

INSIGHT ON **Hospital &
Healthcare
Management**

Vol. 5 Issue 4 Aug. 2016

www.hhmglobal.com

The Benefits Of IT Integration
In The Clinical Laboratory

Data-driven Care,
The Challenge Of Analytics

Creating Exponential Value
In Healthcare Through Analytics

Published by



Avni Media



Not for sale, Circulation only on request. To subscribe, e-mail us at: support@hhmglobal.com

**TECHNOLOGY INTEGRATION
BENEFITING HEALTHCARE**

SCC

Soft Computer

www.softcomputer.com

SCC Soft Computer:

the world's largest laboratory and genetics information systems vendor.



Delivering Integrated Laboratory and Genetics Information Management Solutions Worldwide

**SoftCytogenetics® • SoftMolecular® • SoftFlowCytometry® • SoftPathDx®
SoftHLA® • SoftBiochemistry® • SoftGenePortal™**

Founded in 1979 by Gilbert Hakim, SCC Soft Computer is the world's largest LIS/LIMS software developer—with a global workforce of nearly 2,000 information technology, medical technology, communications, and business professionals dedicated to LIS/LIMS development.

With nearly four decades' experience, SCC Soft Computer designs, develops, delivers, and supports one of the only fully integrated systems available in today's marketplace. These integrated solutions streamline operations and eliminate the need for costly add-ons and middleware.

SCC's laboratory and genetics information management systems help the largest and most sophisticated hospitals and laboratories—including many of the world's renowned academic medical institutions—reach peak productivity.

SCC Soft Computer: the global leader in healthcare IT

To learn more, visit us at www.softcomputer.com. To schedule a demonstration with one of our experts, please contact Ellie Vahman, Vice President of Sales & Marketing, at ellie@softcomputer.com.

Foreward

Dear Readers,

Challenges to improve quality care is one of the most discussed and important issue in our industry. Technology and Analytics are the two key elements that always play an important role in many aspects of the healthcare delivery system, and to offer new and better ways to solve the key problems pertaining to manage healthcare of the new century.

With this in mind we introduce the latest edition of Hospital & Healthcare Management and the reading starts with an interesting advertorial on the benefits of IT integration in the clinical laboratory by Mr. Gilbert Hakim, CEO of SCC Soft Computers who is considered to be a major force in the world of laboratory information systems.

The magazine now puts a limelight on the analytical process of creating value to the healthcare providers by featuring the next three articles on this subject.

The first of the three is a viewpoint on how data-driven approach can transform those organizations which in spite of having the immense data wealth in is not able to utilise the information to fully benefit the patients or themselves.

It is important that the power of analytics be married with the strategic decision making of a healthcare organization with this in mind our third article states the rise of new age healthcare analytics.

The article explains the need for an intelligent platform which focus on helping healthcare organizations commence this new age of medical services by leveraging big data and analytics.

Our fourth article which is also the last one on the subject if analytics explains how through optimization, predictive analytics and business intelligence, organizations can gain insights to strengthen financial and budgetary performance, deepen consumer-centric relationships and improve the way health care is conceived.

Then comes an interview with a renowned name of the industry, Rebecca Lanasa who is the Managing Director of Southeast Asia operations for Cerner answering our question on technology innovation & approach towards quality care.

Nurses are on the frontlines delivering care and ensuring that a patient's safety and best interest remain at the centre of care. explanation on technology is benefiting the nurses of today makes our next article an interesting read.

We, at Hospital & Healthcare Management are committed to keep you in sync with the latest developments in the dynamic field of Healthcare Management. And, with the increasing use of the new technologies and the adoption of innovations we look forward to a healthcare reform.

Until we meet again!!



Yuvaraj Sahni
Editorial Department

EDITORIAL DEPARTMENT

Yuvraj Sahni
Santoshi Joka

ART DEPARTMENT

Santosh Kumar Rangampeta

MARKETING & SALES

Sunny Rogers
Ayushi Mita
Veron Menon

PROJECT ASSOCIATE

Venkateshwarlu Lakum

ACCOUNT MANAGERS

Vineetha Gadhe
Vinay Kumar M

PROJECT HEAD

Sushma Kandula

CONTACT FOR ENQUIRIES & ADVERTISING

Ayushi Mita
M: +91 88268 49084
E: ayushi@hhmglobal.com

Sunny Roger
M: +91 84476 12124
E: sunnyroger@hhmglobal.com

Published by



Avni Media

Avni Media Private Limited. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, photocopying or otherwise, without prior permission of the publisher and copyright owner. Whilst every effort has been made to ensure the accuracy of the information in this publication, the publisher accepts no responsibility for errors or omissions.

The products and services advertised are not endorsed by or connected with the publisher or its associates. The editorial opinions expressed in this publication are those of individual authors and not necessarily those of the publisher or of its associates.

Hospital & Healthcare Management Magazine is a free of charge subscription, though the logistic expenses might be charged. The subscription is subject to approval. For bulk order, reprints minimum order required is 50 copies, POA.

Avni Media Private Limited.
HHM Global Department
104, Padma Palace - 86,
Nehru Place, 110019,
New Delhi, India.



**THE BENEFITS OF IT INTEGRATION
IN THE CLINICAL LABORATORY**

16

**DATA-DRIVEN CARE
THE CHALLENGE OF
ANALYTICS**



**A PARADIGM SHIFT IN
HEALTHCARE FROM
INFORMATION TO INSIGHTS
POWERED BY ANALYTICS**

22



14 - 17 NOVEMBER 2016
DÜSSELDORF GERMANY

www.medica-tradefair.com



WORLD FORUM FOR MEDICINE

Every year in November MEDICA provides an exceptional experience for experts from around the world. The World Forum for Medicine presents a broad product spectrum from some 5,000 exhibitors. Take advantage of MEDICA and its special products for your area of expertise, too.

BE PART OF IT!



Messe Düsseldorf GmbH
Postfach 10 1006 _ 40001 Düsseldorf _ Germany
Tel. +49(0)211/45 60-01 _ Fax +49(0)211/45 60-6 68
www.messe-duesseldorf.de

Basis for
Business



CONFERENCE

August 2016

HIMSS AsiaPac16

23 August 2016 - 26 August 2016
Queen Sirikit National Convention Center,
Bangkok, Thailand
Organisers: HIMSS Asia Pacific
Email: cfong@himss.org
URL: www.HIMSSAsiaPacConference.org

Medical Fair Asia 2016

31 August 2016 - 02 September 2016
Marina Bay Sands, Singapore
Organisers: Messe Düsseldorf Asia Pte Ltd
Email: medicafair-asia@mda.com.sg
URL: www.medicafair-asia.com

Medical Manufacturing Asia 2016

31 August 2016 - 02 September 2016
Marina Bay Sands, Singapore
Organisers: Messe Duesseldorf
Email: mma@mda.com.sg
www.medmanufacturing-asia.com

September 2016

Healthcare Investment and Technology Africa 2016

7 Sep. 2016 - 8 Sep. 2016 Abuja, Nigeria
Organisers: SZ&W Group
Email: info@szwgroup.com
URL: www.szwgroup.com/healthcare-investment-and-technology-africa-2016/

Medicall

09 September 2016 - 11 September 2016
Pragati Maidan New Delhi, India
Organisers: Medexpert Business Consultants Pvt Ltd
Email: info@medicall.in
URL: www.medicall.in

November 2016

Smart Tech Healthcare 201624

November 2016 - 25 November 2016
Bengaluru, India
Organizers: Explore Exhibitions & Conference Llp
Email: samantha@exploree Exhibitions.com
URL: www.ithealthcare.co.in

32

CREATING EXPONENTIAL VALUE IN HEALTHCARE THROUGH ANALYTICS

40

INTERVIEW ON TECHNOLOGY INNOVATION & APPROACH TOWARDS QUALITY CARE WITH REBECCA LANASA

46



TELE-HEALTH THE KEY TO IMPROVING PHYSICIAN WORKFLOW AND PATIENT CARE

50

MAKING TECHNOLOGY WORK FOR NURSES



Gilbert Hakim
CEO, SCC Soft Computer



Lisa Esch
Chief Population Health Innovation Officer, CSC



Brian McCalley
Chief Architect, Healthcare and Life Sciences, CSC



Noshin Kagalwalla
Managing Director, SAS Institute (India) Pvt. Ltd.



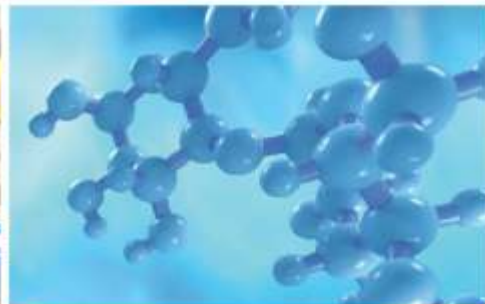
REBECCA LANASA
Managing Director, Southeast Asia, Cerner



Michael J. Sutter
CRNA, MSN, MSBA, Chief Innovation Officer, Carle Health System



Aparna Bala
Clinical Transformation Consultant, AirStrip



MEDICAL MANUFACTURING ASIA 2016

3rd Manufacturing Processes for
Medical Technology Exhibition and Conference

31 Aug - 1 Sep : 10.00am - 6.00pm
2 Sep : 10.00am - 5.00pm
Marina Bay Sands | Singapore

A New Wave of Opportunity Breakthrough Innovations, Invaluable Connections

Visit the region's leading trade fair for the manufacturing processes and medical technology sectors.

Harness the region's medtech prospects with the latest technology, solutions, materials and designs presented by over 200 established exhibitors from 20 countries.

Gain industry-focused insights at the MEDTech Business Forum, and connect face-to-face with 7,000 international industry specialists through the complimentary business matching service.

Pre-Register Your Visit @ www.medmanufacturing-asia.com
Double your chances to win the latest smartphone when you pre-register before 20 July!

(T&Cs apply. Visit website for more details.)

Concurrent Exhibition:



Supported By:



For Enquiries:

Messe Düsseldorf Asia Pte Ltd
3 HarbourFront Place #09-02
HarbourFront Tower Two
Singapore 099254
Tel (65) 6332 9620 _ Fax (65) 6337 4633
mma@mda.com.sg

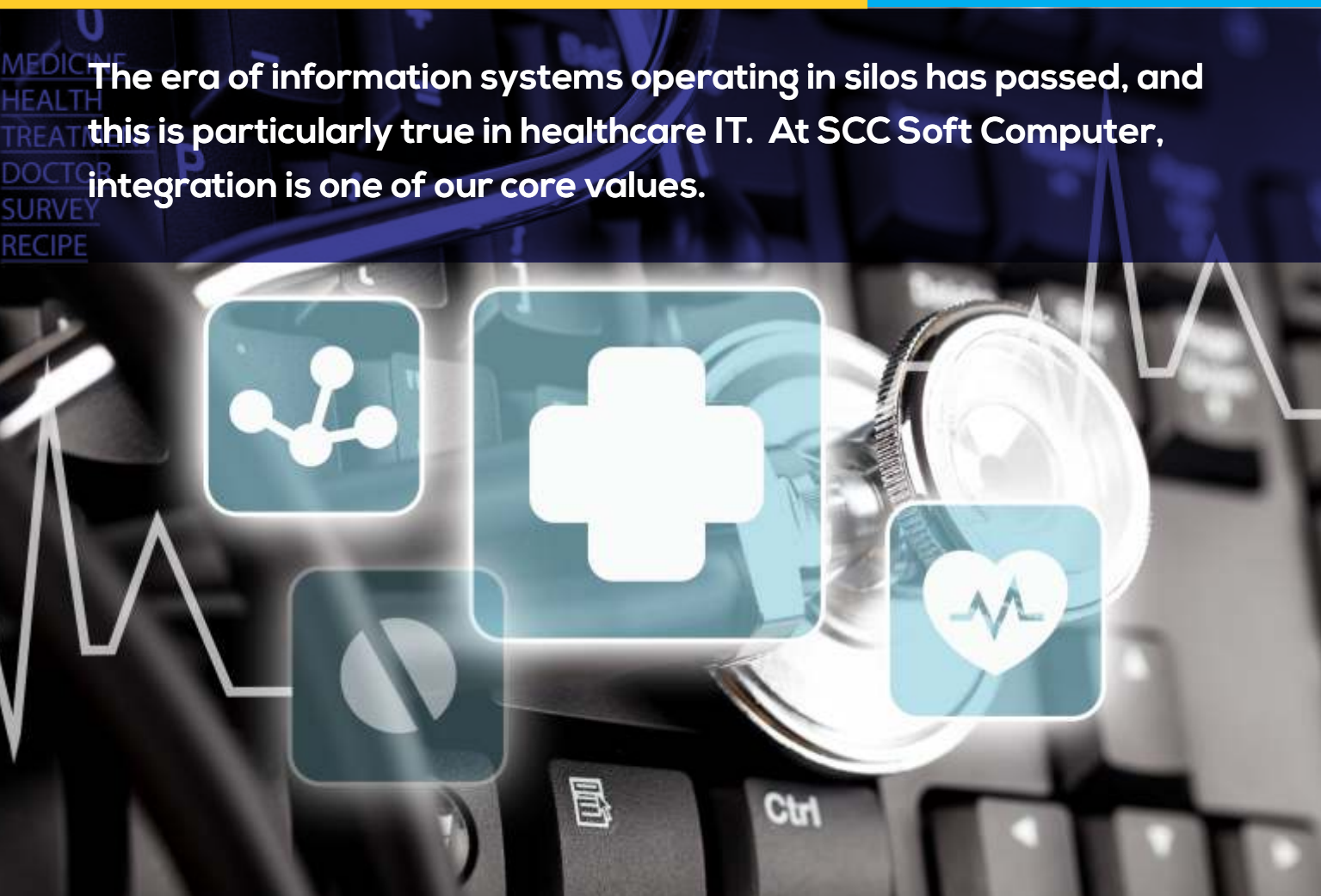
Jointly Organised By:



THE BENEFITS OF IT INTEGRATION IN THE CLINICAL LABORATORY

AND THE IMPORTANCE OF CONSIDERING TOTAL COST OF OWNERSHIP

The era of information systems operating in silos has passed, and this is particularly true in healthcare IT. At SCC Soft Computer, integration is one of our core values.



SCC is the leading and most widely recognized provider of integrated information systems for the healthcare industry. A privately-held organization, SCC reinvests a large percentage of net revenue annually (generally around 20 percent) towards R&D and our LIS. With nearly forty years of LIS experience, SCC has a diverse global workforce of nearly 2,000 information technology, medical technology, communications, and business professionals. SCC is the world's largest LIS/LIMS software developer with 1,620 professionals dedicated to LIS design, development, delivery, implementation, and support. Our robust suites of fully integrated laboratory and genetics information management systems provide healthcare clients the flexibility and scalability to be competitive.

SCC offers a greater depth and breadth of laboratory modules than any other vendor. A "one-stop-shop" healthcare IT vendor, SCC offers multiple disciplines in one integrated system so clients can rely on a single vendor for their entire integrated system instead of choosing a vendor for each. SCC's innovative and complete solutions are setting the standard for healthcare IT with suites of fully integrated information management systems.

Recognizing that clients have different needs, we offer optional productivity modules. We do not force our clients to purchase software modules they do not need.

Considered a leader in the LIS field, SCC produces the most robust and most automated LIS on the market. With the SoftLab LIS, laboratories require fewer laboratory FTEs and are able to process added volumes without adding FTEs. SCC's laboratory and genetics information system software include solutions for these healthcare disciplines and more.

LABORATORY	<ul style="list-style-type: none"> ◆ Laboratory ◆ Microbiology ◆ Anatomic Pathology, Cytology, Autopsy
GENETICS	<ul style="list-style-type: none"> ◆ Cytogenetics ◆ Flow Cytometry ◆ HLA/Immunogenetics ◆ Molecular Diagnostics ◆ Diagnostic Pathology ◆ Biochemistry
BLOOD SERVICES	<ul style="list-style-type: none"> ◆ Transfusion Service Management ◆ Blood Bank ◆ Blood Donor
OUT REACH	<ul style="list-style-type: none"> ◆ Courier Management ◆ Billing/Accounts Receivable ◆ Medical Necessity Checking ◆ Business Intelligence ◆ Billing Portal
SUPPORTING PRODUCTS	<ul style="list-style-type: none"> ◆ Reporting ◆ Image Management ◆ Positive Patient Identification (PPID) ◆ Recurring Order Entry (ROE) ◆ Quality Control ◆ Master Patient Index (MPI) ◆ and more



Delivering integration and interfaces in complex environments

The complex intricacies of clinical interfacing is a job best left to the experts. SCC Soft Computer has an unmatched reputation for writing complex interfaces and working with our industry colleagues to ensure that our clients' clinical environments get the data exchange they need. We understand that interoperability between clinical applications is critical for success—whether it is our own robust healthcare information technology solutions, an instrument, or a module from another vendor.

With a proven record for accomplishing complex LIS implementations in large, multisite environments, SCC excels in delivering complex interfaces and integration projects. SCC outperforms the competition with our best of breed approach to integration projects. Our laboratory and genetics information system solutions provide robust functionality, ease of instrument interfacing—including robotics, Web-enabled tools, rules-based logic, multisite capabilities, and more. SCC's fully integrated systems provide a seamless interface that links all clinical laboratory departments throughout the care provider network.

All SCC systems are designed and developed by SCC architects and programmers; all modules are integrated—and run on a single database instance producing consolidated reports. Our systems share a platform of architectural 'commons' that provides the basis of this integration. Increased consistency between systems, timely delivery of test results, flexible order entry with real-time results reporting, automatic workflow, safety features that are second to none, long-term cost savings, and interoperability—coupled with the ability to exchange information between systems—are just a few of the many powerful features built into SCC's robust healthcare information systems.

As a best-of-breed LIS, SoftLab has always been 'open', and SCC is implemented in the most complex environments (multisite, multi-time-zone/global, all lab disciplines, billing). With SCC's advanced system architecture, we offer many ways to integrate with instruments and foreign systems. Our interfacing team has developed robust direct interfaces, which eliminate the need for middleware/data manager, reduce costs, and decrease the complexity of the installation and implementation.

SCC's SoftLab® LIS is a multi-threaded application, so a technologist can place and view multiple instruments on a single SoftLab LIS from a single workstation. This is important because SoftLab also has a powerful rules engine and is a rules-based system. By contrast, other vendor systems must rely on a data manager for rules and QC. As a result, rules and auto-verification enable a single tech to do the work of several using the SoftLab LIS. During third shifts, a single tech could run the entire lab from a single workstation. These LEAN/Six Sigma-type processes cannot occur without direct interfacing to instruments and without the rules engine.

Integration of laboratory systems is a key quality for successful lab management, and interoperability between clinical applications is critical for success. We have a history of accomplishing complex LIS implementations in large, multisite environments and offer a greater depth and breadth of laboratory modules than any other vendor. We produce the most robust—and most automated—LIS in the world. With our SoftLab LIS, the clinical laboratory can process added volumes without increasing staff. And as a functionality richer solution, SCC's rules-based laboratory and genetics information systems provide specialized efficiency tools within each laboratory discipline without the need for additional third-party systems.



Integration of laboratory systems is a key quality for successful lab management, and interoperability between clinical applications is critical for success. We have a history of accomplishing complex LIS implementations in large, multisite environments and offer a greater depth and breadth of laboratory modules than any other vendor. We produce the most robust and most automated—LIS in the world. With our SoftLab LIS, the clinical laboratory can process added volumes without increasing staff. And as a functionality richer solution, SCC's rules-

based laboratory and genetics information systems provide specialized efficiency tools within each laboratory discipline without the need for additional third-party systems.

SCC is committed to providing integrated products to our clients to ensure seamless and efficient management of their diverse laboratories. In keeping with our core value of integration, we have several ongoing integration initiatives between our laboratory and genetics information system applications. For example, SCC's Genetics Information Systems Suite® is our fully integrated set of genetics information management systems covering a wide range of specialized testing. Although these

systems were designed, built, and function as a single integrated solution, the individual modules can function as standalones or in any combination that clients can purchase to best suit their test offerings.

SCC's integrated solutions enable clients to adapt—allowing them to provide better services to their patients and decrease their operational and IT footprints while increasing opportunities for expansion and revenue-building. The flexibility to evolve with these changes and respond in a timely manner is one of the key differentiators that sets SCC Soft Computer apart.



Managing TCO for maximum ROI

SCC is committed to managing our clients' total cost of ownership—or TCO. We believe software TCO is established long before we write a single line of code, and we consider this during the design process when the objectives of the software—relative to installation/implementation, user requirements, functionality, and ease-of-use—are determined. This is the foundation of SCC's software development lifecycle. With this in mind, we begin our design/development and TCO management process with these three principles/standards:

- Develop systems with ease of use
- Manage costs over the lifetime of the software
- Build data migration and integration into the product

Installation, setup, configuration, training, and ease-of-use will ultimately impact a client's TCO in a far greater way than will the initial cost of purchase, and our clients participate in the design of our systems. SCC develops our laboratory and genetics software based in large part on user requirements gathered by our network of subject matter experts—allied healthcare and healthcare IT professionals themselves—who work directly with our clients. Common words and terminology used in the clinical laboratory environment by knowledgeable, trained, and experienced personnel create a familiar, friendly user interface. This development practice—combined with our experience and expertise—has placed SCC at the forefront of laboratory, genetics, blood services, and outreach information systems software development.



SCC's streamlined workflows help clients do more in less time, thus decreasing costs and maximizing "tech time." Implementing workflow changes in a clinical environment can be as challenging as the software implementation itself—and can have just as big an impact on the business. Too often, when a proper workflow assessment and analysis has not been performed, the new system tends to not yield the expected benefits.

SCC's streamlined workflows help clients do more in less time, thus decreasing costs and maximizing "tech time." Implementing workflow changes in a clinical environment can be as challenging as the software implementation itself—and can have just as big an impact on the business. Too often, when a proper workflow assessment and analysis has not been performed, the new system tends to not yield the expected benefits. As varied as the reasons are for purchasing a new clinical system, the reasons for implementing change are quite simple: **to automate the processes necessary to meet all business goals with an eye on future growth.**

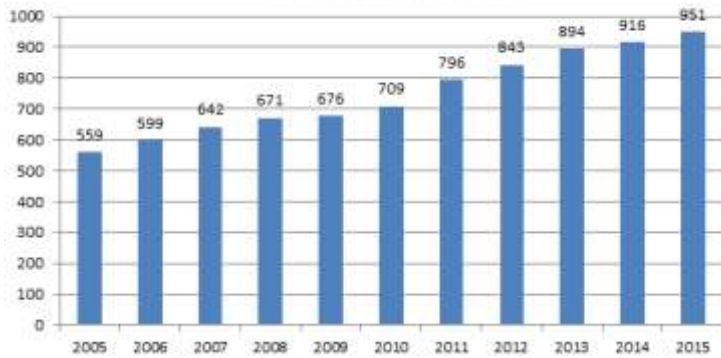
A TCO analysis is critical in helping to ensure that all costs are considered. Leveraging our nearly forty years of experience designing, developing, delivering, implementing, and supporting information management solutions for the clinical laboratory environment, SCC helps clients analyze their workflows to perform unbiased assessments of their current usage of their LIS functionality—and makes recommendations on how they can optimize their systems..



SCC by the numbers

FOUNDED	1979 in New York (1993 corporate headquarters relocated to Florida)
FIRST PRODUCT RELEASE	1980 (version 1.0 of SoftLab®, SCC's flagship LIS)
GLOBAL WORKFORCE	1,800+ worldwide
STAFF DEDICATED TO LIS DESIGN/INSTALLATION/SUPPORT	1,620
951 SITES OPERATING SCC'S LIS* *120 SITES OUTSIDE THE U.S.: <i>Belgium, Brazil, Canada, Hong Kong, Jamaica, Malaysia, Singapore, Switzerland</i>	<ul style="list-style-type: none"> • 60% high-volume sites installed¹ • 40% low-volume sites installed² <p>¹generate >500,000 billed tests annually, or >200 bed hospitals, or >500 requisitions per day ²generate <500,000 billed tests annually, or <200 bed hospitals, or <500 requisitions per day</p>
322 CONTRACTS FOR SITES OPERATING SCC'S LIS	<ul style="list-style-type: none"> • 264 hospital contracts in U.S. • 15 independent lab contracts in U.S. • 6 clinic or group practice contracts in U.S. • 3 public health lab contracts in U.S. • 34 contracts for foreign sites: universities, hospitals, regional/public health authorities, commercial labs
RANGE IN NUMBER OF USER WORKSTATIONS IN SITES OPERATING SCC'S LIS	10 – 4,000+ (average = 80)

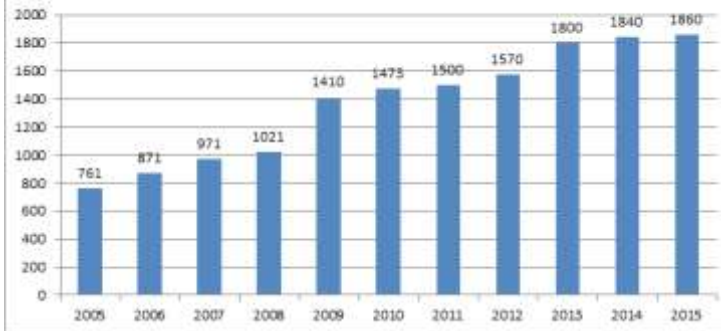
SCC Total Client Sites



SCC receives phenomenal feedback from our client base and the independent users group, SNUG (Soft Network Users Group). Through the processes of SCC's software development lifecycle, this client feedback becomes incorporated into future releases.

Contract wins in the past several years at many of the world's most renowned academic medical institutions highlight our success and leading position within the global LIS market.

Total Global Workforce



This dedication to R&D protects our clients' investment in our LIS, and ensures that our systems will provide the greatest levels of automation, economy, and patient safety available from any vendor.

With development staff of well over 1,000 worldwide, SCC services some of the most demanding laboratory environments, and innovation is essential.

Since the company's inception in 1979, SCC has avoided layoffs and has continued to add positions and new career paths. The company is determined to stay on this course. Our average rate of turnover is consistently at least 40 percent lower than the industry standard.

SCC's large and sophisticated client base, combined with the company's financial stability and independence, will ensure that SCC remains an LIS/LIMS leader for years to come.



SCC Soft Computer: The World's Largest Laboratory and Genetics Information Systems Vendor

Founded in 1979 by Gilbert Hakim, SCC Soft Computer is the world's largest LIS/LIMS developer with a global workforce of nearly 2,000 information technology, medical technology, communications, and business professionals dedicated to LIS development. SCC is a pioneer in developing laboratory and genetics information systems and is a leader in providing multisite LIS/LIMS solutions to healthcare clients. The leading and most widely recognized LIS/LIMS provider for the healthcare industry, SCC is at the forefront of laboratory, genetics, blood services, and outreach information systems software development.

SCC Soft Computer designs, develops, and delivers healthcare IT worldwide.



Gilbert Hakim

CEO, SCC Soft Computer

Gilbert Hakim, SCC Soft Computer's CEO, is a major force in the world of laboratory information systems. From the earliest iterations of what has evolved into the modern LIS, to leading the way in genetics-based LIS and workflow automation, Mr. Hakim is often found at client sites and is considered the most hands-on CEO in the business.

He speaks directly to healthcare professionals and learns from them, absorbing and transforming this knowledge into SCC's vision.

Through his contributions towards the modernization of the LIS, Mr. Hakim is part of what makes SCC special in this complex and highly competitive industry.

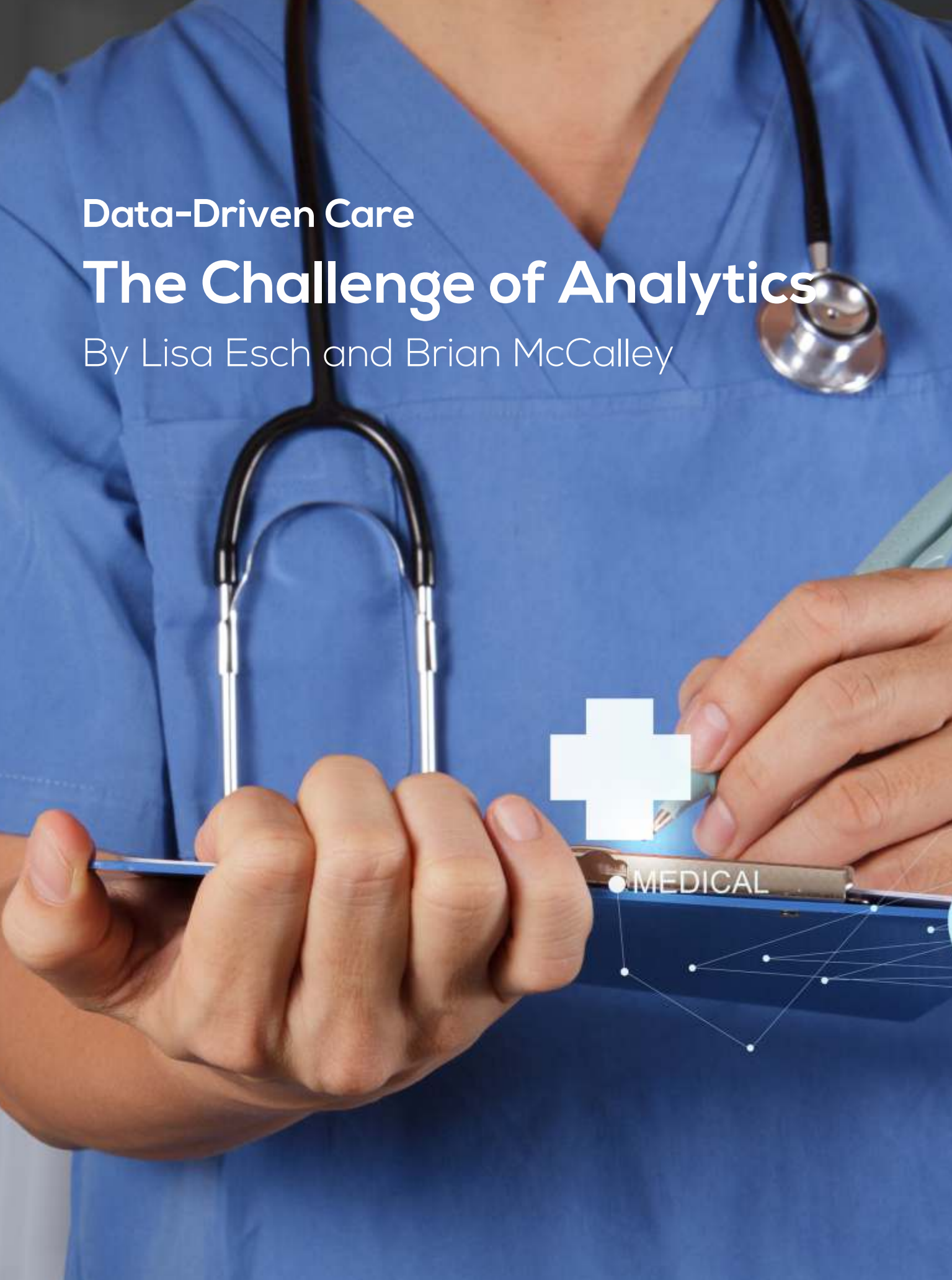
Data-Driven Care

The Challenge of Analytics

By Lisa Esch and Brian McCalley



MEDICAL



Healthcare providers collect massive amounts of data today across a wide array of disciplines, and the data-dependency will only grow. Despite this wealth of data, most healthcare organizations are not effectively using this information to fully benefit patients or themselves. An unprecedented opportunity exists to leverage patient information as well as non-clinical data to support a variety of healthcare functions, including population health management. Let's explore how a data-driven approach can transform your organization.

In healthcare, a number of trends are converging to make data analytics more important than ever. First, the sheer amount of available data is greater and growing rapidly, boosted in part by the increase in electronic health records, sensors, wearables and other technology. Virtually every aspect of the healthcare ecosystem now yields digital data.

In addition, healthcare policy and operations are moving from a provider-centric model to a value-based, patient-centric delivery system. One sign of this is the shifting payment structure for physicians in the United States and in other countries. Physicians are now tracked by metrics such as quality, outcome and patient satisfaction, and this often determines reimbursements.

The final trend is patients' growing awareness of healthcare costs and information. Better-informed, technology-savvy consumers are seeking more personalized attention from physicians, as well as access to their patient records and plans of care.

Keys to improving population health include gaining a better understanding of health patterns and diseases. A study by McKinsey & Company estimates that the healthcare industry could potentially realize \$300 billion in annual revenue by leveraging patient and clinical data. In this environment, hospitals, systems and other health-related organizations have the opportunity to leverage actionable data to accomplish three goals: 1) improve patient interactions and outcomes through better-informed decisions, 2) provide patients with a better experience in the healthcare environment, and 3) reduce costs.

Five Key Questions

To put it simply, organizations can start to wrap their minds around this transformational data initiative by formulating and along the way answering these five questions:

1. How can I get to know my patients and their needs?

As organizations focus on strategies, data and technology, it's important not to forget the patient, and it is imperative to always put the welfare of the patient first. Organizations should remain closely engaged with patients and find ways to interact with them throughout the healthcare journey, through chronic care management. This will improve patient satisfaction and can lead to better health outcomes.

As data analytics helps organizations better understand their patient population, specialized tools can help providers stay ahead of some patient risks, which can reduce costs and incidence of illness. Another outcome is that organizations can stop viewing and classifying patients by disease or illness, instead focusing on the whole person. By applying data analytics, healthcare delivery can become more patient-centric rather than disease-centric.

2. What is at stake for patients and how does it impact outcomes?

There's no question that analytics can be valuable, it is crucial for healthcare organizations to clearly define the challenges that will be solved with a data-driven approach and develop a well-defined strategy to tackle those challenges. Organizations should determine the questions they will aim to solve and the insights they will attempt to derive. This may include defining and stratifying the patient population, considering factors such as utilization and patient demographics and comparing treatment effectiveness. A strategic partner can play an essential role in this process by helping organizations identify important challenges and priorities, and by helping develop a clear-cut strategy based on experience and proven best practices.

3. How will setting goals improve overall patient experience?

Once a strategy has been developed, the biggest hurdle for healthcare organizations is successfully executing that strategy. Healthcare is a people-focused business, so strategy execution should incorporate all involved, from executive buy-in to those on the front lines, including physicians, specialists and other healthcare professionals. A strategic partner can help an organization develop a data, governance and information management strategy that details how data will be collected, maintained and protected. Organization leaders should establish and monitor strategic goals and ensure realistic staffing and budgeting.

Once specific goals have been set and a data-driven strategy has been successfully implemented, the benefits are numerous. For one, unraveling the complexities of big data can provide many insights about making the right patient decisions at the right time. Also, patients can benefit from more personalized care. For one health system client, CSC has established a specialized patient coordination center that provides integrated services that are high-quality, offer value for the money, and a significantly improved, more personalized patient experience.





services environment can be smart technology choices for today's healthcare environment.

This digital approach presents a dramatic change in how information is aggregated, stored and delivered when compared to traditional healthcare IT. But the technologies can improve the way essential services, such as chronic care management, are delivered. It's likely that the solution will require pulling together an ecosystem of partner technologies, something a strategic partner can help navigate.

One major benefit to technology transformation is that improvements to legacy systems will likely result in reduced operational costs, as well.

4. Where should I focus to derive insights from numerous data sources?

Aggregating and integrating data is key to handling it successfully. "Clean," high-quality data is easier to use and can improve predictive capabilities. Organizations should focus on how to bring data sources together and make them connect to patients to derive insights.

Keep in mind that though providers have a set of clinical data based on electronic health records, there's a wealth of data that goes beyond the hospitals' four walls. For example, a patient suffering from weather-related asthma conditions may benefit from a weather alert that could help her get a day or two ahead of the cycle on a prescribed care pathway. Non-clinical data sources such as genomic data, socioeconomic data and more can lead to better analytical insights, and better patient outcomes.

5. What is the right technology to support the road to digital health?

Dealing with mounds of data also means dealing with the technology that enables storage and use. Cloud technology, digital applications, modern platforms and a shared





A Data Driven Approach for Success

Data analytics plays a key role in helping organizations understand patient populations and gain insights to important factors such as social determinants of health. By asking the five questions detailed here, organizations will be well on their way to undergoing a digital transformation that can bring tremendous benefits to healthcare organizations and practitioners, and most importantly, to patients.

Still, implementing the complex changes needed to undergo a healthcare transformation is difficult. Expert strategic partners can hone in on what matters most and help these organizations navigate the complexities and implement successful, holistic solutions. These partners bring much to the table: knowledge, experience, best practices, healthcare expertise and, for some, next-generation technology. And they can be excellent partners on the path to analytics success.

About CSC

CSC (NYSE: CSC) leads clients on their digital transformation journeys. The company provides innovative next-generation technology services and solutions that leverage deep industry expertise, global scale, technology independence and an extensive partner community. CSC serves leading commercial and international public sector organizations, including some of the world's leading healthcare providers. CSC is a Fortune 500 company and ranked among the best corporate citizens. For more information, visit us at www.csc.com.



Lisa Esch

Chief Population Health Innovation Officer, CSC

Lisa is leading the market strategy around coordinated care and population health enablement with the launch of CSC's CCM Chronic Care Management solution.

Lisa previously worked as a senior vice president for a leading online resource with comprehensive information about physicians and hospitals. She launched the solution consulting team that rapidly responded to the changing healthcare landscape with new digital solutions and creatively partnered with customers across the United States.

Lisa's has a Bachelor of Science degree from the University of Nebraska, and a dietetic internship at the University of Nebraska Medical Center.



Brian McCalley

Chief Architect, Healthcare and Life Sciences,
CSC Americas

Brian has more than thirty years of successful marketing experience, ranging from strategy to business development to product marketing to alliance management. His focus is in the healthcare industry, providing technology solutions for chronic disease management and health and wellness. Brian brings a unique perspective to the IT healthcare discussion through enabling innovative end-end system solutions based on open standards-based platforms with a wide range of ecosystem partner capabilities.

Brian has a Bachelor of Science degree, Electrical Engineering from Texas A&M University.



A Paradigm Shift in Healthcare from Information to Insights powered by Analytics

The healthcare industry has notably generated large amounts of data, driven by record keeping, patient care, and compliance and regulatory requirements. But there is a major pattern shift in healthcare information management over the last decade, prompted by the birth of electronic medical records and medical informatics.



This information management shift is ongoing, accompanying the contemporary focus on accountable, high quality, affordable, and patient-centric healthcare. There is a need for an intelligent platform focused on helping healthcare organizations commence this new age of medical services by leveraging big data and analytics. It is important that the power of analytics be married with the strategic decision making of a healthcare organization.



The Rise of New Age Healthcare Analytics

Payers have a convincing and growing need for analytical tools, as a new business model for health insurance is evolving in a post-health reform environment. These tools are needed to help the managers and executives understand the performances with regard to finance, operations, and clinical care. To be successful, payers need to change their business models in the post reform environment, be it the payment or delivery of care and wellness services.

Drivers for new business models for health insurance:

1. The development of value-based reimbursement methods as the U.S. CMS continues to study a variety of value-based payment models like pay for performance (P4P), episodic and bundled payments, and will develop additional regulations to meet its future goals that demand a greater share of provider payments using these models; Payers and providers need to understand the complete risk environment related to the underwriting and management of these new reimbursement models, and this is a key area for analytical tool support.
2. Emphasis on the overall value in health insurance benefits and care as measured by the combination of effectiveness and efficiency in

healthcare; The ACA has placed a financial and regulatory emphasis on patient-centered outcomes, and analytics applications on the payer side can help gather and report important information on the cost and quality effectiveness.

3. Transition to newer insurance benefit packages on exchanges, including narrow network and higher deductible products; Payer managers will continue to depend on analytics in order to determine what is working well and what is not.

It is important to accept that the trends in healthcare industry are forcing market players to adopt analytics to manage member experience.

The development of value-based reimbursement methods as the U.S. CMS continues to study a variety of value-based payment models like pay for performance (P4P), episodic and bundled payments, and will develop additional regulations to meet its future goals that demand a greater share of provider payments using these models; Payers and providers need to understand the complete risk environment related to the under-writing and management of these new reimbursement models, and this is a key area for analytical tool support.

Following are some of the key drivers of analytics in the healthcare market:

Shift in responsibilities for financials and health management to individuals gives more power to individuals and hence improving member experience using analytics is a necessity.

Low CEM scores relative to other industries due to lack of adoption of analytics.

Chronic diseases contributing to 65% of healthcare expenditure due to lack of care management practices.

5% of the population utilizes over 50% of healthcare spend and hence identifying that group and improving the quality of care will certainly bring down the costs



Shift in responsibilities for financials and health management to individuals gives more power to individuals and hence improving member experience using analytics is a necessity.

Low CEM scores relative to other industries due to lack of adoption of analytics.

Comprehensive Scope of Analytics

Though the patient is the ultimate consumer, analytics has exhaustive benefits to offer all the entities in the healthcare ecosystem.

Provider Analytics: Government subsidies and widespread investment in electronic medical records and health outcome data are laying a new foundation for analytics for healthcare provider organizations such as hospitals, individual physicians' offices, and group practices. Analytics, if adopted for both clinical and business purposes of a provider organization, can make it feasible to determine the most cost-effective treatment and the provider that offers it. Widespread digitization of the sector can make it take off.

Payer Analytics: Be it government or private, health insurance firms always had access to structured claims data that is more susceptible to analysis than the unstructured medical records collected by the providers. Traditionally, payers have used this data to improve billing and accounting processes, rather than improving the healthcare outcomes. They are recently beginning to venture into analytics based disease management by modernizing their database to include electronic medical records.

Life Science Analytics: Life sciences companies manufacturing drugs and medical devices have employed analytics significantly more than the providers or payers. However, their analytics need to be reshaped for the concept of 'personalized medicine', which is a treatment that is tailored to individual patient attributes. Another rising trend is marketing drugs directly to end consumers, rather than through the physicians. Consequently, there is new data for commercial analysis and an urgency to contain the costs by increasing the efficiency of Sales and Marketing.



The various applications/areas where analytics can be applied for a provider or payer organization are as follows:

- Clinical: Quality of care, physician performance evaluation, medical error reduction, and customer relationship management
- Financial/Commercial: Analytics for claims, risk management, and revenue cycle management
- Operational and Administrative: Human resources/Workforce analytics, and supply chain and strategic analytics
- Research



Reality of Healthcare Analytics Adopt

The irony is that although healthcare is built on a strong analytical foundation of extensive research on causes and treatments of diseases, this culture has not been extended to the delivery of care.

Healthcare in the United States and other parts of the world has been progressing through the following waves of data management: data collection, sharing, and analytics. So far, the collection and sharing waves, characterized by the critical deployment of EHRs and health information exchanges, have failed to significantly

impact the quality and cost of healthcare. The truth is that healthcare is just beginning to have the paramount analytics capabilities that enable system-wide cost reduction efforts and quality improvement, despite the contemporary hype about big data being the next 'big' thing in many other industries. The real pledge of analytics lies in its ability to remodel healthcare into a truly data-driven culture.

When it comes to adopting analytics to solve problems, the Healthcare industry is still in infancy. Healthcare Analytics Adoption Model is a framework developed by a group of cross-industry veterans to help classify

analytics capabilities into groups, and also provide a methodical sequence of analytics adoption within healthcare organizations.

Overcoming Barriers to Adopt

Eric Dishman, General Manager of Health and Science at Intel said, "In the future, and not that far out in the future, we're talking about really personal medicine, down to the individual level." As interesting as it may look, a number of barriers can obstruct the adoption of healthcare analytics, even amidst information explosion.

1. Varying data types: Data needs to be sourced from various origins, for instance, the claims, billing reports, lab reports, and the EHR. As there has been a boom in the wearable device market, the amount of data generated is not only overwhelming to collect and store, but also differs in data formats. Most of these technologies do not communicate with one another.

2. Lack of clear vision: While it is important to spell out the end goals well in advance, it is also imperative to have an unambiguous and robust roadmap towards achieving the defined goal. An organization should understand the needs of the end-users and accordingly set up a program charter involving the end-users from the commencement. KPIs need to be defined beforehand and monitored regularly. The roadmap should include the needs and challenges faced with current technology and define costs and expected ROI.

3. The risk averse culture: The only sector, other than government, that has a rigid culture and is resistant to change is healthcare. Blaming it on the regulations, this industry has prevented bringing in innovative ideas for years and thus lagged behind in adopting analytics. A handful of organizations have tried to overcome this barrier by being creative within the regulated environment.

4. Leadership: The risk averse culture needs to change with the change in leadership! Innovative leaders from other industries like Consumer Goods, Entertainment, etc. could be brought in

to help realign the hospital's priorities to focus on patient centric healthcare. Some of the other barriers identified include data quality, relevance of data, competing priorities, and lack of proper skills.

HCL's Approach

HCL realizes that analytics will play a major part in the next reshuffle of the top players in the Healthcare sector. The early-adopters of technologies and solutions from analytics, such as Big Data, will be the

new top players in the industry. Hence, HCL has been focusing intently on the sphere of analytics to provide its clients the first-mover advantage with state-of-art technological solutions, having developed capabilities which are unparalleled in the industry, such as: y Big Data, Analytics y Enterprise Information Management y Business Intelligence y Corporate Performance Management.



HCL's solutions for the Healthcare industry include:

Member Experience Management (MEM) is designed to improve the interaction of members with the organization, devise focused interactions, run targeted campaigns, execute care management programs, and reduce member attrition.

Fraud, Waste and Abuse (FWA) Management offers services supported by analytical tools that help the payers or pharmacy benefit management companies handle the issue of increasing healthcare fraud, waste, and abuse.

Population Health Management is a solution framework, driven by metrics and analytics-based personalized interventions that facilitate therapy adherence, health improvement, disease/case management, and utilization management. HCL provides an analytics-driven platform to transition from chronic care management to preventive care management.



References

<https://www.healthcatalyst.com/healthcare-analytics-adoption-model/>

<http://blog.aditi.com/analytics/healthcare-analytics-finally-coming-age/>

<http://blog.aditi.com/analytics/healthcare-analytics-finally-coming-age/>

<http://www.emids.com/3-barriers-to-healthcare-business-intelligence-adoption/>

About HCL Technologies

HCL Technologies is a leading global IT services company working with clients in the areas that impact and redefine the core of their businesses. Since its emergence on the global landscape, and after its IPO in 1999, HCL has focused on 'transformational outsourcing', underlined by innovation and value creation, offering an integrated portfolio of services including software-led IT solutions, remote infrastructure management, engineering and R&D services and business services. HCL leverages its extensive global offshore infrastructure and network of offices in 31 countries to provide holistic, multi-service delivery in key industry verticals including Financial Services, Manufacturing, Consumer Services, Public Services and Healthcare & Life sciences. HCL takes pride in its philosophy of 'Employees First, Customers Second' which empowers its 104,000 transformers to create real value for customers. HCL Technologies, along with its subsidiaries, had consolidated revenues of US\$ 6.2 billion, for the Financial Year ended as on 31st March 2016 (on LTM basis). For more information, please visit www.hcltech.com

INSIGHT ON Hospital & Healthcare Management
 Vol. 1, Issue 1, April 2011
 www.hospitalmag.com

HOSPITAL & HEALTHCARE MANAGEMENT
 A PUBLICATION OF THE
 HEALTHCARE INFORMATION SYSTEMS SOCIETY
 (HITSS)

NEXT BIG WAVE
 eHealth. mHealth.

INSIGHT ON Hospital & Healthcare Management
 Vol. 1, Issue 1, April 2011
 www.hospitalmag.com

HOSPITAL & HEALTHCARE MANAGEMENT
 A PUBLICATION OF THE
 HEALTHCARE INFORMATION SYSTEMS SOCIETY
 (HITSS)

**IMPROVING COMMUNICATIONS
 ENHANCING HEALTHCARE**

INSIGHT ON Hospital & Healthcare Management
 Vol. 1, Issue 1, April 2011
 www.hospitalmag.com

HOSPITAL & HEALTHCARE MANAGEMENT
 A PUBLICATION OF THE
 HEALTHCARE INFORMATION SYSTEMS SOCIETY
 (HITSS)

GLOBAL VIEW
 IT advancement to Healthcare.

INSIGHT ON Hospital & Healthcare Management
 Vol. 1, Issue 1, April 2011
 www.hospitalmag.com

HOSPITAL & HEALTHCARE MANAGEMENT
 A PUBLICATION OF THE
 HEALTHCARE INFORMATION SYSTEMS SOCIETY
 (HITSS)

**INCREASING COMMUNITY PROSPERITY
 BY IMPROVING HEALTH AND WELLNESS**

INSIGHT ON Hospital & Healthcare Management
 Vol. 1, Issue 1, April 2011
 www.hospitalmag.com

HOSPITAL & HEALTHCARE MANAGEMENT
 A PUBLICATION OF THE
 HEALTHCARE INFORMATION SYSTEMS SOCIETY
 (HITSS)

Retrofitting Healthcare Facilities

INSIGHT ON Hospital & Healthcare Management
 Vol. 1, Issue 1, April 2011
 www.hospitalmag.com

HOSPITAL & HEALTHCARE MANAGEMENT
 A PUBLICATION OF THE
 HEALTHCARE INFORMATION SYSTEMS SOCIETY
 (HITSS)

THE DIGITAL DOCTOR IS "IN"



THE LATEST, DELIVERED IN THE BEST WAY POSSIBLE

Referred to, received and read by the senior executive of top healthcare companies and hospitals, Hospital and healthcare management (HHM Global) features contributions from industry experts on the latest and upcoming developments in the healthcare industry. Hospital and healthcare management intends to be the most comprehensive B2B industry.

Magazine and the best platform of choice for the healthcare executives seeking information and business opportunities.

The upcoming issue of HHM in November 2016 would focus on the power of latest developments, new markets and innovations with its role advancement and influence in the healthcare sector as the prime topic of the magazine.

For any further queries related to the magazine, editorial, calendar or advertisement contact us at yuvraj@hhmglobal.com

www.hhmglobal.com

**Hospital &
Healthcare
Management**

CREATING EXPONENTIAL VALUE IN HEALTHCARE THROUGH ANALYTICS

The Analytical Process of creating Value

So what is healthcare analytics, really? Health analytics comprise of the technologies and skills used to deliver business, clinical and programmatic insights into the complex interdependencies that drive medical outcomes, costs and oversight. For example, Figure 1 shows a sample progression of questions related to diabetes that can be answered through standard reports, ad hoc reports, query drill-down, alerts, statistical analysis, forecasting, predictive modeling, and optimization – with each providing increasing levels of depth and multifaceted analyses



Through modeling, optimization, predictive analytics and business intelligence, organizations can gain insights to strengthen financial and budgetary performance, deepen consumer-centric relationships and improve the way health care is conceived and delivered for better outcomes across the entire spectrum of health industries

When integrated into a business process, analytics can transform your organization into an agile, learning entity. The analytic process can become a ripe platform to fuel learning and insights from all your data assets – corporate and external. It can be the cornerstone on which your health care organization can develop & grow – financially and intellectually.



Figure 1. The evolution from hindsight reporting to predictive analytics in the case of diabetes analysis



Figure 2. Analytics as a process can be approached in four phases: Manage and Discover, Model, Deploy and Monitor.

Taking a closer look, as seen in Figure 2 at its most basic level, the analytic process:

- Manages data and reveals insight.
- Models the insight to better understand what will likely happen in the future.
- Deploys the insight to support decisions that will create better outcomes.
- Monitors the results

Ensure that you are addressing any barriers

When a healthcare organization does all of the process, it learns. All organizations learn, but do they learn quickly enough to outgrow the industry levels? Never before has health care had to learn to respond to change faster than today. And to be a learning health care organization that flourishes, the analytic process must be repeatable and scalable with long-term, sustained executive commitment. Like any other organizational strategy designed to deliver significant results, analytics requires a major commitment to achieve success.

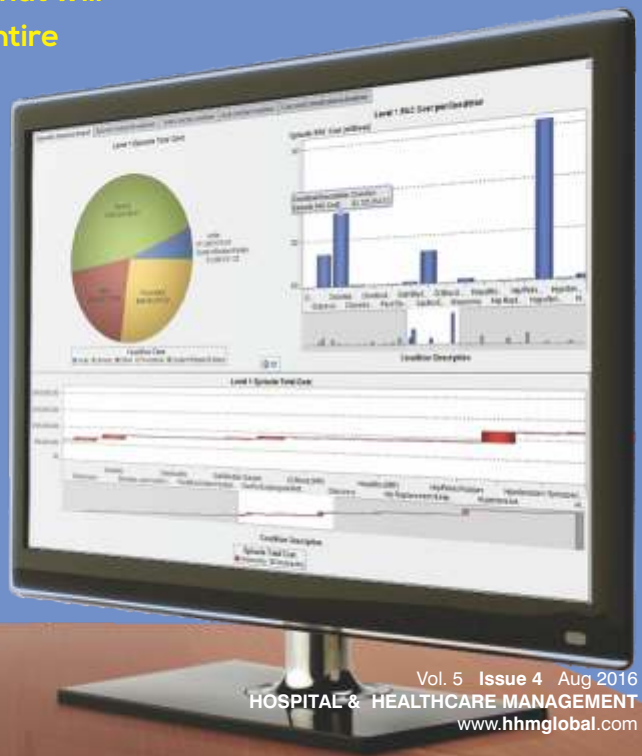
In the past, organizations have often taken tactical approaches to analytics focused on specific projects. While this approach can add limited value, you must have a strategic analytics plan to create broader organizational value. You need a master plan to make sure the tactical steps come together to create a bigger picture of analytical excellence to deliver value.

In a very real sense, analytics lives at the intersection between operational systems (EMRs, supply chain, care management, quality, etc.) and productivity systems (Microsoft Office, Excel, PowerPoint, etc.). Before the adoption of strategic analytics, executives often thought of analytics as a set of discrete capabilities without much thought to the larger analytic process. Today, organizations that are

strategically approaching analytics have understood that the steps in the analytic process are interconnected, and the lack of integration can significantly affect the degree of manual work – and thus the overall organizational value. They have recognized the need to implement their analytics environment as an integrated platform that can interact with both their operational and productivity platforms – i.e., an analytics platform.

An analytics platform, like operational and productivity platforms, provides an integrated environment that will support the entire

analytic process from managing data and discovering insight to monitoring the results. The platform must maximize the productivity of your analytics team, empower business users, easily grow and be supportable by your IT team (if and where there is dependency on IT). Also, it must easily interoperate with the operational and productivity platforms throughout the analytic process.





depth of deployment. Often deployment starts with providing reports and dashboards. Here, integration with the productivity platform can be a major benefit to your analytics team. An analytics platform should allow your organization to interact with live analytics through Microsoft Office, Excel, PowerPoint and SharePoint. Analytics effectively embedded in the natural workflow of your productivity platform becomes much more accessible, consumable and useful.

Deploying analytics often requires interaction with operational systems to deliver predictive insight into the business or clinical workflows. An analytics platform should provide many operational deployment options, ranging from scoring an analytic model in an operational database to interacting with business rules to real-time analytic scoring. These capabilities include the ability to automatically turn an analytic model into software code that can run in the operational environment, saving time otherwise lost with manual coding, debugging and testing. Without the ability to interoperate with operational systems, full organizational value from analytics will never be realized.

Interoperability is critical in two of the four steps in the analytic process. To manage and explore data, the analytics platform must be able to quickly access operational data and prepare that data for analytic work. Most organizations have a variety of operational systems; therefore, strong abilities to interact with a wide range of data sources are important ingredients to the analytic team's productivity.

Deploying the analytic insights is the other critical integration point between platforms. Deployment requirements will vary depending on the characteristics of the analytic insight and the

Grow Your Analytic Maturity





Similar to the analytics platform's positioning between operational and productivity platforms, the analytics team will work at the intersection between data and organizational knowledge – creating both clinical and financial value. Given the future demands for value-based health care, an analytics team will likely focus on challenges relating to:

- Managing financial risks and incentives.
- Proactively managing quality and outcomes.
- Improving the efficiency of care delivery.
- Managing population health and engaging patients.

Using analytics to create value in these areas will be a learning process for the analytics team and the broader organization. Since analytics is relatively new to health care, many team members may come from other industries that are less complex than health care. As the depth of your team's health care understanding increases, so will the analytic value it creates.



In summary, creating value in health care requires a combination – a committed leadership, a highly-productive analytics platform and the right team which will support the strategic application of analytics within your organization. When you have such a heady mix, with each successful project, your organization become more agile while continuously learning from your data, adding organizational value at each step and in turn deriving exponential returns from analytics.



About SAS

SAS is the leader in analytics. Through innovative analytics, business intelligence and data management software and services, SAS helps customers at more than 80,000 sites make better decisions faster. Since 1976, SAS has been giving customers around the world THE POWER TO KNOW®.



Noshin Kagalwalla

Managing Director, SAS Institute (India) Pvt. Ltd.

Noshin Kagalwalla is the Managing Director of SAS Institute (India) Pvt. Ltd, the Indian subsidiary of SAS Institute Inc – a leader in business analytics and business intelligence software solutions. He is responsible for architecting the long term vision, driving sales and customer strategies and maintaining SAS' leadership position in the Big Data Analytics and Business Intelligence market in India.

Noshin joined SAS in December 2004 as part of the executive leadership team and took on the responsibility of Managing Director in October 2013. Over this period, he has significantly contributed to SAS India's growth and established SAS as a strong brand synonymous with Analytics, commanding over 50% of market share in the advanced analytics market in India.

Mr. Noshin Kagalwalla is an MBA from UCLA, an M.S. in Computer Engineering from Wright State University and Bachelors in Engineering from V.J.T.I., Mumbai. He is a veteran in the Analytics industry and has over 22 years of experience across business functions. Prior to SAS, Noshin held executive positions in multinationals such as Microsoft and TCS.

GIL INDIA 2016

5 October 2016
Hyatt Regency
Mumbai



DIGITAL TRANSFORMATION

A New Strategic Imperative

Gold Partner



Media Partner



Strategic Visionaries

Amol Kotwal
Director,
Energy & Environment
Frost & Sullivan



Anu Aga
Non-Executive Director
Thermax Limited



Aroop Zutshi
Global President &
Managing Partner
Frost & Sullivan



Arunkumar J
Associate Director and
Practice Head
Automation & Electronics
Frost & Sullivan



Kaushik Madhavan
Director, Automotive &
Transportation, MENASA,
Frost & Sullivan



Manoj Menon
Senior Partner & Asia
Pacific Managing Director
Frost & Sullivan



Patrick Nugent
Vice President
Frost & Sullivan



Vidya S Nath
Research Director, Global
Innovation Center &
Digital Media Practice
Frost & Sullivan



Growth Workshops



Business Networking



Thought Provoking Sessions

Join us as we embark on this year's journey with the theme
Digital Transformation - A New Strategic Imperative

To attend the conference please contact
Solonie Pathania
Manager - Vision Implementation Team
SolonieS@frost.com

A professional headshot of Rebecca Lanasa, a woman with shoulder-length brown hair, smiling. She is wearing a black blazer over a patterned top and a pearl necklace. The background is a soft, out-of-focus light blue.

Interview on Technology Innovation & Approach Towards Quality Care

REBECCA LANASA

Managing Director, Southeast Asia, Cerner

4. What do you think are the biggest worries of healthcare providers while implementing new technologies?

Can I use this technology and keep up with current patient volumes or will it slow me down?

Will the technology be a barrier between my patients and I?

5. How do you overcome these fears?

By making sure our solutions are fast, easy and smart for everyone involved in the care process to use as they treat their patients. The systems have to have rapid response times, so that information is presented in sub-second response, and only a few clicks away from the initial screens presented to the user. The software has to be easy to use, almost intuitive to use without attending formal training.

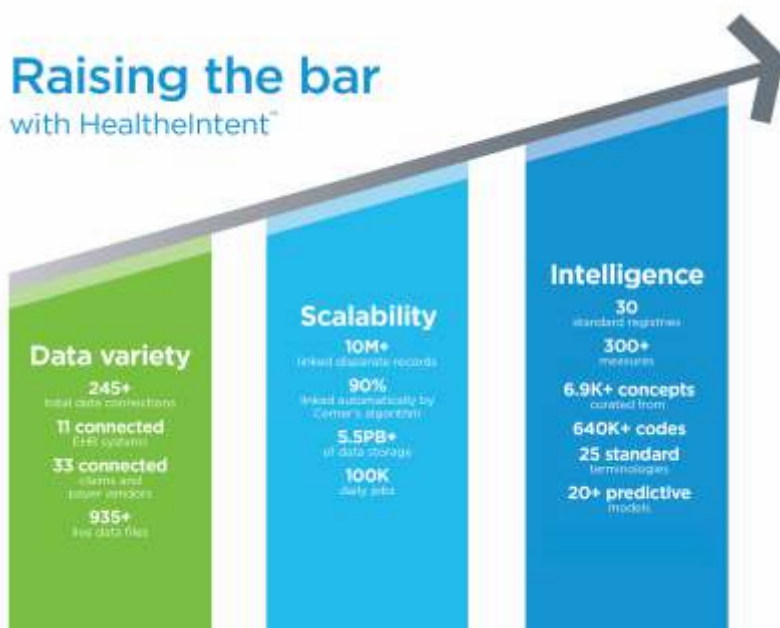
And while the systems should be easy enough to use without training, ensuring an appropriate training plans are in place to help ensure comfort with the tools that are available before the clinician is in front of a patient. We find at the elbow training especially impactful to drive adoption early on in the system roll out phase. Some one that can be right there as the use the system the first time and can point when that using is having a bit of stage fright.

There is also a fear that the technology will get in the way of caregiver to patient interactions, so it is important for the training to talk about how you can use the system with the patient, showing them lab results, where to put the devices, etc, all play a role in how the technology can strengthen the relationship vs. become a barrier.

6. Do you find cost to be a roadblock to adopt innovative technologies and digitization, especially in developing countries

It's understandable, but I think organizations really take into account the entire picture when considering to implement new technology. The return on investment is seen as potential productivity gains, (eliminating time spent tracking down medical records), increasing revenue generation (better documentation leading to improved revenue recognition) and other financial savings (medical records storage space repurposed into patient care service space), and most importantly lives saved due to patient safety quality related improvements that can be systematically implemented across an organization.

Adoption barriers can vary by region and by the specific solutions being implemented, but certainly things like infrastructure and connectivity are key challenges that need to be overcome in developing countries. Now at the same time, every day, as technologies become more advanced, these issues becomes less and less of a challenge. Think about what you can do on your mobile phone today (log onto your patient portal and schedule an appointment, or see your lab results) verses what you were doing on it 10 years ago (call your provider's office).



7. What as per you is the Next Big Wave that will redefine IT in healthcare ?

At Cerner we are going from sick care to health care. Cerner's vision for population health management is simple: healthier people, better quality of life and stronger organizations, which contribute to sustainable growth in our communities. We believe that addressing people's health care needs and encouraging healthier behavior in the work and at home is a key component of our vision.

HealthIntent, our population health management solution, has proven its ability to scale. In 2015, it had 5.5 petabytes of data, 59 million persons, and performed more than 100,000 processing jobs daily across activated clients, giving them access to near real-time data of their population.

It supports our clients' abilities to scale their population health management activities, allowing the automation of personalized plans for care and programmable intelligence

8 What are the Core principles on which Cerner plans to build its future ?

Our success is a function of three things: 1. having a compelling vision for the future, sometimes years or even decades in advance, 2. innovating by investing heavily in solutions and services that create future value for clients, and 3. building a culture of trusted relationships based on a shared commitment to health.

What we do is incredibly important, and it's personal. It touches our friends, our family and, ultimately, ourselves. I am fortunate to have thousands of associates and clients

that share a powerful mission to change health care for the better.

9. What makes Cerner stand out to be the best partner for the healthcare providers ?

We are a partner for today and where our clients are going tomorrow. We believe that size, scale and skills are important to partner with health care providers to solve their challenges today and prepare for an uncertain future. Cerner has spent over 4.2B USD investment in research and development of our solutions during our history, and spends 650M USD annually in this space. Understanding this commitment to continuous innovation is incredibly important to our clients around the globe, as they count on us as their partner to provide solutions that will enable them to change the traditional models of healthcare care delivery.

Cerner today



About CERNER

Cerner's health information technologies connect people, information and systems at more than 20,000 facilities worldwide. Recognized for innovation, Cerner solutions assist clinicians in making care decisions and enable organizations to manage the health of populations. The company also offers an integrated clinical and financial system to help health care organizations manage revenue, as well as a wide range of services to support clients' clinical, financial and operational needs. Cerner's mission is to contribute to the systemic improvement of health care delivery and the health of communities. For more information about Cerner, visit cerner.asia, read our blog at cerner.com/blog, connect with us on Twitter at twitter.com/cernerasia. Our website, blog and Twitter account contain a significant amount of information about Cerner, including financial and other information for investors.

REBECCA LANASA

Managing Director, Southeast Asia, Cerner.

REBECCA LANASA, Managing Director, Southeast Asia, is responsible for the strategy and operational oversight of the deployment and support of Cerner's solutions in hospitals across the whole of Southeast Asia. In addition to her role as Managing Director, Rebecca is also a guest lecturer at the Centre for Health Informatics, National University of Singapore, in the Certificate in Healthcare Leadership Program.

Throughout her 20-year tenure with Cerner, Rebecca has held multiple leadership positions at Cerner's world headquarters in Kansas City, Missouri, United States. Prior to her appointment to Southeast Asia, Rebecca served as the Senior Director of Cerner's Client Experience, representing "voice of the client," and was accountable for the satisfaction of Cerner clients around the globe.

Rebecca received a Bachelor's degree in Government and Politics from George Mason University, an Executive Master's degree in Business Administration and a Certificate in Healthcare Leadership from the University of Missouri at Kansas City.



STRATEGIES INSIGHT FOR TECHNOLOGY LEADERS
IN HEALTHCARE



24th - 25th November 2016 |
JW Marriott, Bengaluru |

www.ithealthcare.co.in |

Become a Speaker or Delegate:

M: +91 7022 871385 | E: imran@exploreexhibitions.com

Become an Exhibitor or Sponsor:

M: +91 7022 871390 | E: robert.b@exploreexhibitions.com

For Media Partnership:

M: +91 7022 871384 | E: samantha@exploreexhibitions.com

Official Media Partner

Hospital & **Healthcare**™
Management

Powered & Organised by


explore
Exhibitions & Conference



Telehealth The Key to Improving Physician Workflow and Patient Care

Several different 'flavors' of telehealth have developed over the years, with varying degrees of popularity and adoption. Some hospitals have telehealth systems in an emergency room, allowing ER physicians to communicate directly with physicians at another site. Other hospitals have specialty physicians who leverage telehealth visits from one health facility to another.

Telehealth equipment is generally known to be costly and limited. Traditionally, telehealth tools were permanently located in one room and only accessible when that room was available – very similar to the advent of teleconferencing rooms in offices. Unless a mobile cart was available to move from room to room, the telehealth offerings remained limited.

Today, the steady increase of mobile devices being integrated into the workflow of hospitals is transforming telehealth and how we deliver care. Additionally, medical devices are getting more compact and leveraging the technology that is already in our pockets. The end result is not only improving workflow and physicians' lives, but also improving patient care and satisfaction.



For example, Carle is a level-3 center for perinatal care. Our health system offers care to patients across a span of about 9,000 square miles. In dealing with high-risk obstetrics situations, patients may have to travel over an hour by ambulance or 30 minutes by helicopter just to determine if they actually need to be in our main facility. However, if a local community physician is able to leverage telehealth and apply a very simple device to read that fetal heart rate and contraction, then share that information with a specialist at the main campus, we can determine the level of risk and take the appropriate

action. That may entail either arranging transport, or treating the patient without having to make an unnecessary trek. The ability to extend specialty services out to remote sites in a rural health environment, where the care is equivalent to that of the main campus, is the ultimate goal.

Additionally, telehealth changes how we think about data. If you look at how care has been provided in the past, it has always been based on static data. For example, I can call a hospitalist to report a patient's blood pressure at a certain time. However,

by the time I get the hospitalist on the phone, I'll always be providing historical data, nothing in real time. With today's technology, the hospitalist can now look at the data on his phone while we are on a call, thus enabling the hospitalist to make a more informed treatment decision.

With the help of telehealth, we are changing the way healthcare is delivered. Keeping our patients healthy, safe and happy is always our most important goal, and it's an exciting time to see the technology keeping up.



Michael J. Sutter

CRNA, MSN, MSBA,
Chief Innovation Officer for Carle Health System

Michael J. Sutter, CRNA, MSN, MSBA, is Chief Innovation Officer for Carle Health System based in Urbana, Illinois. As Chief Innovation Officer, Michael Sutter aligns Carle's technology strategy with clinical care applications and performance excellence. He assesses and implements new technologies that enhance staff capabilities, improve quality and workflow, and integrate technology-based solutions. Sutter works closely with information technology, electronic health record teams, quality improvement and others to ensure Carle is at the leading edge of deploying innovative technology. Sutter previously served as Executive Director, Information Technology and Director of Clinical Systems/LAN & Network Services/Telecom/eHIM at the Carle Clinic Association. In this role, he was responsible for all clinical systems, telecommunications, Health Information Management, and network / LAN services. Sutter earned his BA in chemistry from St. Ambrose University, BSN from Illinois Wesleyan University, MSBA from Boston University and MSN in Nursing with emphasis on Nurse Anesthesia from the University of Buffalo.

Connecting you to real time patient data from any care setting

We're the sole provider of the Medical Interoperability Gateway (MIG), a secure middleware technology which can connect any clinical systems to share real time patient data. In six to eight weeks we can give you with instant access to valuable information through your day to day application, which will help clinicians to make informed treatment decisions faster. We also offer specialist datasets to support care planning for chronic health conditions.



30

Million patient records shared across the UK.



115

CCGs are already using the MIG.



2.5

Hours of clinician time saved each day.



Of the clinicians thought the MIG had improved overall care for patients.



Thought the MIG had helped with prescribing decisions.



Felt that the MIG had helped to avoid unnecessary hospital admissions.

* Information taken from a benefits evaluation undertaken by Rushcliffe weekend out of hours service (2015).

To find out how the MIG can help you to provide safer, more efficient care call 0845 601 2642 or visit our website www.healthcaregateway.co.uk/mig



Making Technology Work for Nurses

Nursing is the protection, promotion, and optimization of health and abilities, prevention of illness and injury, alleviation of suffering through the diagnosis and treatment of human response, and advocacy in the care of individuals, families, communities, and populations.



Nurses are on the frontlines delivering care and ensuring that a patient's safety and best interest remain at the center of care. Key nursing values promote a holistic approach to patient care – one that incorporates not only clinical responsibilities, but also compassion, cultural sensitivity, situational awareness and tech savviness.

A nurse's day is jam-packed with activity. Whether it is direct patient care – from admitting and transferring patients or performing physical exams and administering personalized clinical interventions – or internal processes

like documenting care transitions or coordinating across the multi-disciplinary care team, nurses must multitask to stay on top of their workloads. Their days are highly mobile and physically demanding, and often characterized by inefficient processes that have them chasing information. Their days are heavily interrupted with nurses completing 100 tasks per shift, spending approximately three minutes on a task before being interrupted, while 48 percent of nurses cite a lack of communication takes time away from caring for patients.[1]





Technology has the potential to ease some of the challenges that nurses face every day – but only if it meets their needs. Nurses need technology solutions to simply work in mission critical situations. While an average person gets annoyed with a call dropping or a text taking too long to send, such technology hiccups in healthcare are unacceptable as they impact patient care and safety.

When considering technology in the hospital, there are a few key criteria to meet to encourage adoption and ensure satisfaction:

Reliable Network – Nurses need a high-quality and reliable wireless network within their facilities that ensures communication will go through when they need it to.

Reliable Device – If a device is perceived to be dysfunctional or have bugs, it will deter adoption as it negatively affects patient safety if the hardware fails or the software glitches.



Adequate Training – Training and coaching is essential when implementing new innovations. It takes time for individuals to adapt to new tools and feel confident using them. Without this sort of personal investment, nurses will not feel comfortable or be able to spare the time to add it to their already packed workday.



Effective Alarms – Caregivers have become desensitized to alarms because of the frequency of false alarms that do not need intervention. Ensuring that nurses receive effective and clinically reliable alerts will improve care and ensure engagement.

While technology and automation can make workflow easier, it also has the potential to add frustration if not done properly. It can also create a cycle of inefficient workflow and compromise patient safety. For those of us working to deliver effective health IT solutions, we need to put ourselves in others' shoes. We wouldn't want the nurse who is taking care of us or someone dear to us to be using a defective medical device. Therefore, it is our responsibility to make sure we give nurses the tools to be efficient and safe in the healthcare environment.

[1] Rosin, T. (2014, Sept. 14). 35 Statistics on Nurse Satisfaction. *Becker's Hospital Review*. Accessed on Aug. 2nd, 2015 from <http://www.beckershospitalreview.com/hospital-physician-relationships/35-statistics-on-nurse-satisfaction.html>



GLOBAL PUBLICATION
SERVING THE
PHARMA INDUSTRY.



PHARMA PACKAGING & LOGISTICS

Don't miss out our upcoming edition of World Pharma Today in November 2016

for Special positions and discount please contact.
veron@worldpharmatoday.com with a discount code **NOV2016**

About AirStrip

AirStrip® (www.airstrip.com) provides a complete, vendor- and data source-agnostic enterprise-wide clinical mobility solution, which enables clinicians to improve the health of individuals and populations. With deep clinical expertise and strong roots in mobile technology and data integration, AirStrip is empowering leading health systems globally as the industry continues to evolve at a rapid pace. Based in San Antonio, Texas, AirStrip allows health systems to unlock the full potential of their existing technology investments with a complete mobility solution that provides access to critical patient data across the care continuum. AirStrip is backed by investments from Dignity Health, St. Joseph Health, the Gary and Mary West Health Investment Fund, Sequoia Capital, Qualcomm, Inc., Leerink Partners, Hospital Corporation of America (HCA) and the Wellcome Trust. AirStrip's base of visionary clients includes HCA, Texas Health Resources, Tenet Healthcare, Dignity Health, St. Joseph Health and Ardent Health Services.



Aparna Bala

Clinical Transformation Consultant at AirStrip

Aparna Bala is Clinical Transformation Consultant at AirStrip. As a registered nurse, Aparna's knowledge of nursing workflow stems from 15 years of direct patient care experience in over 20 hospitals, including UCSF Medical Center, Cleveland Clinic and Children's National in Washington, DC. Her active participation in hospitals' healthcare technology implementations motivated her transition to clinical informatics with a focus on the multi-dimensional aspects of clinical transformation.

11th International Exhibition
on Hospital, Diagnostic, Pharmaceutical,
Medical & Rehabilitation Equipment & Supplies

31 Aug – 2 Sep 2016

Marina Bay Sands • Singapore



Opportunities.

It comes when medical
professionals and healthcare
experts meet.

The Region's No.1 Medical Event

- 1,000 exhibitors from 45 countries
- 20 national pavilions / country groups
- Free business matching service
- New digital and sports rehab care platforms
- Inaugural Medicine + Sports Conference Asia featuring topics on innovative methods for prevention, therapy and recovery healthcare

Pre-register your visit now
www.medicalfair-asia.com

Stand to win the latest smartphone
when you pre-register now!

Terms & conditions apply.



Where healthcare connects with technology • medicalfair-asia@mda.com.sg • (65) 6332 9620

Sponsored by:



Endorsed by:



Held in:



Concurrent Exhibitions:



Organized by:



Supported by:

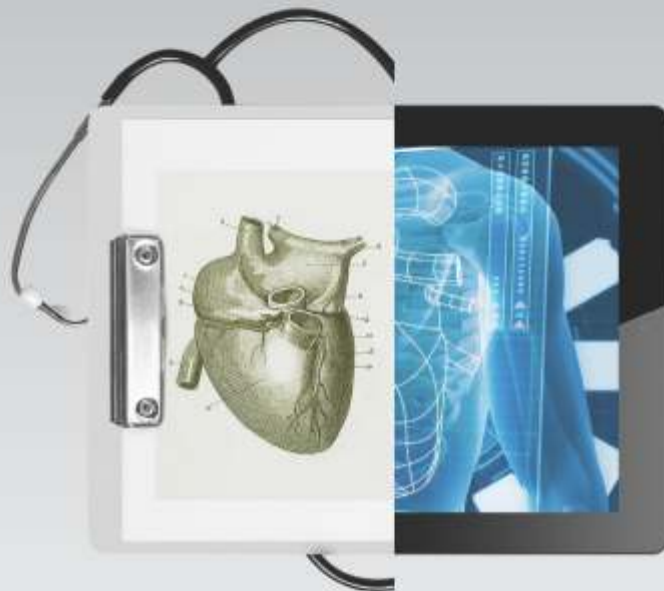


Messe Düsseldorf / Organizer of:





Power Forward to the Digital Future of Healthcare



Move at the speed of change to create connected healthcare communities and deliver patient-centric care.

www.csc.com/healthcare