

Summa Health Network
2010 ANNUAL REPORT




A community leader in
transforming healthcare
through technology



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DEAR FRIENDS AND COLLEAGUES,

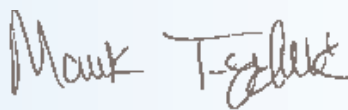
Summa Health Network (SHN) is excited to share with you, our second annual report on our efforts to improve the quality and cost of healthcare. Despite the uncertainty around healthcare reform, in the last year SHN was able to focus more closely on our goals and further define our strategy for achieving meaningful clinical integration. Working together with our physician leaders, we developed a strategic plan to guide the community in what we believe is the right direction for the delivery of healthcare.

Over this past year SHN began the transition from a claims-based, payer-driven Performance Incentive Model to a true Clinical Integration Model. The SHN Clinical Integration Model is based on clinical measures developed by the SHN Quality Improvement Committee and the utilization of timely clinical data. By effectively utilizing electronic medical record (EMR) systems and developing standardized clinical measures, we will be able to improve the healthcare of the patients we serve. We believe that whatever events transpire in Washington, D.C. over the next several years, clinical integration will make SHN stronger and more responsive to the needs of our physicians and their patients while also creating opportunities for progressive collaboration with both payers and employers. Improving the clinical quality and efficiency of care through the use of technology will give us an edge in a highly competitive environment.

We invite you to read through this report to better understand our vision for clinical integration, the tools we have put in place to reach our goals and the progress we have made. Thank you for your interest in and support of what we believe is a game-changing approach to healthcare.



Charles R. Vignos, C.P.A.
President,
Summa Health Network



Mark Terpylak, D.O., FACOG
Physician Director, Clinical Integration
Summa Health Network





Michael Maggio, M.D.

Summa Health System is one of the largest integrated delivery systems in Ohio. Formed in 1989 with the merger of Akron City and St. Thomas Hospitals, the nonprofit system now encompasses a network of hospitals, including Summa Akron City and St. Thomas Hospitals, Summa Barberton Hospital, Summa affiliate Robinson Memorial Hospital, Summa Wadsworth-Rittman Hospital and joint venture hospitals, Summa Western Reserve Hospital and Crystal Clinic Orthopaedic Center. It also includes community-based health centers, a health plan, a multi-specialty group practice, research and medical education, multiple foundations and a physician hospital organization (PHO), Summa Health Network (SHN).

SHN's Vision is to unite and lead independent physicians in our community in quality initiatives that ensure unsurpassed care for all patients.

As the PHO for Summa Health System, SHN represents more than 1,200 physicians at Summa Health System's member hospitals.

EXECUTIVE SUMMARY

SHN is led by a Board of Managers comprised of Summa Health System administration and Summa Health Network physician members. The SHN Board of Managers include:

**Michael Maggio, M.D. –
Chairman**

Summa Physicians

Mark Terpylak, D.O.
Paragon Health Associates, Inc.

Robert Flora, M.D.
Summa Physicians

R. James Dom Dera, Jr., M.D.
Ohio Family Practice Centers, Inc.

Jon Seager, M.D.
Community Health Care, Inc.

**Thomas Strauss –
President & Chief Executive Officer**
Summa Health System

**Michael Rutherford –
System Vice President, Chief Financial Officer**
Summa Health System

**William Powel III –
System Vice President, Legal Services**
Summa Health System

**Charles Vignos –
President**
Summa Health Network

In early 2008 SHN launched an aggressive clinical integration initiative based on healthcare information technology with the goal of engaging its physician members as the means to fulfilling this mission. Electronic medical record (EMR) systems and the SHN Clinical Data Repository form the foundation for this community initiative. These tools provide the essential clinical data for measuring physician performance against specific quality indicators as the basis for improving quality of care and patient outcomes.

SHN has evolved in the past year from a payer-directed, Performance Incentive Model to a physician-directed, Clinical Integration Model, with SHN's Quality Improvement Committee establishing its own set of quality measures based on National Quality Forum (NQF) standards. SHN continues to be a community leader of quality initiatives that are improving healthcare. More than 500 SHN physicians are in the process of fully implementing an EMR and are moving towards full participation in the Clinical Integration Model.



Summa Health Network's goals are to partner with community physicians, Summa Health System and regional and national payers to:

- Improve the clinical quality and efficiency of care
- Lower the cost of care to patients and employers
- Assist physicians with the technology and resources necessary to achieve these goals



Michael A. Hillman, M.D.

ACCOUNTABLE CARE ORGANIZATION

Healthcare today is changing. Over the next decade, the United States will see more change in healthcare than any time in our history. Fee for service will no longer exist – neither will a system that pays for sick care.

For organizations like Summa Health System, the goal is no longer simply to provide the best care for everyone who passes through our doors — although it does and will continue to do so. Summa's goal in this new era of healthcare is to be accountable beyond its four walls, to every citizen of Northeast Ohio, and keep them as healthy as possible.

Summa fundamentally believes that accountability in healthcare is a moral imperative with integration being a means to that end. Summa will use its Integrated Delivery System, which encompasses a network of hospitals, community-based health centers, a health plan, a multi-specialty group practice, multiple foundations and Summa Health Network – to provide continually improving, value-based, high-quality, transparently accountable care to patients, populations and payers it serves. It will do this by building relationships to advance accountability by partnering in a deeper way with patients, populations and payers towards improving the health of its communities while reducing costs.

Summa anticipated this monumental change and is ahead of the curve. Its made significant progress in coordinating care across its communities;

establishing a leadership position in technology; streamlining operations to increase efficiencies and decrease cost; consistently delivering the highest level of care to members of the community – and now, Summa is ready to be a national model of accountable care.

**“Make no mistake, like it or not,
in the next three to five years
Summa Health System
will be transformed.”**

– Michael A. Hillman, M.D.

To help the health system achieve its goal, Summa hired System Vice President of Quality and Medical Affairs Michael A. Hillman, M.D. He is taking the lead in defining system-wide, value-based outcomes, identifying the elements required to build a common cultural framework around safety, accountability, and high-reliability and the actions necessary for Summa to prosper in the changing healthcare payment environment.

Dr. Hillman has said, “Make no mistake, like it or not, in the next three to five years Summa Health System will be transformed. The only question is whether we define our transformation or let others define it for us. We are confident that Summa can define its future as a leader in high-value, accountable healthcare delivery for the patients, communities and providers we serve. As such, we will be a model, if not a source of learning and inspiration, for others across the nation.”

AMERICAN RECOVERY & REINVESTMENT ACT OF 2009



The American Recovery and Reinvestment Act (ARRA) of 2009 is one of the most significant pieces of legislation to affect the medical community in the past decade. It promotes the use of health information technology (IT) for quality improvement at point of care along with the exchange of clinical data in a structured format. A Medicare eligible professional (EP) can receive up to \$44,000 in incentive payments over five years for demonstrating meaningful use of a certified EMR with the first incentive payment being as early as 2011. Beginning in 2015, physicians who have not implemented a certified EMR that is configured to meet the various meaningful use requirements will be confronted with a significant decrease in Medicare reimbursement.

Centers for Medicare & Medicaid Services (CMS) has divided the definition of meaningful use into three stages. Each stage will become increasingly more stringent. Stage one requires a Medicare EP to attest that they have met the outlined standards. Stage two and stage three will involve quality reporting along with demonstration of standards.

Because of the significant time and resources required to demonstrate meaningful use, SHN is committed to assisting its physicians in adopting a certified EMR to comply with Medicare requirements and to participate in the ARRA incentive. SHN continues to offer an EMR Implementation Program to its physicians to make the transition to a certified EMR manageable and affordable. SHN has also teamed with Summa Health System's Information Technology and Systems to provide education and guidance on the meaningful use standards.

American Recovery and Reinvestment Act of 2009 – Stages of Meaningful Use according to the Advisory Board Company:

- Stage 1 – Attestation to CMS that physicians are utilizing certain functionalities within their EMR and meaningful use objectives and measures are being met**
- Stage 2 – The use of health IT for quality improvement and the exchange of clinical information**
- Stage 3 – Improvements in quality, safety and efficiency by focusing on decision support for national high priority conditions**



SUMMA HEALTH NETWORK SERVICES

Since 2005 SHN has assisted over 500 SHN physician members with the purchase and implementation of an EMR. SHN has awarded over \$2 million in grant funding.

Leading in Implementation of Technology

Summa Health Network (SHN) strives to be a community leader in quality initiatives improving healthcare and recognizes the significant benefits for patients and physicians that come from adopting an electronic medical record (EMR) system. During the past year, SHN continued to award grant dollars to support its physicians in the adoption of an EMR.



Almost all of SHN physicians utilizing eClinicalWorks are accessing clinical information from SHS via an electronic interface.

A majority of SHN physicians utilizing other EMRs are accessing clinical information from SHS via an electronic interface.

It was a year of accomplishments in 2009 for SHN and change for the physician community. We surpassed our goal of 400 physician participants in the SHN EMR Grant Program. The Centers for Medicare and Medicaid Services (CMS) announced that they will begin offering funding for the implementation and meaningful use of a certified EMR through the American Recovery and Reinvestment Act (ARRA). For these reasons, the SHN Board of Managers made the decision to discontinue the SHN EMR Grant Program going forward in 2010. Resources previously allocated to this program are now being used to further the development of the SHN Clinical Integration Model. Because EMR implementation and utilization is now linked to Medicare and Medicaid physician reimbursement, SHN will continue to offer an EMR Implementation Program. Our goal is to assist physicians in taking full advantage of the potential Medicare incentive payments. SHN continues to partner with eClinicalWorks to offer an attractive package that includes software, training and support at an affordable price. This cost-effective EMR solution has been selected by over 500 SHN physicians, including Summa Physicians.



SHN EMR Value-Added Services for a Successful Implementation:

- Locally hosted services
- Local eClinicalWorks User Group
- Preferred EMR Package through Summit I.T. Solutions for hardware and technical support
- Supplemental eClinicalWorks training
- Real-time interfaced test results with Summa Health System
- Pay-for-Performance EMR incentives
- Access to SHN Clinical Data Repository

“I feel that the Program offered by SHN has been excellent with regard to the support services. The hosting program gives me peace of mind in that it is constantly monitored for operational fitness and is completely within compliance with regard to any and all federal regulations for security and confidentiality. Also for a smaller single physician practice, the hosting program is a cost effective management tool.

Having the EMR in office offers more than a medical record; it is actually closer to a transcript of the visit between the patient and the physician, with the capability of providing a detailed, rapidly reproducible record for future review by me, another provider, the patient, or even the third party provider in the event of any service dispute. I personally feel that I am complying with federal mandates and more importantly providing and maintaining a record that is current in every aspect of review from one visit to the next. I believe that in today's world that the only marketable practice is a practice which uses the EMR. I know that without the help and support which I have received from SHN and its EMR program that this would not have been a reality for me.”

— Joseph F. Alexander, Jr., M.D.
Joseph F. Alexander, Jr., M.D., Inc.

Leading in the Exchange of Clinical Information

Summa Health System (SHS) together with Summa Health Network (SHN) continued to offer integration services throughout 2009. Real-time interfaces to SHS member hospitals allow for the communication of clinical information between hospitals, physicians and patients. Patient information is collected at registration, following laboratory and X-ray studies and from medical record transcription and deposited in the physician's electronic medical record (EMR) system via a clinical information exchange hub. This exchange of clinical information allows for improvement in quality, safety and efficiency in the care delivered to patients.



SHN BOARD CERTIFICATION RATE



Leading in Quality

The success of the Summa Health Network (SHN) Clinical Integration Model is reliant on a foundation of physicians who are “leaders of quality” in their own practices. Each physician applicant submits to a thorough credentialing process which is governed by the National Committee for Quality Assurance (NCQA) and other regulatory bodies. The SHN Credentialing and Peer Review Committee evaluates physician applicants against established criteria to ensure SHN physicians meet the highest professional and ethical standards.

SHN Credentialing and Peer Review Committee Members:

Teresa Koenig, M.D. – Co-Chair
Internal Medicine

James F. Grow, Jr., M.D. – Co-Chair
Family Medicine

Joseph Dankoff, M.D.
Urology

Robert Flora, M.D.
Urogynecology

Michael Hill, M.D.
Internal Medicine

Todd Ivan, M.D.
Psychiatry

Thomas Repko, M.D.
Ophthalmology

Christopher Sullivan, M.D.
Endocrinology/Metabolism

David B. Sweet, M.D.
Internal Medicine

John Vollman, M.D.
Neonatology

Leading in Physician Engagement

As SHN moves down the path of clinical integration, we continue to promote the utilization of the SHN Clinical Data Repository. SHN works closely with the practice during the initial startup to ensure that their electronic medical record (EMR) data is accurately captured and reported in the Clinical Data Repository. The SHN Provider Relations team conducts monthly meetings with the practice to review current clinical measures and disseminate information regarding best practices. In addition, the SHN Provider Relations team teaches physicians and their staff how to utilize the SHN Clinical Data Repository to achieve the desired clinical measures for a better patient experience.

The key to a successful clinical integration model is well engaged physicians and physicians' staff.

- Over 1200 physicians participate in SHN
- Over 500 physicians committed to EMR
- Over 300 physicians participate in performance incentive programs
- Over 200 physicians and staff attend educational sessions





SUMMA HEALTH NETWORK PARTICIPATION MODELS

Summa Health Network (SHN) allows for integration of its independent community physician members at varying degrees. Through three different participation models, physicians are able to choose their involvement in payer contracts, performance incentive programs and clinical quality initiatives.

MESSANGER MODEL	PERFORMANCE INCENTIVE MODEL	CLINICAL INTEGRATION MODEL
Program Originator: Payer	Program Originator: Payer	Program Originator: SHN Clinical Integration Quality Improvement Committee
Physician Requirement: Fee Survey	Physician Requirement: Implemented EMR	Physician Requirement: Implemented EMR
SHN Requirement: Contract Language Negotiation	Physician Requirement: EMR Data Submission	Physician Requirement: EMR Data Submission & Full Implementation of Clinical Data Repository
SHN Requirement: Claims Payment Resolution	SHN Requirement: Incentive Compliance Verification	Physician Requirement: Participation in CI Committees & Educational Initiatives
	SHN Requirement: PI Program & Amendment Review	Physician Requirement: Compliance with Policies & Procedures
	SHN Requirement: Clinical Data Repository Access	Physician Requirement: Active in Physician Monitoring & Corrective Action Plans
		Physician Requirement: Participation in all Payer Contracts
		SHN Requirement: Committee Organization & Oversight
		SHN Requirement: Support in Policies & Procedures Development, Educational & Clinical Quality Improvement Initiatives
		SHN Requirement: Development of Clinical Data Repository & Reporting
		SHN Requirement: Negotiation & Execution of Payer Contracts

Messenger Model

When physicians join SHN, they are automatically placed into the Messenger Model. Currently, SHN serves as a managed care resource to over 1200 physicians in the Messenger Model participation option. Under this Model, physicians complete an assessment indicating their acceptable contracting benchmark. As SHN arranges for managed care contracts with regional and national payers, physician members are able to elect which agreements they want to participate in, and they are automatically placed with those who are acceptable to them through their benchmark survey. Today, SHN offers over 20 managed care contracts to these physician members. SHN's services to these physician members do not end at the formulation of the agreement. SHN's Provider Relations team assists members with claims payment resolution, ensuring demographic updates are relayed timely to all appropriate payers, and providing education on payer updates.

Performance Incentive Model

SHN's second participation model allows physicians who have accomplished the implementation hurdle of EMR, to participate in performance incentive programs with various national and local payers. Under this Model, SHN collaborates with payers to establish the payers' clinical quality programs in physician offices, based on claims data. Physician participants in this Model maintain their Messenger Model agreements, but they are able to share in cost savings with performance incentive payers generated through the quality programs. SHN currently has performance incentive programs for physicians with Aetna, Anthem, and SummaCare.

Each performance incentive program through SHN has four elements:

- **EMR Implementation:** The physician group must have implemented an EMR and is eligible for incentive payments for succeeding in adopting an EMR
- **Cost-Effectiveness:** The physician groups share in the cost savings with payers, such as when generic medications are filled versus the same brand-name equivalent
- **Clinical Quality:** Preventative screenings, test results and health maintenance measurements are central to the incentive programs
- **Value-Added Services:** Indicators such as providing care after normal business hours are also rewarded to these physician groups





PERFORMANCE INCENTIVE MODEL

What is a Generic Medication?

According to the U.S. Food and Drug Administration (FDA), a generic drug is the same as a brand-name drug in:

- Dosage
- Safety
- Strength
- Quality
- The way it works
- The way it is taken
- The way it should be used¹

Performance Incentive Model results EMR Implementation

Today, over 300 SHN physicians have completed their EMR implementation and have received payer incentives for making this electronic leap, and providing the overall higher quality of care that they, along with SHN, believes is now given to their patients.

Generic Prescribing Results

Newly developed medications are available under their proprietary brand name until their patent expires. At that time, a generic medication equivalent is able to be formulated. The FDA approves all generic medications and advises that they are as effective as their branded equivalents by containing the same active ingredients as their branded equivalents.

Generic medications, according to the FDA, are able to cost significantly less as they are mirroring their brand name counterparts, and not newly developed.

The Rationale

Yearly, almost 2.6 billion generic medications are used, and that number continues to increase. In 2009, the number of generic medications filled increased by 5.9 percent from 2008. This rise in

the dispensing of generic medications also brought a decline in the number of brand-name drugs filled in 2009 by 7.6 percent according to IMS Health, a global company dedicated to pharmaceutical market intelligence.² IMS Health also recently reported that the projected improvement in the utilization of generic medications will decrease the total global expenses on medications by \$80 - \$100 billion by 2015. This savings will be assisted in the next two years, as patents will expire for 6 of the 10 most prescribed medications in the U.S. which may allow for additional generic medications to now be available.³

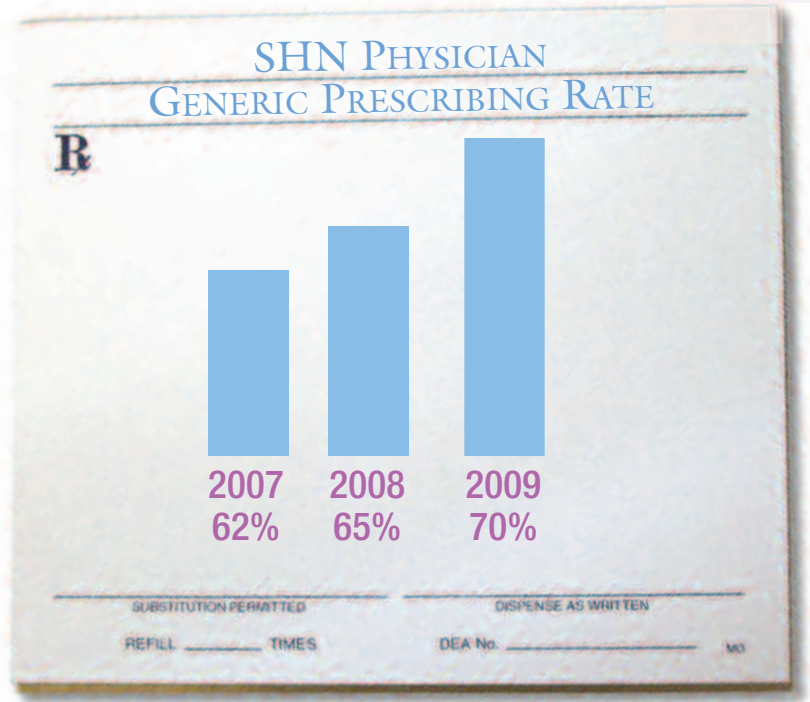
Not long ago, the AARP, which represents retired Americans, surveyed over 1000 people on their prescription medication use. Almost one fourth of respondents answered that they are not able to afford their medications if a generic form is not available.⁴

Physicians participating in the SHN Performance Incentive Model began sharing in savings as a result of this measure in 2008 by comparing their generic prescribing frequency with their brand name prescribing frequency. For meeting set generic prescribing percentage targets with participating payers, SHN physicians receive incentive payments.

PERFORMANCE INCENTIVE MODEL

The Measure

Before SHN Physicians began participating in the Performance Incentive Model program for generic prescribing, their annual rate of generic prescribing was assessed. SHN physicians averaged 62 percent generic prescribing. After the first year of the program, in 2008, the SHN physician generic prescribing frequency increased to an average of 65 percent. By 2009, the SHN average showed to be increasing at a much higher rate than the national increase. SHN physician generic prescribing jumped to over 70 percent; an increase of over 13 percent since the induction of this program. Under one payer's program, 81 percent of participating physicians continued to exceed the expectations in generic prescribing frequency.



Clinical Quality Results: Cholesterol Management

In 2009, 73 percent of eligible SHN physician groups received an incentive for their diligence in the care they provide to their patients with cardiovascular disease. For this measure, it was required that these patients receive an LDL-C screening each 12 months. SHN physician's average for this measure was 91 percent, significantly above the Ohio average of 82 percent.





Value-Added Services

SHN physicians strive to provide the best care and service to their patients. This is eminent among the value-added measures within the Performance Incentive Model as well. Eighty three percent of participating physician groups provide laboratory blood draws directly in their offices for their patients. This eliminates the need for patients to travel to an outside laboratory draw site for these services, and expedites the timeliness of their test results.

“We offer phlebotomy in the office for most of our patients. We find it to be a great benefit to all: patients like the convenience, the staff likes not having to chase down patients to ensure they had their labs drawn, and the physicians like getting results back quicker. This last feature is made possible with our electronic laboratory interfaces – in many instances I have results back by the end of the day. I've had many patients comment to me how efficient the process seems: show up in the office for a visit, get labs drawn, and get a phone call back from the office later that day or the next with their results. Other services provided in the office include spirometry, electrocardiography, urine testing, and rapid strep/flu testing. These also give patients the convenience of having testing done all at one place, while allowing physicians to provide faster and more precise diagnosis and treatment.”

– R. James Dom Dera, Jr., M.D.,
Ohio Family Practice Centers, Inc.

CLINICAL INTEGRATION MODEL

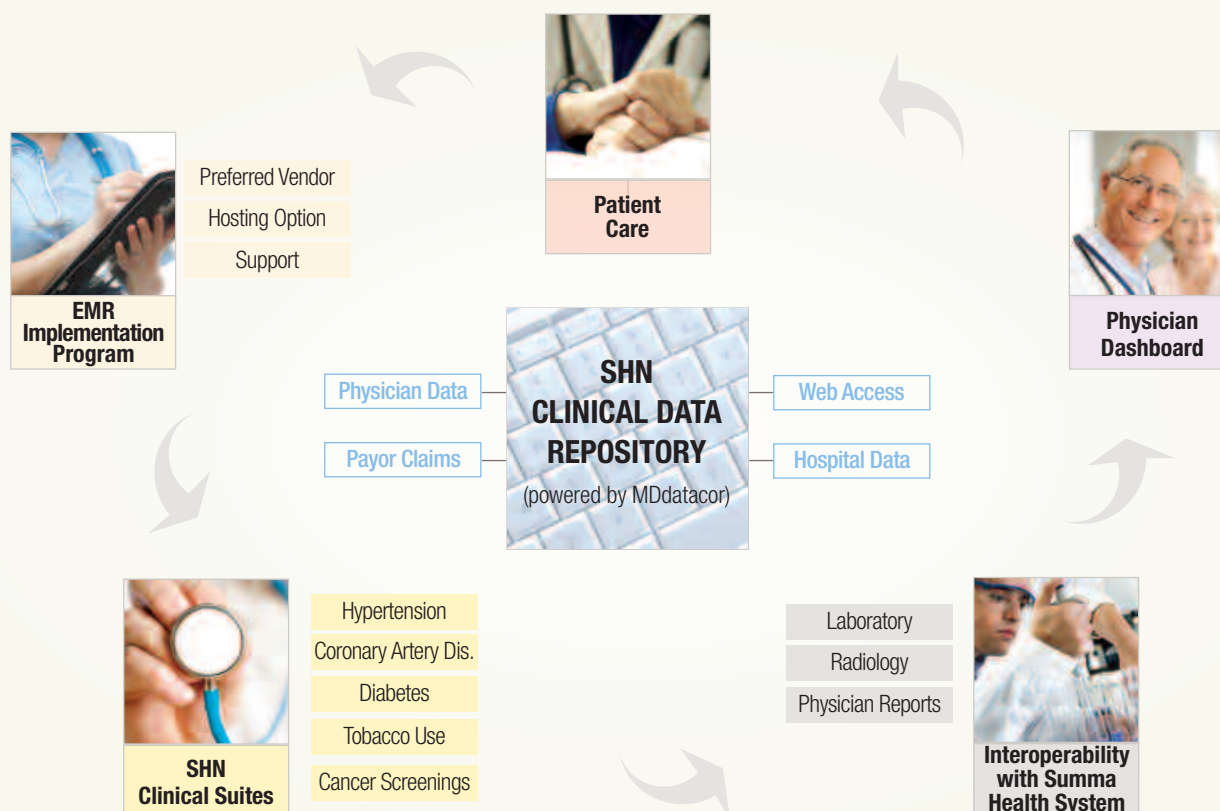
Clinical Integration Model

Formed throughout 2009, SHN's Clinical Integration Model offers SHN physicians yet another level of collaboration and currently consists of 74 physicians. It allows them to unite in the development and execution of their own quality programs, based on clinical data, not claims data. All physicians in this Model utilize SHN's Clinical Data Repository which aggregates clinical, claims, and hospital data into one source. Under this Model, SHN administration plays an assistive and supportive role to physicians who are striving to provide an unmatched quality of care. These physicians actively use EMR as a tool for

maintaining their patient care records, and take part in additional quality initiatives such as effectively managing patients with chronic conditions (i.e. Diabetes), managing to high standards, wellness programs (i.e. tobacco assessment), and implementing effective patient outreach programs.

Physicians within this Model lead two committees, a Quality Improvement Committee and a Contracting Committee, and all Clinical Integration Model physician participants agree to rotate membership on these committees as needed.

SUMMA HEALTH NETWORK CLINICAL INTEGRATION MODEL



CLINICAL INTEGRATION MODEL

Quality Improvement Committee

The Quality Improvement Committee began meeting in 2009 and is the driving force behind the development of the Clinical Integration Model. This group of physicians established the current set of meaningful clinical quality measures as their focus for improving care. With the assistance of the SHN Clinical Data Repository, this Committee is able to analyze outcomes and provide education to their peers for improving upon those outcomes. In addition, this Committee has developed outreach programs and standardization practices to assist Clinical Integration groups with achieving their desired clinical outcomes.

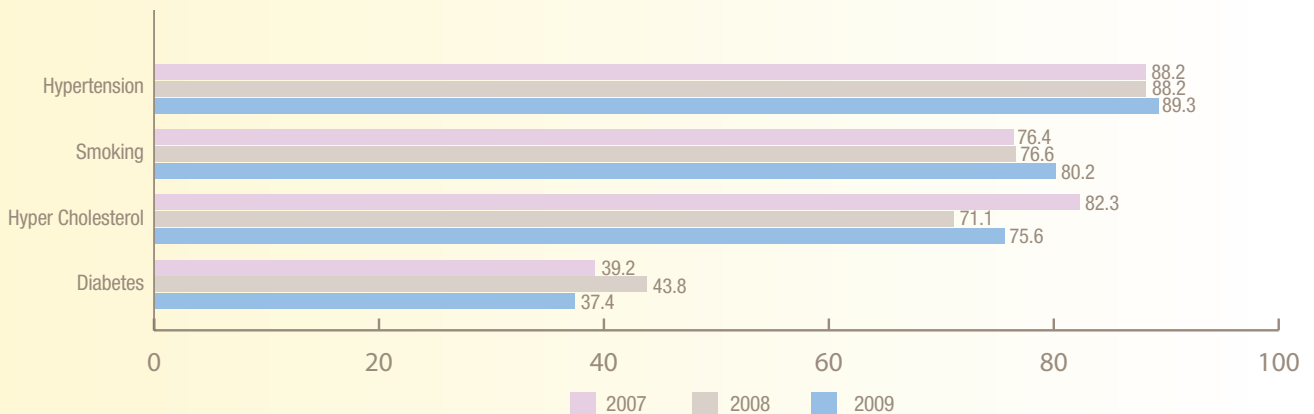
Early in 2010, this Committee implemented an outreach program targeting hypertensive patients. The goal of this outreach initiative is to ensure that all hypertensive patients have their blood pressure recorded once every 12 months. Poorly controlled high blood pressure may cause stroke, heart

attack, vision problems, heart failure, and other serious conditions. As a result, through this outreach program, physicians are requesting that patients who have not had their blood pressure reading taken within the proposed time period, make an appointment to have this assessed.

Data from Summa's Cardiovascular Institute additionally demonstrates the importance of controlling hypertension, and smoking cessation. For the past three years, information continues to illustrate a presence of hypertension and smoking in all patients who present at the hospital for peripheral intervention services (cardiac implants). Controlling hypertensive patient's blood pressure, and additionally assisting smokers with quitting, may be able to decrease the number of hospital admissions for these services.

PERIPHERAL INTERVENTION – SUMMA AKRON CITY HOSPITAL

History upon Presentation: Percent of Total Volume 2007 - 2009



Data Source: Lumedx LVI Database

Summa Cardiovascular Institute – 2009 Clinical Outcomes – March 23, 2010

The Quality Improvement Committee consists of the following members:

Mark A. Terpylak, D.O. – Chair
Obstetrics/Gynecology

Kyle Allen, D.O.
Geriatric Medicine

R. James Dom Dera, Jr., M.D.
Family Medicine

Matthew Finneran, M.D.
Family Medicine

Richard Hines, M.D.
Family Medicine

Michael J. Maggio, M.D.
Internal Medicine

Richard May, Jr., M.D.
Nephrology

Mark Meyer, M.D.
Family Medicine

Jon Seager, M.D.
Family Medicine

“The ultimate goal for this committee is to improve the quality of care delivered to our patients, and to show the payers in our market that we have achieved that goal. This will be accomplished by continually improving our ability to best utilize our EMR. Because of the extensive experience of the groups involved in this project, I believe we can go beyond proving ‘meaningful use’ and really make the EMR work for us.”

– Mark Meyer, M.D.
Pioneer Physicians Network

Clinical Integration Contracting Committee

Unlike the other physician participation models within SHN, the success of SHN’s Clinical Integration Model is significantly dependent on its Clinical Integration physicians participating in all Clinical Integration Model specific payer contracts. The only way to ensure this is for SHN (through the Clinical Integration Contracting Committee) to arrange payer contracts for its complete clinically integrated network of physicians. Groups participating in the Clinical Integration Model may also still participate in the Messenger Model and Performance Incentive Model as they apply to their specific business needs. However, under this united Model,

managed care contracting will be completed under a single-signature contract for the participating groups. No other contracting methodology will ensure full physician participation in critical clinical integration initiatives.

In addition, this Committee will continually review the effectiveness of each payer contract, collaborate with the Quality Improvement Committee in the development of contract criteria, and ensure that the care provided by the physician participants exceeds averages for quality standards.

CLINICAL INTEGRATION MODEL



Limited number of models in the U.S.

There are currently a limited number of clinical integration models within the United States. Even with the limited existence, SHN is uniquely different from these other models by making Electronic Medical Record systems the foundation of our Clinical Integration Initiative which allowed the development of the SHN Clinical Data Repository. The use of this technology provides local physicians with access to additional patient information, helping them to make more informed decisions at the point of care.

According to a recent report printed by the American Hospital Association, “Clinical integration cannot be achieved instantly. It requires leadership from both hospitals and physicians, development of an appropriate culture, organizational changes, support from payers, and a great deal of effort.”⁵

“Physicians in the greater Akron area are on the cusp of achieving what few around the country have: Clinical Integration. Most simply, its physician-driven activities bring together some previously immiscible components of health care through meaningful information gathering, useful knowledge dissemination, practical experience sharing, and supportive payment modeling. Where other models fail to recognize patient choice and the importance of the relationship with their physician, Clinical Integration supports a diverse and viable community of physician practices.”

— Jon Seager, M.D.
Community Health Care, Inc.

Local SHN Clinical Integration Model physician participants are excited about being the market leader in a model that has focused on such planning, technology, and development on the forefront. SHN began the process to develop clinical integration in 2004 when the Board of Managers voted for an EMR Grant Program to assist physicians in the implementation of an EMR, and lead the healthcare market in additional quality initiatives.



SUMMA HEALTH NETWORK CLINICAL INTEGRATION MEASURES

To begin their task of improving healthcare, the Summa Health Network (SHN) Quality Improvement Committee looked to the National Quality Forum (NQF) for assistance in tracking measures with proven validity. The NQF is well known for its function in healthcare of approving quality measures on a national level.¹

At its infancy stages, the SHN Clinical Integration Model is comprised of a majority representation of primary care physicians, who treat patients for a vast range of diseases and illnesses. The SHN Quality Improvement Committee wanted to select measures that would be appropriate for its members, and their patients. With these elements in mind, the Committee was able to choose five clinical suites:

- Diabetes
- Coronary Artery Disease
- Hypertension
- Cancer Screenings
- Tobacco Use Assessment

These measures are important for primary care providers in the SHN Clinical Integration Model to monitor as their presence among their patients is overwhelming. Many of these clinical diseases and prevention tactics are found to apply to the patients in the SHN community. According to the Ohio Department of Health, 70 percent of American deaths are caused by chronic diseases.²

The National Quality Forum's (NQF) mission for improving the healthcare quality for Americans is:

- Setting national priorities and goals for performance improvement;
- Endorsing national consensus standards for measuring and publicly reporting on performance; and
- Promoting the attainment of national goals through education and outreach programs.³

“Physicians as a whole want to believe that they are doing all they can for their patients to keep them well. However, when looking at clinical measures such as cancer screening, smoking cessation, optimizing blood pressure, lipid and glucose values etc., one quickly finds that there is room for improvement. Government and private payers struggle to fully understand the important role that a patient's personal primary care physician plays in this process and the potential barriers that the primary care physician has to navigate to accomplish optimal clinical outcomes for their patients. However, through the efforts of the SHN Clinical Integration Committee, these clinical measures are being proactively explored, in an effort to identify best practice models, which will lead to optimal clinical outcomes with the ultimate goal to deliver the highest quality of healthcare that is possible.”

— Matthew Finneran, M.D.
Family Practice Center of Wadsworth



DIABETES

What is Diabetes?

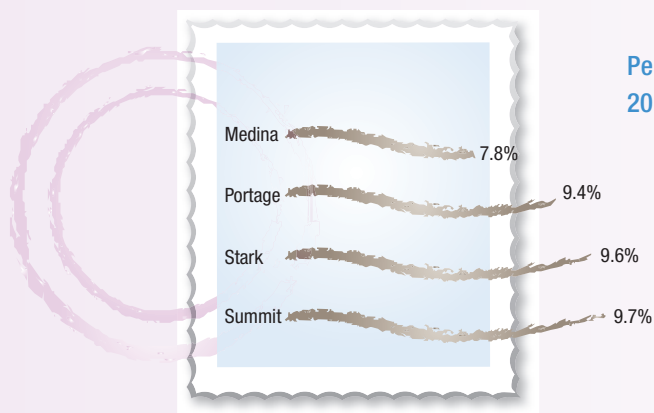
Your body changes most of the food you eat into glucose (a form of sugar). Insulin is a hormone produced by the pancreas that allows glucose to enter all the cells of your body and be used as energy.

Diabetes is a disease that occurs when a person's body doesn't make enough insulin or can't use insulin properly. When you have diabetes, the sugar builds up in your blood instead of moving into the cells. Too much sugar in the blood can lead to serious problems, including heart disease and damage to the nerves and kidneys.⁴

Diabetes at a Glance

- American's with diabetes: 23.6 million children & adults (7.8 percent of population)
- Each year 1.6 million people are diagnosed with diabetes
- 7th leading cause of US deaths in 2006
- Costs: \$174 billion (total costs of diagnosed diabetes in 2007)⁵

Diabetes Closer to Home



Percentage of persons
20 and older with Diabetes.⁶



Diabetes was chosen as a condition for concentration of the SHN Clinical Integration Model physician participants, as according to the American Diabetes Association (ADA), 23.6 million people, or nearly eight percent of those living in the United States are affected by this disease.⁷ In Ohio alone, over 800,000 people are estimated to suffer from this disease.⁸

In addition to the disease itself, diabetes is a contributing factor to other serious conditions such as vision loss, kidney disease, neuropathy, heart disease, and high blood pressure. These extenuating conditions often lead patients to life changing effects. Instances of this can include the need for kidney dialysis, limb amputations, and stroke. Limb amputations are so prevalent in diabetics that this disease is found as the cause of two-thirds of all non-traumatic lower-limb amputations according to the ADA.⁹

The costs of this disease are also overtaking. Nationally, it has been found that the presence of diabetes increases the amount a person will spend annually on medical care by over 200 percent, compared to people who are not affected by this disease. The ADA advises that the costs of diabetes in Ohio alone (including lost productivity) are nearly \$6 billion annually.¹⁰

SHN Clinical Integration Model physician participants are aiming to control these costs while decreasing the complications among their patients with diabetes. Within this clinical suite, the SHN Clinical Integration Model physician participants strive to excel in their observance of kidney disease screening tests and retinal eye exam completions. They actively track and manage their diabetic patients' blood sugar control through monitoring their HbA1c readings, and regularly examine their cholesterol by testing their LDL levels.

According to the American Diabetes Association (ADA), 23.6 million people, or nearly eight percent of those living in the United States are affected by diabetes.⁷ In Ohio alone, over 800,000 people are estimated to suffer from this disease.⁸

CORONARY ARTERY DISEASE



What is Coronary Artery Disease?

Coronary artery disease (CAD) is a condition in which plaque (plak) builds up inside the coronary arteries. These arteries supply your heart muscle with oxygen-rich blood.¹¹

Coronary Artery Disease at a Glance

- American's with CAD: 17.6 million¹²
- 785,000 estimated Americans have a new coronary event each year¹³
- #1 leading cause of US deaths in 2006¹⁴
- Costs: The estimated direct and indirect 2010 cost is \$177.1 billion¹⁵

Coronary Artery Disease Closer to Home

Heart Disease death rates (2000 – 2006)

Stark	458 per 100,000 people aged 35 & older
Summit	504 per 100,000 people aged 35 & older
Portage	505 per 100,000 people aged 35 & older
Medina	508 per 100,000 people aged 35 & older ¹⁶

Heart diseases continued to be the leading cause of death in the United States in 2007 when the most recent data is available through the Centers for Disease Control and Prevention (CDC). In Ohio alone, 25 percent of all deaths were related to heart disease in 2009 according to the CDC.¹⁷

The SHN Clinical Integration Model aims to lower the occurrences of death, heart attack, stroke, and other complications in patients with coronary artery disease through effective monitoring of their blood pressure and LDL levels. High blood pressure is found in nearly 30 percent of those with coronary artery disease while 40 percent of those suffering from this disease also have high cholesterol. The United States Preventative Services Task Force has shown that measuring blood pressure in adults can be effectively used to identify those who may have a greater risk of developing heart disease. They have also found treatment for this to decrease the incidences of diseases of the heart. The physician participants in the SHN Clinical Integration Model have committed to screening their patients with coronary artery disease's blood pressure at least once every 12 months and aim to control these patients' reading under 140/90.¹⁸

In addition to blood pressure, SHN physicians also feel strongly about screening and controlling the cholesterol readings of their patients with CAD. Specifically, SHN physicians focus on their CAD patients' low-density lipoproteins or LDL readings which represent what is known as the "bad" cholesterol. This type of cholesterol leads to constriction inside patients' arteries which can lead to other serious conditions such as heart attack and stroke. SHN physicians strive to assess their CAD patients' LDL reading every 12 months, and control it's reading to under 100 mg/dl.¹⁹

HYPERTENSION

What is Hypertension?

Hypertension is a term used to describe a high blood pressure.

“Blood pressure” is the force of blood pushing against the walls of the arteries as the heart pumps out blood. If this pressure rises and stays high over time, it can damage the body in many ways.²⁰

Hypertension at a Glance

- Americans with hypertension: 74.5 million people²¹
- 13th leading cause of death in 2006²²
- Costs: Estimated \$76.6 billion in the U.S. for 2010²³

Hypertension Closer to Home

28 percent of adults in Ohio reported in 2007 that they had been told at some time that they have hypertension.²⁴

Although hypertension, or high blood pressure is not one of the 10 highest causes of mortality in recent years (13th in 2006, the last year data is available from the CDC), it is still a leading factor to other chronic diseases as well as the cause of 23,855 deaths in 2006.²⁵

Diabetes, obesity, smoking, and a diet high in salt content, as well as many other factors are known to be contributing influences to high blood pressure.²⁶

The SHN Clinical Integration Model physician participants believe that by early identification, and routine maintenance of high blood pressure, further complications can be avoided, or contained. They feel that high quality care for other disease states can start by identifying and controlling this important health factor.

In early 2010, the SHN Quality Improvement Committee began analyzing the blood pressure reading frequencies for the members in the Clinical Integration Model. Although the average screening rate for the SHN physicians within a 12 month period was an exemplary 88 percent, above the national rate of 46.6 percent the committee was not satisfied with these results.²⁷ With the help of MDinsight, SHN’s Clinical Data Repository, they have now implemented a hypertensive outreach program. This program sends a personalized letter to each patient, from their physician, who needs to receive a check-up and a blood pressure reading. This program is still underway, and the Quality Improvement Committee will be able to share the effectiveness results from this outreach program in the 2011 Annual Report.





CANCER SCREENINGS

Cancer at a Glance

- Americans with cancer: 11.1 million Americans
- New Cases for 2009: 1,479,350 cancer diagnoses
- 2nd leading cause of deaths in 2009
- Costs: overall \$228.1 billion (direct & indirect costs)²⁸

Breast Cancer

In late 2009, the US Preventative Task Force issued a recommendation that decreased the frequency in which many women should receive a mammogram to screen for breast cancer. Specifically, women aged 50 – 74 years were advised to receive this screening every two years while those younger than 50 were merely recommended to discuss the need for a mammogram with their physician.³² Many groups, including the American Cancer Society and the American College of Obstetricians and Gynecologists, continue to recommend that women receive a yearly mammogram beginning at age 40 to capture 95 percent of all incidences of this cancer.^{33,34}

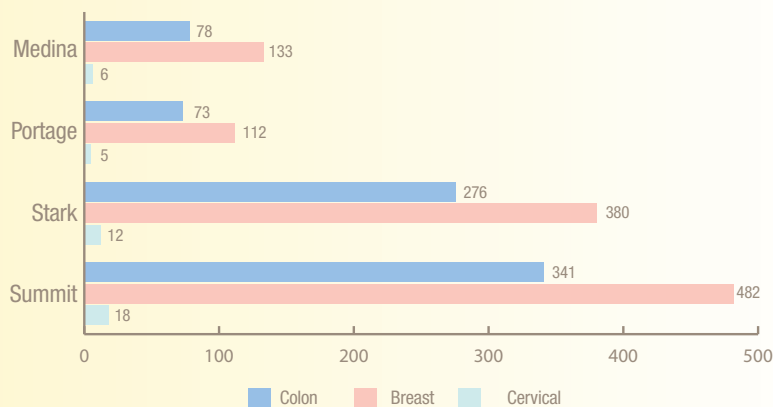
The SHN Clinical Integration Model physician participants have taken this strong stance as well toward early detection of breast cancer and other cancers. Twenty-nine percent of all women in Ohio who are diagnosed with cancer have breast cancer. As one of the clinical measures, physician participants aim for early detection of this disease and for their patients to receive a mammogram at least biannually after turning 40.

“Having a yearly mammogram screening should be an important part of each woman’s preventative care once they reach 40.”

– Tara D. Scott, M.D.
Paragon Health Associates

Cancer Closer to Home

Average new cases of cancer per year 2002-2006:



The American Cancer Society calculated that cancers would cause 24,350 deaths in Ohio alone, and 62,420 Ohioans would receive a new diagnosis of cancer in 2009.³¹ Across the United States, over 1500 people die of cancer each day. The SHN Clinical Integration Model physician participants believe in early detection of cancers to improve these outcomes through routine, clinical screenings. The specific sites that the physician participants are currently focused on are cancers of the breast, cervix, and colon.

Cervical Cancer

Cervical cancer can provide a high treatment success rate if detected early through a routine Pap test by a Gynecologist. However, in 2009, it was figured that over 11,000 women would have received a positive diagnosis for cervical cancer. Annually, in Ohio, nearly 500 women are diagnosed each year with cervical cancer according to the American Cancer Society.³⁵

The SHN Clinical Integration Model physician participants recommend a screening every three years for their female patients for the early detection of cancerous cells. Pap test screenings offer efficiency in identification of precancerous cells which are often able to be removed as well. According to the American Cancer Society, the probability of a woman's survival from cervical cancer is almost 100 percent if detected in the infancy stages.³⁶

Colon Cancer

Nationally, it was estimated in 2009 that over 100,000 people would be diagnosed with colon cancer according to the American Cancer Society. Locally, each year nearly 6,500 Ohioans are diagnosed with colon cancer yearly. Of those diagnosed, in Ohio, 47 percent are in a progressed stage, making survival from this cancer less probable. As with many other cancers, early

detection greatly increases the success rate for treatment and overcoming the disease. Probability of survival from colorectal cancers when detected early is 91 percent as stated by the American Cancer Society.³⁷

As prevalence of colon cancer is greatly increased by age, routine screening is recommended by all SHN Clinical Integration

Model physician participants beginning at age 50. A colonoscopy once each ten years is the most common form of screening, however additional screenings are also considered acceptable by the physician participants: fecal blood occult test (yearly), sigmoidoscopy, (every five years), or a double contrast barium enema (every five years).



TOBACCO USE ASSESSMENT

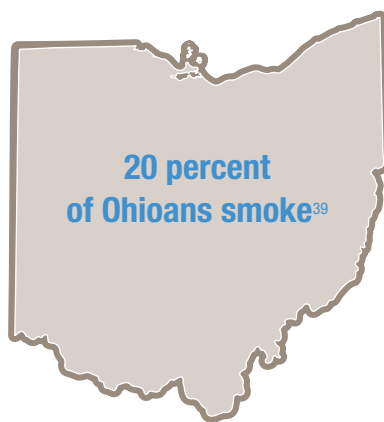
Smoking at a Glance

- Current smokers: 46 million U.S. adults
- Mortality: 20 percent of all deaths is related to smoking³⁸



Closer to Home

Awareness to the effects of tobacco use is continually increasing; however, according to the American Cancer Society and the Ohio Cancer Incidence Surveillance System, tobacco use would still cause about 7,300 of all



2009 deaths in Ohio. With so many deaths in Ohio caused by this drug, it is not surprising to note that Ohio was ranked 8th in the country for the number of smokers according to the 2007 Ohio Behavioral Risk Factor Surveillance System. SHN Clinical Integration Model physician participants begin screening their patients at age eleven for use of tobacco. According to the Ohio Department of Health, nearly all adults who continue to smoke began smoking by their 19th birthday.⁴⁰ Additionally, nearly 27 percent of young adults aged 18 – 24 were reported as smokers by the American Cancer Society. SHN Clinical Integration Model physician participants are actively working to

change these statistics. They query their patients yearly, beginning at age 11 on their tobacco usage. They also offer their patients counseling to assist in dropping this habit as well as offer pharmacy assistance.

SUMMA HEALTH NETWORK CLINICAL DATA REPOSITORY



Famed writer for The New Yorker and associate professor at Harvard Medical School, Dr. Atul Gawande recently said of the timeliness of data available in healthcare, “It’s like driving a car with a speedometer that tells you only how fast all cars were driving, on average, three years ago. We have better information about crops and cows than we do about patients.”¹

The addition of the Electronic Medical Record (EMR) system in Summa Health Network (SHN) physician offices moved physicians from an outdated paper-based record-keeping system to a robust electronic-based database that now effectively manages their patients’ clinical information. Through implementing this technology, SHN physicians are part of only 43.9 percent of U.S. physicians using EMR according to the Centers for Disease Control and Prevention.² This electronic move has allowed physicians to run reports based on the information contained in their system, such as diagnoses, vitals, and office visit occurrences. The downfall of this reporting is that the source is limited to a physician’s EMR when other data sources are involved in a patient’s care such as a hospital, laboratory, and specialty physician. The SHN Clinical Data Repository, through a product called MDinsight powered by MDdatacor has been able to address this issue.

SHN’s Clinical Data Repository gives SHN physicians access to timely data on their patients, aggregated from many different sources. Data from the physician’s EMR, payer claims, and

hospital laboratory and radiology systems are combined into one web-based utility that allows the physician to view their patient outcomes on the SHN Clinical Measures at any time, with timely information. This data is currently refreshed weekly, giving physicians access to clinical data much sooner than ever before.

Historically, physicians relied on insurance companies to notify patients of upcoming preventative screenings through the information gathered on patient claims. Once an insurance company could send an outreach notification to their patients, their claim

data was at least 90 days old. During that time, the patient’s qualifying factors may have changed, or the patient may have been to the physician’s office and no longer need an outreach notification. Claims data also lacks the ability to reach out to patients on many clinical elements that may not be routinely reported on claims such as control of a hypertensive patient’s blood pressure, and their tobacco use for assistance in smoking cessation. Claims data can advise if a patient was seen in the physician’s office, but without added coding effort from the physician’s office, cannot report on whether or not a hypertensive patient’s blood pressure was checked while they were there. Another example is that claims-based data can indicate that a HbA1c was performed on a patient.

SHN’s Clinical Data Repository gives SHN physicians access to timely data on their patients, aggregated from many different sources.



Claims data however, cannot provide the results of the HbA1c screening. SHN's clinical-based model can provide the results of the patient population. This in return allows SHN physicians to specifically identify patients who need to be controlled for their diabetes and the effects of the outreach controls. By uploading data automatically to the SHN Clinical Data Repository on a weekly basis, SHN physicians are able to maintain their daily workflow, without added strain, and gain access to additional information on their patients.

Aggregating data from multiple sources also assists in reducing duplicate testing. Although a primary care physician may not have record of a preventative cancer screening, this testing may have been conducted by another physician and the claim submitted to the patient's insurance company. Through the SHN Clinical Data Repository, the primary care physician can observe that the appropriate screening has been completed, and avoid unnecessarily duplicating the test.

By weaving SHN physician's EMRs with the additional technology offered in the SHN Clinical Data Repository, SHN physicians are on the leading edge of improving clinical quality and efficiency of healthcare.

“Combining MDinsight software with eClinicalWorks EMR allows physicians and staff to review prevention needs and place an order in the medical record prior to the patients visit. A 56-year-old man came to the office for a preventive visit, the report created by MDinsight noted he had yet to receive a colonoscopy to screen for colon cancer. Prior to his appointment, staff placed a referral to a local Gastroenterologist. We activated the referral at the time of his visit and one month later the exam revealed a localized colon cancer. He underwent colorectal surgery and found he is stage 1 and we anticipate a cure rate of greater than 80%.”

— Michael Maggio, M.D.
Summa Physicians, Stow Internists

CLINICAL INTEGRATION MODEL PARTICIPATING PHYSICIANS

As of May 2010, these physicians are participating or moving toward the Summa Health Network Clinical Integration Model. For a current listing go to www.summahealthnetwork.org/annualreport.

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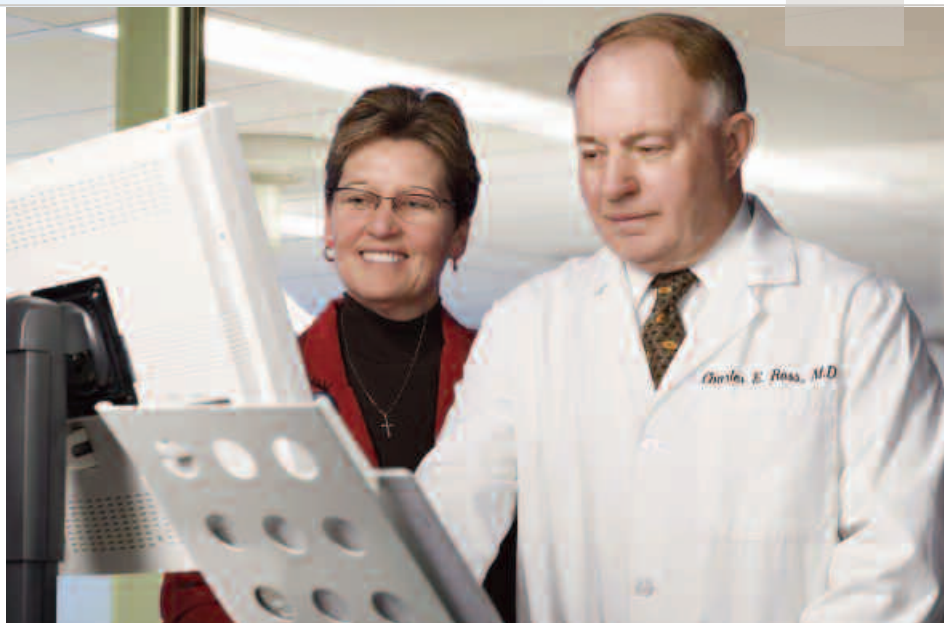
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