAH; it has been shown to improve 6-minute walk distance compared to placebo. Several trials have also showed the benefit of combination therapy in PAH; as of this time, initial use of initial combination therapy is a class IIb recommendation. When medical therapy has failed, interventional therapies like balloon atrial septostomy (BAS), Pott’s shunt, pulmonary artery denervation can be done. Other surgical therapies include extracorporeal life support and lung/heart-lung transplant. For pulmonary hypertension due to left heart disease, therapy focuses on reduction of left sided pressure to reduce pulmonary pressure.

Agents like ACE-I, ARB, B blockers, diuretics, digoxin and inotropes are used to improve outcomes. CRT has also been used for severe LV dysfunction. Vasodilators like sildenafl do not cause benefit in this subgroup. The third class of pulmonary hypertension, that is caused by chronic lung disease/hypoxia, is treated with pulmonary bronchodilators and long- term oxygen. Unfortunately, calcium channel blockers and PAH-specific therapy like vasodilators are not useful in this category. The therapy for the last class of PAH, CTEPH, is founded on anticoagulation.

Four cases were presented to be able to discuss and review the clinical utility of different imaging modalities today including echocardiography, MPI, and computed tomography scan. From these cases, it was shown that CT coronary angiography and cardiac MRI are two of the most promising diagnostic approaches today.

Case 1 dealt with a 36-year-old female with palpitations and holosystolic murmur presenting with intracardiac mass noted on 2d echo (TTE and TEE). Cardiac MRI showed great utility in tissue characterization of intracardiac mass. This can be done by certain techniques like fat suppression, detection of water and contrast enhancement.

The other three cases highlighted the potential of CT coronary angiography as an alternative tool in working up patients with different profiles and risks for coronary artery disease. This modality has been shown to be beneficial in case 2 of a 52-year-old female with intermediate probability risk for CAD. The role of non-invasive imaging of the coronaries will be most welcome among such group of patients and thereby improving its cost-effectiveness. Maria Claudia G. Alcancia, MD | Makati Medical Center
Right Heart Failure: Diagnostics, Monitoring and Management

Dr. Ma. Consolacion Torres talked about the causes, diagnosis and management of Right Heart Failure by. Right ventricular heart failure is a vicious cycle that confers poor prognosis by having decrease cardiac output, decrease tissue perfusion and a septal shift that leads to compression of left ventricle. The causes of right heart failure are RV volume overload, RV contractile dysfunction and RV pressure overload. This is coupled by activation of neurohormonal cytokines and mechanical stretch signaling. In the diagnosis of Right heart failure: A good history and physical examination is paramount wherein ancillary diagnostics such as electrocardiogram, chest X ray, and echocardiography complete the over-all picture. Additional imaging such as CT pulmonary Angiography is a preferred diagnostic modality in hemodynamically stable ICU patients, while Cardiac Magnetic Resonance is a most sensitive method to assess RV size. Cardiac Biomarkers such as elevated BNP and Troponins are hallmarks of the disease, wherein Right Heart Catheterization is still the gold standard as a direct measurement. Thus, a complete history and physical examination, imaging, invasive hemodynamics and identification of underlying causes are proven measures in management.

Heart Lung Interactions: How Strong is the Connectivity?

Dr. Elmer Linao tackled the interlinked relationship of Heart to the Lung which is an integrated system of balancing act. He said that balance of preload; RV and LV afterload are influenced by intrathoracic pressures which explains pulsus paradoxus. The ventricular interdependence correlates with ventricular contraction and volume that ultimately modify the function. The pericardial influence such as constrictive physiology and the alterations in pulmonary arterial hypertension are important in assessing the interconnectivity of the cardiopulmonary circuit. Thus, managing LV function and Positive End Expiratory Pressure (PEEP) helps systolic compromise by decreasing preload and afterload.

Minimally Invasive Hemodynamic Monitoring: What’s New?

Dr. Luis Martin Habana spoke about the column of obituary for the Pulmonary Artery Catheter which was initially seen from 1970 to 2013. This is a manifestation of an evolving science wherein changes are inevitable. However, an analysis by Pinsky states that “No monitoring device, no matter how accurate its data, will improve outcome; unless, coupled with a treatment, which itself improves outcome.” Moreover, new paradigm shift in invasive and non-invasive measures are discussed such as: pulse wave analysis, transpulmonary thermodilution system, Pulse Pressure Variability, and Doppler Cardiac Output monitoring devices. Nexfin is a non-invasive pulse pressure analysis, NICOM using the ficks principle, NICOM (Bioreactance) measures changes in frequency and electrical currents. Treatment interventions must be based on hemodynamic data in timely matter may improve outcome. He further recommends that dynamic rather than static monitoring, and ends the talk with a challenge that “it is not what the software does; it’s what the user does”.  

Ariel D. Valones, MD UP-PGH
The latest guideline adapted the term nSTE ACS to encompass both NSTMI & UA incorporated data from the ongoing PHA ACS registry and from local studies, emphasized the use of quantitative troponin in approach to diagnosis and the inclusion of unexplained syncope and dizziness as a clinical presentation.

For Stable IHD new features include the use of PTP (Pre Test Probability) assessment using echocardiography, stress imaging as initial diagnostic tools, GDMT (Guideline directed medical therapy in all patients before considering revascularization and in certain subsets using the heart team approach in decision making.

In STEMI the major changes include pre-hospital recognition which can reduced morbidity and mortality, transfer strategy to the nearest hospital capable of reperfusion therapy, ivabradine as an alternative for beta blocker, use of therapeutic hypothermia for comatose or post arrest and use of aspirin indefinitely and p2y12 inhibitor undergoing DES placement.

An open technique with same ideas via different approaches could be fully adopted by MICS (Minimally Invasive Cardiac Surgery). An alternative to open heart surgery with advantages of less blood loss, lower risk of infection, reduced trauma and pain, shorter hospital stay, faster recovery and quicker return to normal activities.

Sharon T. Cordero, MD | St. Luke’s Medical Center, QC

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**Which is better? Accelerated Cardiac Rehab Med Program vs. Regular Cardiac Rehab Program**

The barriers to enrollment in phase 2 cardiac rehabilitation program include lack of referral, program cost and length of the program.

The advantages of an accelerated rehabilitation program is shorter rehabilitation time and shorter time in returning to usual occupational activity and activities of daily living. Disadvantages include patients being unable to keep up with poor exercise intolerance and fear that the patient may develop arrhythmias or signs of hemodynamic instability.

Patients in a conventional program had a significantly higher incidence of recurrent and fatal MI on the first year of follow up as compared to the short-term and long-term arm, according to a study by Boulay and Prud Homme. Both short- and long-term cardiac rehabilitation program are effective in secondary prevention to lower the incidence of recurrent and fatal MI.

Both short-term and long-term cardiac rehabilitation were effective in the management of CAD risk factors by improving lipoprotein lipid profile, exercise capacity and smoking cessation in a study by Boulay and Prud Homme.

Decision on what program to be implemented should be individualized. The accelerated program may be an alternative to the standard program depending on the type of surgery and functional capacity of the patient. Patients that may benefit from an accelerated program are CABG PCI, Valvular, and Congenital patients.

Louie Alfred Shiu, MD | Manila Doctors Hospital

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**Speaker:**

Benjamin Jose Quito, MD

**Credentials:**

Clinical Research Fellowship in Cardiac Rehab, Phc, Fellowship Training at University of Santo Tomas

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**Speakers:**

- **NSTE-ACS**
  - Dr. Sue Ann Locnen
- **Stable Angina**
  - Dr. Ma. Consolacion Torres
- **STE-ACS**
  - Dr. Victor Lazaro
- **MICS**
  - Dr. Roberto Cristobal

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**CAD Sessions**
FFR-guided PCI may just be better

Measuring fractional flow reserve during angiography to guide percutaneous coronary interventions (PCI) may add more meaning for patients with significant coronary artery diseases (CAD).

This was the central message of Dr. Fahim Haider Jafary in his discourse for the 46th PHA Annual Convention and Scientific Meeting last May 28 at the Edsa Shangri-La Hotel in Mandaluyong City.

Myocardial Fractional flow reserve (FFR) is a new index of functional severity of coronary stenosis that is calculated from measurements made during coronary arteriography. It involves determining the ratio between the maximum achievable blood flow in a diseased coronary artery and the theoretical maximum flow in a normal coronary artery. Its use in guiding PCI has gained popularity but remains controversial.

The ability of the cardiologist to discriminate between lesions that can cause MI and lesions that are physiologically insignificant on the basis of coronary angiography alone is limited, Jafary stressed.

The Singaporean interventional cardiologist pointed out the flaws of angiography-based PCI especially at delineating diffuse CAD.

He presented clinical trials comparing measuring FFR during angiography versus angiography alone before PCI is done. A cut-off value of 0.8 FFR was used to guide PCI that resulted in a significant reduction on rate of composite endpoint of death, non-fatal MI, and repeat revascularization at one year.

He further discussed limitations of angiography alone in left main diseases, post-myocardial infarction, multi-vessel and diffuse diseases, bifurcation lesions and tandem lesions. He cited results from FAME 2 trial, an FFR-guided PCI versus Medical therapy in stable coronary disease. More than a thousand patients with one to three vessel involvement were included and evaluated for PCI with DES. He said this trial was prematurely stopped because of a significant reduction in the need for urgent revascularization was clearly observed.

Jafary is a senior cardiology consultant at the Tan Tok Seng Hospital in Singapore.

For ACS patients need for more potent, safer therapy stressed

Dr. Fahim Haider Jafary, a highly-respected interventionalist from Singapore, discussed the use of the new P2Y12-ADP receptor antagonist Ticagrelor (Brilinta) in a broad spectrum of Acute Coronary Syndrome (ACS) patients in a luncheon symposium.

With the evolution of anti-platelet therapy, there is clearly a need for more potent and safer therapy for ACS patients. Clopidogrel, the commonly used P2Y12 receptor inhibitor, is a pro-drug which requires activation for its anti-platelet activity. Ticagrelor, on the other hand, does not need activation, thus, it works quickly, early and therefore, more potent. These and other differences from the currently available anti-platelet drugs, Jafary extensively discussed the results of the PLATO Trial, the landmark study for Ticagrelor. Across a broad spectrum of ACS patients, Ticagrelor was found to benefit both medically-managed patients and those who underwent coronary intervention. Jafary called Ticagrelor “a mortality-reducing drug”, having showed reduction in the rate of death from any cause compared with clopidogrel (4.5% vs 5.9%). He emphasized that Ticagrelor (in combination with Aspirin), significantly reduced the primary composite endpoint of cardiovascular death, myocardial infarction, or stroke compared with the use of Clopidogrel plus Aspirin. The absolute reduction in mortality was seen more in high-risk patients – those who had a history of stroke, myocardial infarction, and those with chronic kidney disease. In terms of bleeding, there was no significant difference in the rates of major bleeding between Ticagrelor and Clopidogrel.

However, higher fatal intracranial bleeding with the use of Ticagrelor was noted, hence, those patients with prior intracranial bleed should not be given the medication. With those patients who underwent coronary intervention, ACS patients who received Ticagrelor had fewer stent thrombosis versus patients who received Clopidogrel. The luncheon symposium was sponsored by Astra Zeneca.
PCI in survivors of cardiac arrest may do worse

Is it significant to do primary percutaneous coronary intervention (PCI) to reduce the mortality of patients with ST elevation myocardial infarction (STEMI) complicated by out-of-hospital cardiac arrest?

This was the highlight of the topic of Dr. Ku Hyun Kang, vice chair of the Korea Society of Emergency Cardiac Care, during his lecture at the 15th Resuscitation Council of Asia Summit. Coronary artery disease is the most important cause of sudden cardiac arrest. Attempt to do PCI for STEMI patients after achieving return of spontaneous circulation (ROSC) has resulted in somewhat an unfavorable outcome such that most of them expired during cardiac intervention.

Identifying STEMI in post-arrest is even more challenging. Its absence on post-ROSC electrocardiogram, may not necessarily mean absence of acute culprit coronary lesions that triggered the cause of cardiac arrest.

However, small observational studies on PCI for post-cardiac arrest syndrome may be effective. Hence, the need for randomized studies to confirm such findings.

“Most importantly, good teamwork among emergency personnel should be kept in mind and in practice,” Kang concluded. Isaiah C. Lugtu, MD: Chinese General Hospital and Medical Center ♥

LITONJUA... from Page 41

discussed the benefits of using DPP4 inhibitors in diabetic patients.

Earlier in his lecture, Litonjua enumerated the core defects in type 2 Diabetes (T2DM). Insulin resistance, Beta cell dysfunction and loss, and increased hepatic production are the defects that lead to a patient developing T2DM.

Aside from these defects, a forgotten cause of T2DM is the hormone glucagon. It is a major regulator of hepatic glucose production, promotes adipose lipolysis, beta oxidation and inhibits glucose uptake.

Moreover, Litonjua highlighted the role of Glucagon-like peptide-1 (GLP-1) in diabetes. It promotes slow gastric emptying, increases insulin secretion, decreases glucagon secretion and hepatic glucose production. GLP1 is degraded by the enzyme DPP4 which shortens its action in the body.

With the advent of DPP4 inhibitors it could promote the effects of GLP-1 and in turn control sugar levels for type 2 diabetics. Aside from the effects of DPP4 inhibitors in glucose metabolism, other beneficial effects were also mentioned.

It inhibits degradation of over 20 peptides in the human body examples are GIP, PACAP, gastrin releasing peptide and other neuropeptides. DPP4 inhibitors could also increase the amplitude of incretin release keeping them elevated for 12 hours.

Knowing the beneficial effects of DPP4 inhibitors, its cardiovascular effects were put into focus. Impairment of GLP-1 could decrease cardiovascular functions hence inhibiting its degradation could promote cardiovascular function.

Aside from GLP-1, DPP4 inhibitors also promote other enzymes that could augment cardiovascular function like bradykinin, endomorphin-2, IGF-2, among others. Litonjua reiterated that the function of DPP4 inhibitors does not only stop in controlling diabetes but also have beneficiary effects in other organ systems.

“The symposium was sponsored by LRI-Therapharma.” Florante T. Paler Jr, MD | UPHRMC ♥
Two eminent Filipino cardiologists Drs. Romeo Divinagracia and Rafael Castillo debated on the use of biomarkers to direct management of patients with chronic heart failure.

Divinagracia who was on the positive side of the fence, argued citing results from meta analyses that patients whose management are biomarker guided fare better than those who are clinically guided.

He added that such biomarkers may be costly but is cost-effective with lower re-hospitalization rates among patients under biomarker-guided therapy than those in the clinically-guided therapy group.

Castillo, on the negative side, refuted Divinagracia’s claim by stating that biomarkers are not essential and cost-effective in the management of heart failure in a typical Philippine clinical setting.

Aside from the fact that the blood tests for heart failure are not standardized, there are a number of limitations to these biomarkers such as age, BMI, renal disease, comorbidities, and has a large intra- and inter- individual variability that affect the results.

Citing results from the BATTLE-SCARRRED trial by Richards, patients who are at least 75 years old whose treatments were biomarker guided did not do any better in terms of survival, compared to the usual care and clinical-guided therapy group.

Castillo, however, admitted that biomarkers showed significant survival benefit among patients aged 75 years old. He went on saying that although BNP clearly improves diagnostic accuracy of patients presenting with dyspnea, it is not a stand-alone test.

The physician must bring to the table adequate history and physical examination skills, as well as ability to interpret other laboratory tests such as chest x-rays, Castillo strongly stressed.

Both speakers found a common ground, however, saying that the use of biomarkers is not applicable to everyone especially in our clinical setting. No amount of biomarkers should replace the physician’s clinical judgment, one that is priceless and most certainly economical.

Former PHA president Ma. Carrisma Belen ably moderated the debates. Both Divinagracia and Castillo are former presidents of the PHA.

The Crossfires and Controversies was the first installment of two debates scheduled for this convention. The audience found the debates very interactive, a bit heated yet intellectually stimulating.

ECMO... from Page 37

frequency was written in Japanese journals since the 1980s. Percutaneous cardiopulmonary support has at least 1,000 registered users in Japan which is mostly due to urgent cases. There are more than 1,500 cases per year in 2009 to 2012. Because of benefits it contributed, ECPR is covered by health care insurance companies in Japan during the first three days to post-arrest patients.

Moreover, Sakamoto shared findings of the SAVE-J Study (Extracorporeal Cardiopulmonary Resuscitation versus conventional cardiopulmonary resuscitation in adults with out-of-hospital cardiac arrest: A prospective Study).

The multi-center study tried to determine whether or not ECPR would improve the short- and long-term outcome of out-of-hospital cardiac arrest cases. Two hundred and sixty patients of ECPR group and 194 patients of non-ECPR group were enrolled. It concluded that there was no difference between the background of ECPR group and non-ECPR group.

Sakamoto is a professor and chairman of the Department of Emergency Medicine, Teikyo University School of Medicine. He is also the chairman of Cardiopulmonary Resuscitation Committee, Japan Foundation for Emergency Medicine and the vice president, Japanese Society for Emergency Medicine.
May 28, 2015 marked the annual UP-Philippine
General Hospital, Section of Cardiology alumni
homecoming celebration. Held at the Paparazzi
Bar, Edsa Shangri-La Hotel during the annual Philippine
Heart Association Convention, this year was the most
attended homecoming to date, with a total number of 110
alumni from all over the Philippines.

The celebrants were from Batch
1995 (Drs. Manuel Edmilao, Cristina
Larracas, Robertito Marino, Arnold
Mina, and Felix Eduardo Punzalan)
and Batch 2005 (Drs. Walid Amil,
Joseph Dimaano, Ivan Panganiban,
and Ronald Santos). Each was
awarded a golden Oblation statue and
recognition from batches before and
beyond.

The highlight of the night was when
the alumni from batch 1995 took the
stage and started reminiscing about
their cardiology training. From journals
they published to competitions they
won, then to echocardiography antics
and duty mishaps. Afterwards, the
first four alumni, namely Drs. Romeo
Ariniego, Emiliano Canonigo Jr.,
Juanito Magbanua, and Rody Sy took
the stage and reminisced how the
section started. They all shared their
experiences and how they practiced
back in the days despite the lack of
high tech imaging and gadgets.

They all thanked our prime mentor,
Dr. Ramon Abarquez for starting the
section and being a teacher to all, both
past and present. Dr. Abarquez then
encouraged everyone to ask, “because
when you ask, you learn, and when
you learn, you should share”, pointing
the importance of teaching and
passing what you know to generations
after you.

Elected as members of the 2015–
2016 Board of Directors: Drs. John
Anonuevo (president), Paul Reganit
(vice-president), Mic Agbayani
(secretary), Ricky Tiongco (treasurer),
Jean Alcover, Dony Magno, and Elmer
Llanes as directors.

It was a night of singing, drinking,
and merriment. Friendships both
shared and celebrated. ♥
Once again, the Philippine Heart Association Cardiology Quiz Bowl tested the knowledge and established camaraderie among the fellows-in-training from 14 different training institutions in Cardiology.

The Medical City was declared as the champion. University of Sto. Tomas Hospital got the 2nd place while Cardinal Santos Medical Center won the 3rd place.

Breaking from tradition, there was no elimination round this year. The spirit of healthy competition permeated the air. All the participants conquered the three rounds of the competition from easy, intermediate to difficult level. Everyone did his/her best to win the title.

And at the end of the day, the efforts all the contestants and organizers paid off. The prestigious event, once again, successfully assembled all the renowned and aspiring cardiologists to strengthen their commitment in making the heart of every Filipino healthy and above all, happy!

**PHA Cardiology Quiz Bowl**

TMC, UST Hospital, CSMC net top 3 places
it was hosted by Dr. Helen Ong-Garcia who put more excitement in the event and at the same time, inspired the participants all throughout the competition. It was arbitrated by three respected cardiologists -- Drs. Aurelia Leus, Leila Diaz and Brenda Espinosa.
AFTER three years of painstaking conceptualization, research, writing stories, collating pictures spanning six decades, several photo and presswork. The Philippine Heart Association’s third book of its kind gives an account of its big breakthroughs and rich history extending over six decades.

Through pictures in sepia and in full glossy color and well-written articles, the reader is taken to a virtual tour of the society’s remarkable existence in the last 60 years.

Dr. Saturnino Javier, PHA@60 editor in chief, said "I salute all those who have become part
off the press of PHA’s many enduring decades of life-long commitment to preventing disease, healing hearts and saving lives."

It takes pride in the fact that this publication merited the attention of Philippine President Benigno Simeon Aquino III, Health Secretary Ona, Philippine College of Physicians President Priscilla Caguioa, and Philippine Medical Association President Atty. Leo Olarte.

The book is composed of six sections showing six decades of history. The stories were written by members of the PHA and Gynna Gagelonia. Other pages of the book are dedicated to former presidents of the society and an “In Memoriam” dedication to deceased past presidents.

Stories on the different chapters and councils of the society, board of directors and the PHA’s honor roll, among others are also included in the book.

In particular, some featured stories’ focus include PHA’s Birth Years, Decade of Firsts, Counterpointing PHA’s Golden Decade with the World, Decade of Sharing, Decade of Breakthroughs and Diamond Decade.

The book was launched on May 28, 2015 in simple ceremonies attended by the PHA Board, former presidents, council chairs, contributors and some guests from the pharmaceutical industry.

(GPGagelonia) ♥
President’s Night
Changing of the Guard

CLOSING CEREMONIES
May 29, 2015 | Edsa Shangri-La Hotel
Mandaluyong City

Presidential Citation recipients
The PHA 46th Annual Convention was capped with a glamorous, fun-filled Fellowship Night dubbed “Follies de PHA” which immediately followed after the Closing Rites and the turnover of the key of responsibility to the incoming President Dr. Alex Junia.

The night was formally opened by the incumbent President Dr. Joel Abanilla.

A series of presentations then struck the audiences in awe which started with the glamorous presentation from the PHA Board themselves, the performers of Club Mwah!, the competition among three different chapters namely -- the Zamboanga Peninsula Chapter, Western Visayas-Panay Chapter and Southern Tagalog Chapter, and a surprise number by Dr. Marienella Francisco.

Drs. Abanilla and Nannette Rey treated the audience to a string of Broadway and West End theatre tunes.

The Cebu Chapter this year, instead of joining the annual competition, showcased its talent and presented a repertoire of songs from the Broadway and closed it with a very inspiring “You’ll Never Walk Alone” rendition dedicated to Cebu’s Pride and the very first ever President from Cebu City, Dr. Junia.

Western Visayas-Panay Chapter emerged as the winner.

This year’s Fellowship Night was indeed filled with follies and fun. Thanks to the tandem of Drs. Helen Ong-Garcia and Don Robespierre Reyes, who excelled in their hosting job.

Drs. Abanilla and Nannette Rey
Fun-filled

FOLLIES de PHA

PHA Western Visayas – Panay Chapter

PHA Zamboanga Peninsula Chapter

PHA Southern Tagalog Chapter

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Everyone deserves a healthy heart and a healthy life. This is why the PHA makes it its mission to improve cardiovascular health. Every Filipino’s heart health matters to us. A healthier heart is important so that you can live longer- to enjoy life’s little pleasures: cherish the special moments, enjoy those summer getaways, travel and fulfill that bucket list, spend those weekend mornings playing a round or two of golf with friends, enjoy beautiful and perfect sunsets in your favorite hideaway, relish dining out experiences with family and friends, and take great delight in the company of grandchildren and great grandchildren.

We are the Philippine Heart Association.

We are here because your heart matters.