THE COVENANT Chart

COVENANT HealthCare

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Bedside Manner and Patient Recovery
A Direct Correlation

Dr. Sara Rivette, Covenant HealthCare Chief of Staff

As a physician, it is easy to get lost in the whirlwind of the modern healthcare system. While we are always doing our best to improve and maximize positive outcomes with our patients, we can get so busy that we forget the importance of maintaining and improving interpersonal communications with our patients.

A recent research review showed just how important provider-patient communication can be in overall treatment success. The review, reported in the journal *PLOS One,* has supporting data that a good bedside manner has a tangible impact on patient health.

The review encompassed 13 clinical trials around the world. The trials measured hard outcomes like weight loss as opposed to subjective results like patient satisfaction. In each trial, health providers (usually doctors) were assigned at random to either receive patient interaction training, or continue with their standard method of care without additional training.

The doctors assigned to the training group learned people skills to improve warmth and empathy, as well as specific techniques like motivational interviewing, listening without interrupting and proper eye contact. The results found that these physicians had better success in getting patients to lose weight, lower blood pressure or manage pain associated with arthritis.

Although modest, the significance of these gains is similar to that of administering low-dose aspirin or cholesterol-lowering statins for preventing heart attack.

While it's not clear what specific skill made the difference, and while people differ on what they expect from a doctor, researchers conclude that the provider-patient relationship makes a difference.

An article I keep on hand highlights a few great tips on bedside manner. Some key points to keep in mind include:

- Don't underestimate the power of a proper introduction; acknowledge everyone in the room.

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A New Tool for the Detection of Early Stage Breast Cancer
Automated Whole Breast Screening Ultrasound (AWBUS)

GUEST AUTHOR
Dr. Mark Ludka, Diagnostic Radiology, Advanced Diagnostic Imaging, PC

Over the past few years, there has been growing interest in both the radiology literature and lay press regarding mammographic breast density and how it relates to breast carcinoma. Evidence shows Automated Whole Breast Screening Ultrasound (AWBUS) to be an important new tool for detecting early stage breast cancer in women with dense breasts and/or implants.

Screening and Detection

Screening mammography has a long track record of significantly reducing breast cancer mortality, and remains the most effective breast cancer screening exam available today. Despite the steady improvement in mammographic technology over the years, including the conversion to digital imaging and tomosynthesis, mammography is not a perfect screening exam. Breast imagers have long known the limitations that dense breast tissue places on detecting lesions mammographically.

More recently, there has been mounting evidence that dense breast tissue not only makes cancer harder to detect but is also associated with an increased risk of its development. Some studies have shown the risk of developing breast cancer to be increased by up to six-fold in women with extremely dense breasts. While overall mammographic sensitivity is often quoted at 85-90%, this percentage drops to 50% in women with extremely dense breasts.

There is now strong evidence that supplemental breast ultrasound screening performed on patients with dense breasts significantly increases sensitivity. AWBUS has been

The Covenant Breast Health Center is the first medical facility in Michigan to offer Automated Whole Breast Screening Ultrasound.

shown to double the cancer detection rate in dense-breasted women. It should also be noted that the mammographically occult cancers detected with a screening ultrasound tend to be smaller and more likely curable.

Availability and Coverage

The Covenant Breast Health Center now offers AWBUS as a supplemental screening exam for women with dense breasts and/or implants and is the first medical facility in Michigan to do so. The hospital's mammography reports now include a statement describing the patient's breast density level on a scale from 1 (fatty) to 4 (extremely dense). AWBUS is recommended, in conjunction with screening mammography, in patients with a breast density level of 3 or 4. Because AWBUS is a screening procedure like mammography, those women who have an abnormality detected will be called back for a more detailed, targeted ultrasound exam to determine the need for follow-up or biopsy. The call-back rate is typically around 10%, similar to the call-back rate for screening mammography.

AWBUS is cleared by the FDA as an additional screening examination in conjunction with screening mammography. The exam is billed using ICD-9 diagnosis code 793.82 (inconclusive mammography) and ultrasound CPT codes 76645 and 76999. Because it is considered supplementary, the level of insurance coverage varies and patients are advised to check with their insurance providers prior to the exam.

A Simple Procedure

AWBUS is a painless procedure using a standard ultrasound machine with the probe attached to an automated arm which scans each breast in vertical rows. There is no breast compression needed and the exam takes about 20 minutes to perform. Areas typically difficult or impossible to visualize mammographically – such as the axillary and deep inferomedial breast tissue – is included in the field of view which provides yet another benefit.

Please note that AWBUS is not a stand-alone procedure or a replacement for annual screening mammography. It is a supplemental exam that can be scheduled and performed at the same time, or following, the annual mammography. Furthermore, AWBUS is not intended for evaluation of specific breast signs or symptoms. That is done using diagnostic mammography and targeted (hand-held) breast ultrasound.

Ordering AWBUS

Please consider ordering AWBUS for patients with dense breasts. Electronic orders for AWBUS can be placed in Epic as AUTOMATED FULL BRST US SCRN or FULL BREAST US (synonym), or IMG6156 (see contact details below for assistance). Traditional hard copy scripts can also be written as either AWBUS Screen or FBU Screen.

For more information, contact Dr. Ludka at 989.799.5600 or mludka@aol.com. For assistance in adding the order to your Epic Preference list, call Jan Makl at 989.583.0464.

Next-Gen Clot Removal Device May Improve Outcomes of Severe Stroke Patients

Dr. Sanjay Talati
Radiology Section Chief / Chief of Neuroradiology

According to the American Stroke Association, strokes are the fourth leading cause of death and leading cause of adult disability in the United States, with one stroke occurring every 40 seconds and death every four minutes.

The goal of treatment is to prevent major loss of brain tissue and disability. Currently, the first line of defense is tissue plasminogen activator (t-PA), a clot-dissolving medicine. Aspirin or other antiplatelet medicines may also be administered. Quite often, these treatments achieve the goal.

In some cases, however, clots refuse to dissolve and remain a threat. If this occurs, the clot may be removed with a medical vacuum-extraction device to open major arteries and prevent further damage to brain tissue.

A new generation of blood clot removal devices, such as the 5MAX™ ACE, show excellent promise in revascularizing severe stroke patients. This particular device features a larger inner lumen and end-hole diameter, making it possible to quickly engage and aspirate the clot and if necessary, to remove the remaining clot in one piece by withdrawing the device under continuous suction.

While such devices can pose a high risk of bleeding and complications, they do provide a second line of defense when other options fail or are not feasible. In severe stroke cases, for example, IV medications may fail to open the occluded artery or patients may not meet criteria for clot-busting medications like t-PA due to the timing of symptoms, existing medical conditions or existing medications such as blood thinners.

The 5MAX ACE is yet another advancement in the overall treatment protocol that, based on industry evidence, is demonstrating positive outcomes in which patients recover and retain a good quality of life. As part of the overall continuum of stroke patient care, Covenant HealthCare has invested in the 5MAX ACE to selectively deal with severe cases such as those described above. The hospital offers a full line of stroke services with 24/7 neuroradiology coverage, as a part of comprehensive stroke team.

For more information, contact Dr. Talati at 989.583.6272 or stalati@adirads.com.

New Hospital-Acquired Pressure Ulcer (HAPU) Intervention Program Results Pays Off

GUEST AUTHORS
Chris Musser, BSN, CWOCN, Vanessa Burrows, BSN, CWCN, and Renee Bootz, MSN, CWOCN

Launched in March, a new Hospital-Acquired Pressure Ulcer (HAPU) Intervention Program at Covenant HealthCare is reducing the incidence of pressure ulcers through more focused education, teamwork and engagement. It is being rolled out by unit and features several process improvements that are already delivering results (see Figure 1).

Kicking Off the Effort

HAPUs can occur quickly despite best efforts to prevent them. To investigate opportunities for improvement, a multidisciplinary Pressure Ulcer (PU) Committee comprised of staff and leadership was formed. The team held staff meetings to not only discuss and share information about reducing PU incidents and progression, but to also:

- Clarify current knowledge levels.
- Teach new techniques and approaches.
- Identify and remove barriers to proper skin assessment, skin care and PU prevention.
- Identify needs for documentation and follow-up.

These meetings were not directive but rather interactive, as the PU Committee wanted on-the-ground staff input about the current situation and ideas for solutions. As such, it identified several areas of variation in PU treatment, including:

- Protein supplement administration
- Education for managers, educators and staff
- Surface products (beds, mattress, overlays)
- Protective and prevention supplies
- Moisture/shear (briefs and pads)
- Repositioning patient with prevention devices
- Ambulating patient

With this information in hand, a PU Process Improvement (PUPI) implementation team was chartered to pilot a new process and deliver results.

Piloting the Process

The PUPI team selected three key areas of improvement for piloting the HAPU Intervention Program at the Harrison ICU (HICU) and the Cooper Surgical ICU (SICU):

- Protein supplement administration
- Education of managers, educators and staff
- Surface products (beds, mattress, overlays)

In addition, it implemented several PU process improvements. For example:

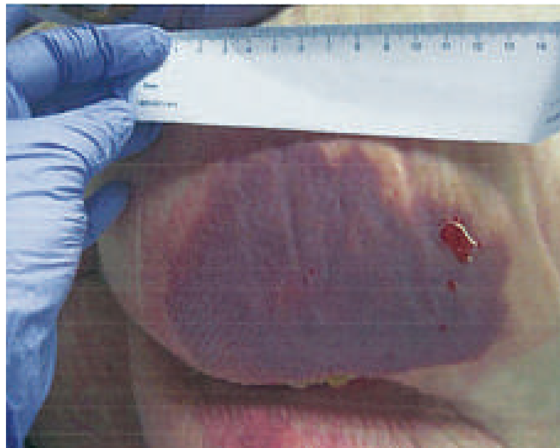
- A Wound, Ostomy and Continence (WOC) nurse identifies at-risk patients.
- Weekly skin rounds are scheduled for at-risk patients and attended by the RNs, NCAs, the WOC nurse and managers of both shifts to improve understanding, real-time learning and hand-offs.
- Together, the team performs a thorough head-to-toe patient assessment and Plan of Care.
- Staff provides a more thorough documentation of skin conditions and progress.
- Weekly (1-2 times) safety huddles with the WOC nurse included education and open discussions about PU, including risk factors, Braden scores and preventive measures.

FIGURE 1

HAPU INTERVENTION PROGRAM, HICU RESULTS

INTERVENTION	INCIDENTS
BEFORE	
December 2013	7
January 2014	3
February 2014	2
AFTER	
March 2014	0
April 2014	1
May 2014	0

When the HICU piloted the Hospital-Acquired Pressure Ulcer (HAPU) Intervention Program, PU incidents declined from 12 in December through February to just one in March through May, with zero incidents achieved in two of those months – proving that zero is achievable.



Concerns about pressure ulcers are growing nationwide, especially given the growing number of elderly, immobile patients. While a number of factors can impact the success of intervention, achieving a goal of zero can indeed be achieved with the right tools and teamwork.

Promising Results

As shown in Figure 1, after three months of piloting the HAPU Intervention Program in the HICU from March-May, pressure ulcer incidents fell to zero by May.

While change can be difficult, the staff is taking pride in delivering improved patient outcomes, and is becoming increasingly empowered to sustain the gains. In fact, after the pilot phase, WOC nurse involvement will be decreased and replaced by a "Unit PU Champion" to continue the momentum and also to report back results to the PUPI team.

Going Forward

In July, skin rounds were started in the Neuro/Trauma ICU in addition to the first non-critical care units: Cooper 5 East and Harrison 3 South. The PUPI team is creating an implementation schedule for other units too.

In addition, more consistent measurement criteria is being developed to compare pre- and post-intervention on each unit. Measures will include PU incidence, progression and staff confidence. While a number of factors can impact performance, achieving a goal of zero HAPU incidents is proven to be feasible, thanks to the dedicated efforts of a committed team.

> "I absolutely LOVE and enjoy rounding with the night people, WOC nurse, and manager. *Getting involved as a team* makes all the difference."
>
> – Unit Staff Member

Taking Off the Tatt!
High Success Rates with Newer Laser Technology

John Germain, Director of Surgical Services

In the movie Hangover II, Stu the dentist wakes up to a surprise tattoo on his face just like Mike Tyson's after a heavy night of partying. While all tattoos are not instant regrets, about 50% of the tattooed population opt to get them removed. What was "cool" yesterday no longer fits into their current lifestyle.

Laser Technology to the Rescue

Fortunately, tattoos don't need to be forever. Q-switched laser technology now offers the opportunity to have that irksome tattoo removed, safely, quickly, effectively, and with a very low risk of scarring and infection. It delivers laser energy in nanosecond pulses deep into the skin, selectively targeting and shattering the ink into tiny particles that can be absorbed by the body and flushed out naturally – all without damaging the surrounding skin.

Q-switched laser technology is:

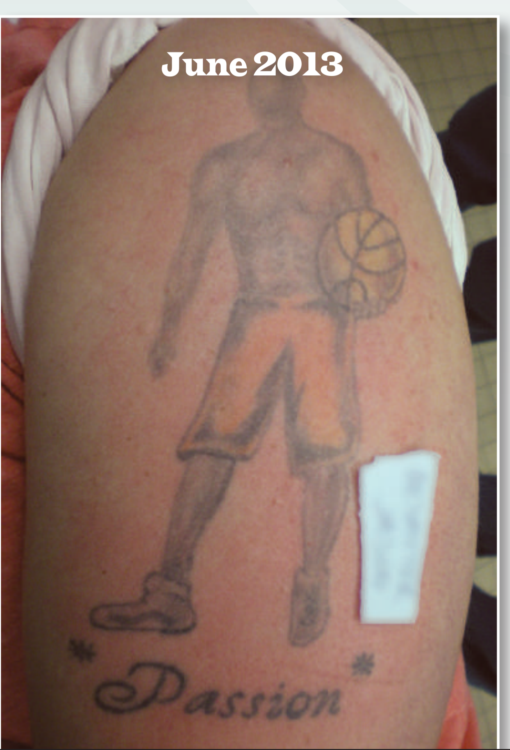
- Less invasive than other techniques like dermabrasion, trichloroacetic acid treatments, fading creams, salabrasion, cryosurgery and excision.
- More targeted, faster and effective than other methods.
- Very flexible, enabling technicians to treat whole or partial tattoos.
- Considered the gold standard.
- FDA approved.

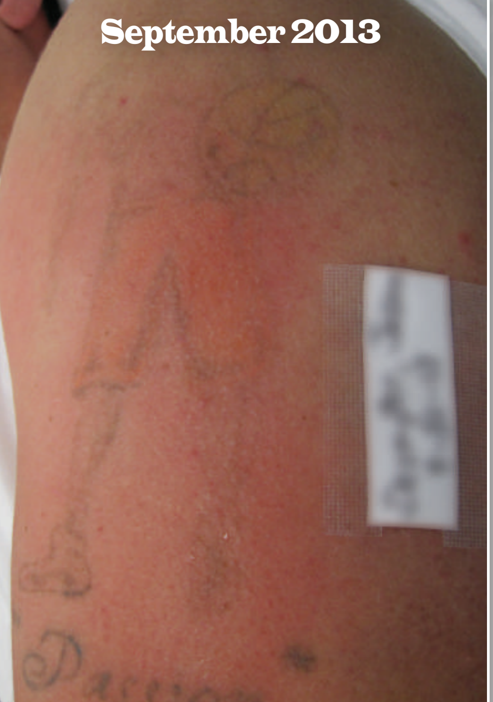
That said, laser technology isn't painless or perfect either. Nor is it always cheap. A few facts:

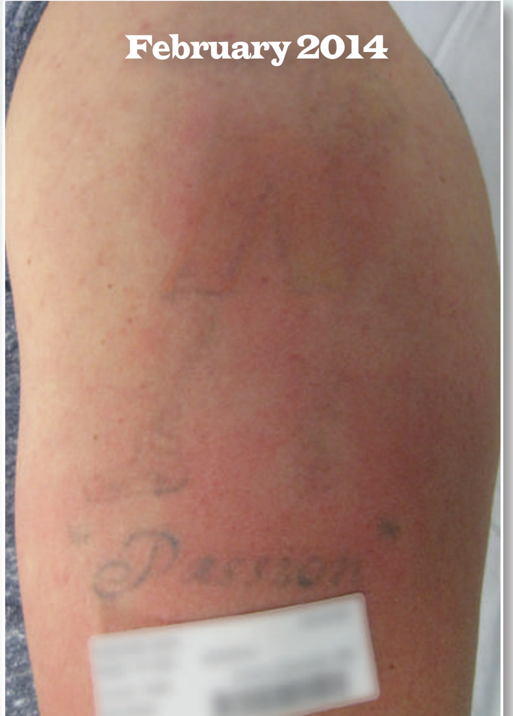
- It's nearly as painful to remove tattoos with a laser as it is to ink them.
- Repeat visits are necessary, but each removal session is typically completed in short, five-minute sessions over a period of 4-8 weeks. Results become evident in just a few sessions.
- A number of variables impact success, including the age, size, type, complexity, color, ink and location of the tattoo itself, in addition to skin type and the patient's health.
- The inks used today are more durable and harder to move, especially colored inks.
- Some residual scarring is still possible, particularly on areas with low body fat.
- While temporary blistering can occur from the laser heat, side effects overall are mild.
- The procedure is considered cosmetic and therefore usually not covered by insurance. Costs can range from hundreds to thousands of dollars depending on the tattoo.

Treatment Success

Due to the many variables, complete fading of tattoos can't be fully guaranteed. With Q-switched laser technology, however, significant success is usually achieved to the point where it's hard to tell a tattoo was even there.







Meanwhile, technology keeps improving. Newer "duality" Q-switched lasers, for example, are faster and more versatile, producing two wavelengths of light in ultra-short pulses (6,000 picoseconds) to better treat all colors of ink – from black, brown and blue to red, purple, orange, green and yellow. Furthermore, the square beam allows for little overlap during treatment, increasing efficiency and comfort.

Tattoo Removal Clinics on the Rise

With an estimated 40 million people who have tattoos and a growing number with regrets, it's no surprise to see the rise of tattoo removal clinics – especially given the successful outcomes of laser technology.

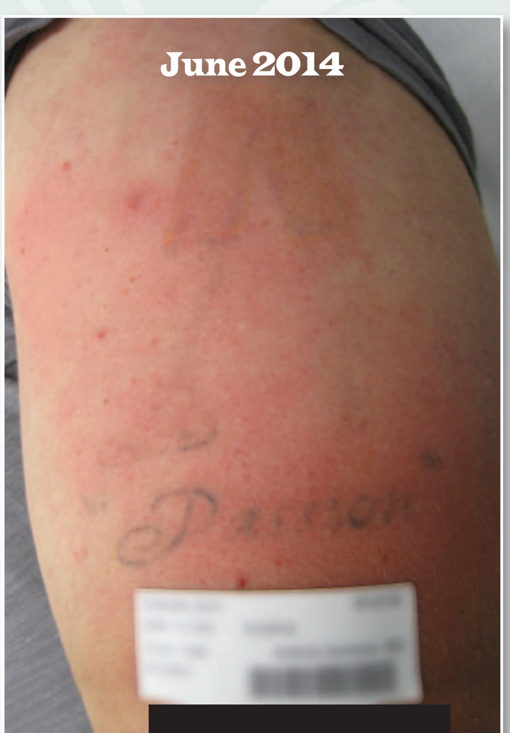
Covenant HealthCare, which opened a Tattoo Removal Center in late 2013, has three trained technicians to operate the Astanza Duality Nd:YAG laser. After a personal consultation, specialists perform the procedure in a medical setting at Covenant Medical Center Cooper to ensure an even higher standard of sterility and care. This location also enables them to seek the direction of a physician for areas of concern – such as tattoos that have moles or lesions, or for especially challenging tattoos. Patients can call **1.866. COVENANT** (268.3626) to discuss overall services.

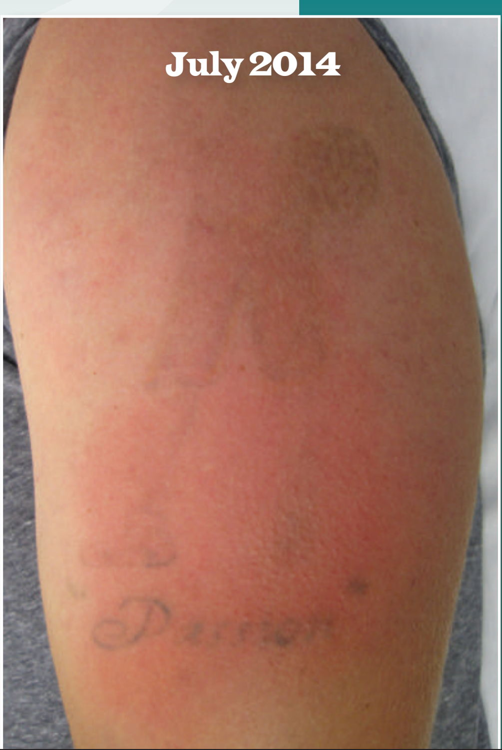
For more information, contact John Germain at 989.583.4674 or jgermain@chs-mi.com.

Q-switched laser technology now offers the opportunity to have that irksome tattoo removed, safely, quickly, effectively, and with a very low risk of scarring and infection.

"When we were 18, my twin brother, Josh, and I got matching tattoos on our arms of a guy holding a basketball. That was before I had kids and started a career. Later, my kids began asking me about the tattoo, I started worrying about what people thought, and my coworkers kind of hassled me. So when I heard about the laser treatments at Covenant HealthCare, I decided to give it a try. While it was painful at times, the treatments were short and now most of the tattoo is gone and my skin looks good. Josh had the same procedure done where he lives in Washington, DC, with similar results. For people thinking about getting a tattoo, though, I'd say think about the future before you get inked to begin with."

– Jason DeSmyter





A Progressive Approch to Patient Care

Family Team Care Model™ Improves Productivity and Satisfaction

Dr. John Kosanovich, CEO, Covenant Medical Group

Most physician's offices operate with a trifecta of key resources: physicians, nurses, and support staff. Together, they are focused on one objective: providing patients with the best care possible, efficiently and effectively.

In today's world, though, that's becoming more difficult. The dynamics surrounding insurance, reimbursement, regulations and escalating costs have required many physicians to see more patients in less time and work more hours just to stay profitable. This, of course, can cause a domino effect of growing frustration and shrinking satisfaction for everyone in the office – including patients.

Solutions like electronic medical records (EMR) and the Patient Centered Medical Home are helping to improve the efficiency and quality of care. But you might be interested in another proven approach that is adding value to physician's offices across the nation: the Family Team Care Model™.

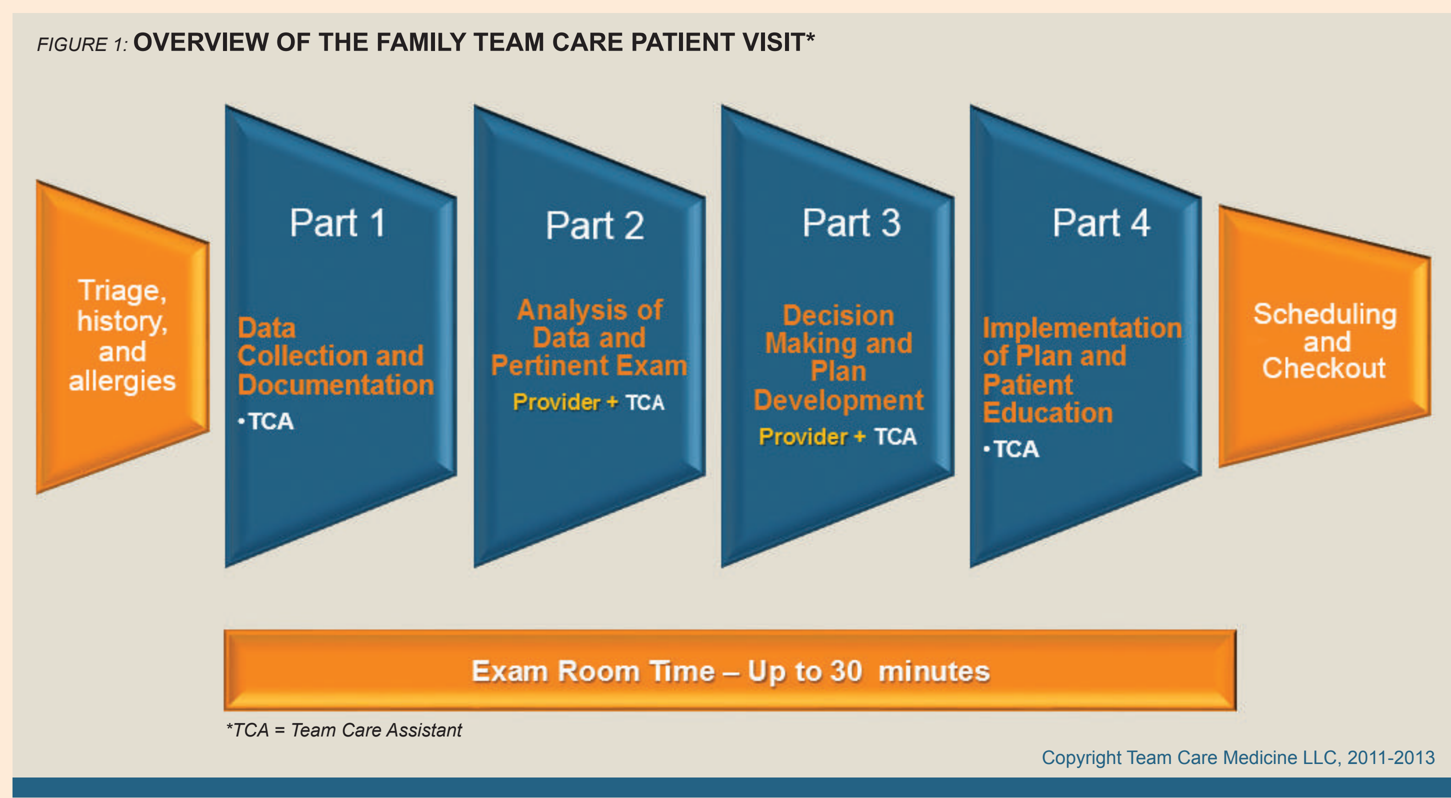
Working at the Top of Your License

Developed by Peter Anderson, MD, as a solution to challenges in his own practice, the Family Team Care Model encourages office staff to work at the top of their license, also known as "highest and best use staffing."

In most offices, that doesn't happen. Physicians handle the majority of four activities during the patient visit: data gathering, analysis and exam, treatment planning, and treatment implementation and education. While applaudable, it's just too much to handle in 15 minutes as it leads to the problems described above.

Family Team Care takes everything to the next level, saving even more time while further improving the quality of care.

FIGURE 1: **OVERVIEW OF THE FAMILY TEAM CARE PATIENT VISIT***



*TCA = Team Care Assistant

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Family Team Care addresses that issue by spreading those responsibilities, optimizing time and skills. It is centered on delegating lesser but important tasks to other qualified individuals in the practice while elevating the nurse's responsibilities. As a result:

- Physicians do what they are trained to do, delegating all lesser tasks to others.
- Clinical staff members – also called Team Care Assistants (TCAs) – do what they are trained to do, also delegating as appropriate.

Achieving Success

Key elements of success in the Family Team Care model include:

- **A five-step training program** by Family Team Care coaches, who will help map the flow of patient care and delegation of authority, and help the team adapt to change. This occurs in conference rooms and the actual office/exam room setting.
- **Close interaction between a physician and one or ideally, two well-trained clinical assistants** (RN, LPN or MA) capable of performing time-consuming tasks, such as:
  - – Collecting and documenting the patient's medical history and other data.
  - – Documenting the visit into the EMR using protocols and templates.
  - – Reviewing and implementing the treatment plan.
  - – Providing patient education.
- **Three to five exam rooms**, enabling the physician to leave one exam room and immediately visit the next exam room where patient information has already been gathered.
- **Fast implementation, within one month**, starting with a few patients each day then adding more until all patients can be served using this approach.

Continued on page 11

How Team Care Improves Care

Dr. Vicki Chessin

In June, all physicians at the Gratiot Family Practice in Alma implemented the Family Team Care Model. Dr. Vicki Chessin describes, in her own words, the benefits she has personally experienced to date.

To stay successful while delivering quality care, Gratiot Family Practice has been pretty aggressive about implementing tools like EMR. But while EMR is critical, it puts an incredible burden on providers who need to document each visit. To remedy that, we experimented with a scribe and found it saved time and allowed me to see more patients, but we were not staffed for that.

Family Team Care takes everything to the next level, saving even more time while further improving the quality of care. Now I can hand over most of the pre- and post-exam work to the Team Care Assistant (TCA) in terms of patient documentation and education. The time savings are huge: before, I was always running an hour late by mid-morning, rarely had lunch, and was doing charts until 8-9 pm. Now I get lunch and charts are closed by 6:30 pm.

As a result, I've been able to add a few more patients and because the computer no longer comes between me and my patient, interactions feel more meaningful. In fact, overall staff and physician time spent with the patient has increased while wait time has dropped by at least 70%. And while my personal time with each patient has decreased a little, it focuses on the patient and is more than made up by their time with the TCA. Most patients are thrilled about this and the higher level of focus on them.

Importantly, the model gives us the mechanism to be more consistent at implementing all the new pieces to Patient Centered Medical Care, such as goal setting and My Chart participation, while addressing adult immunizations and prevention. Responsibilities are shared with the TCA, which takes the load off any one person having to remember everything.

The staff loves it. It took a few weeks for everyone to get used to the added responsibility but now, they can't believe how fast the day goes. They are much more involved and proactive with the medical side of patient care, not just the mechanical side of checking patients in and out. Teamwork has also improved as everyone better understands the role they play in both patient and office success. We are all taking more pride in the overall delivery of care.

The official Family Team Care training was invaluable, as it oriented us to new roles and a new way of thinking. Plus, it provided the TCAs with a set of skills they were not initially taught in traditional MA and LPN training, not only documenting patient histories and exams, but eliciting and presenting the medical story. It enables all of us to not only operate at the top of our license, but to learn new approaches more in line with the realities of modern health care.

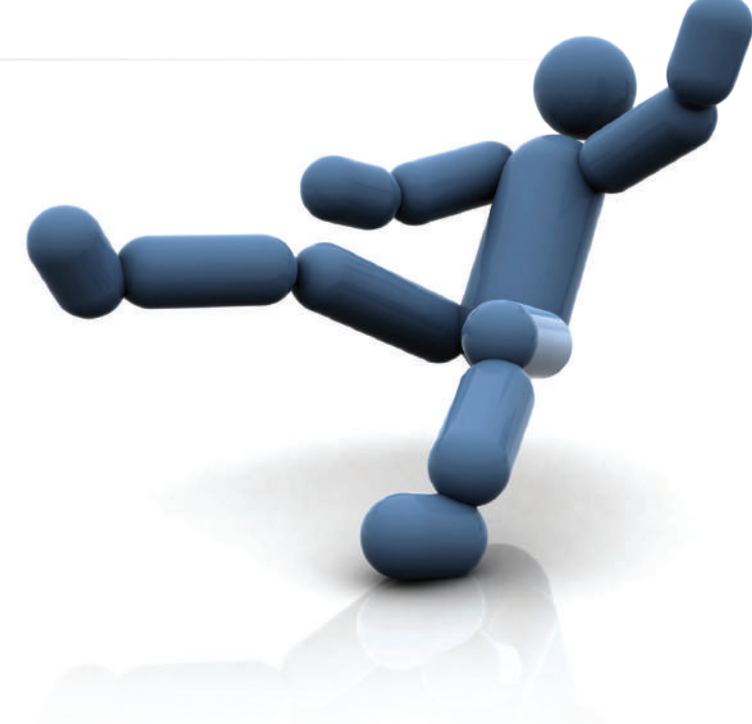
Family Team Care is proving to be everything it should be. Going forward, I advocate its continued use and an even more robust training program to address long-term staffing needs as the inevitable changes in staffing occur.

I am so grateful to Covenant HealthCare for their foresight and commitment to Team Care. The cost to staffing up and investing in our training cannot be small, but clearly will pay dividends not only in adding patient numbers to my day but in increased satisfaction for myself, my staff and my patients.

Don't Let Patients Take the Fall

Vestibular Rehabilitation Therapy Proven to Help Restore Balance

GUEST AUTHOR
Crystal Parker, Level II Physical Therapist



Vestibular dysfunction is a prominent cause of balance problems and a significant source of morbidity. When vestibular signals about equilibrium and motion are interrupted, patients can experience dizziness, vertigo, lightheadedness, room spinning and frequent falls. Fear of falling may result in self-imposed activity restrictions which in turn can further decrease strength, increasing the risk of falls.

With the right kind of treatment – including Vestibular Rehabilitation Therapy (VRT) – patients don't need to take the fall and can, in fact, regain their quality of life.

Vestibular Disorders 101

Vestibular disorders can result from disease and injury, and be worsened by genetic and environmental conditions. It is generally agreed that such disorders occur frequently and can affect people of any age, primarily the elderly. Of all falls suffered by the elderly in the United States, 50% are reported to be the result of vestibular dysfunction.

The most commonly diagnosed vestibular disorders include:

- Benign paroxysmal positional vertigo (BPPV) – an estimated 50% of cases
- Labyrinthitis or vestibular neuritis
- Ménière's disease
- Secondary endolymphatic hydrops
- Perilymph fistula

Other causes include superior canal dehiscence, acoustic neuroma, ototoxicity, enlarged vestibular aqueduct, and mal de débarquement. Problems with balance can also be associated with migraines, autoimmune disorders, allergies and injuries to the lower back and spine.

Of all falls suffered by the elderly in the United States,

50%

are reported to be the result of vestibular dysfunction.

The Value of VRT

In some cases, vestibular disorder symptoms may self-resolve in a few weeks. If not and depending on the cause, treatment can range from medication management and dietary adjustments to various forms of surgery. It's important, however, to also prescribe VRT which uses a combination of exercises and maneuvers to restore balance and mobility.

VRT is a scientifically based and clinically valid approach to treatment. Medical evidence demonstrates that the vestibulus can be strengthened with the right exercise, just like a muscle. The goal is to retrain the brain to process signals from the vestibular system in conjunction with input from the eyes (vision) and touch sensors in the feet, trunk and spine (proprioception). When patients adhere to the VRT program, results can be seen within a month with notable long-term improvements achieved in 80-90% of patients. Quite often, no other treatment is needed.

Without VRT, the ability to maintain posture and balance may overly depend on vision and proprioception. Furthermore, the patient may compensate with unhealthy head and body movements which can worsen symptoms and cause other problems.

How VRT Works

At Covenant HealthCare, physical therapists (PTs) are trained in VRT at several sites, three of which also feature the NeuroCom® Balance Master® for enhanced and objective assessment of patient performance. The basic process is as follows:

- A PT performs a thorough evaluation that includes patient history and observance of posture, balance, gait, hand-eye coordination and compensatory strategy.
- An individualized treatment plan is developed both for the therapy setting and home.
- Sessions are scheduled once or twice a week where progress is monitored and validated with data provided by the Balance Master.

The Balance Master combines visual biofeedback with sensitive, real-time monitoring of movement to help patients restore their balance faster. Exercises can be tailored to meet patient needs at each stage of therapy. Key exercises include:

- Seated balance/strength training
- Standing balance/weight bearing training
- Mobility training
- Closed chair training

Getting Started

If a patient continues to experience vestibular dysfunction, physicians should consider adding VRT to the treatment plan. It is a clinically proven therapeutic modality for the treatment of vertigo-related symptoms and has the added benefit of preventing further injury due to falls and accidents. In addition, VRT is covered under insurance as physical therapy under "neuromuscular re-education."

For more information, contact Crystal Parker at 989.671.5740 or crystalmparker@chs-mi.com.

When patients adhere to the VRT program, results can be seen within a month with notable long-term improvements achieved in 80-90% of patients. *Quite often,* no other treatment is needed.

A Progressive Approach to Patient Care—continued from page 9

A Typical Scenario

In the Family Team Care Model, summarized in the visual on page 8, the physician and nurses work hand in hand, similar to a relay but with more interaction time. Imagine a scenario with one physician and two trained nurses.

- The visit begins when Nurse 1 meets with Patient 1 in Exam Room 1, gathering patient information and entering it into the EMR.
- Next, the physician reviews the patient's chart and enters the exam room, where the nurse summarizes the patient's condition in front of the patient. The physician talks to the patient, performs any necessary exam, and talks out loud while the nurse enters it into the EMR.
- The physician discusses the treatment plan with the patient, wraps up the visit, and goes to see Patient 2 in Exam Room 2 where the process is repeated with Nurse 2 who has already prepared the patient.
- Meanwhile, Nurse 1 is reviewing the treatment plan and education with Patient 1 and prints a summary of the visit.

Key Benefits

The Family Team Care Model is proving to enhance productivity, efficiency, satisfaction, quality of care and the financial performance of practices.
In addition:

- Nurses are more involved and engaged, staying for the entire visit.
- Physicians and nurses enter into stronger partnering relationships, strengthening mutual respect.
- Physicians can see more patients in a timely manner and within a normal work day.
- Patients receive 100% attention from a focused physician, plus get more attention from the nurse.
- Total interaction time with patients is longer and of a higher quality, consequently patient satisfaction increases too.

The Family Team Care Model is a new way of delivering health care and can be implemented in any physician's office. Currently, five physicians at Covenant HealthCare have implemented this model and more are expected to join the trend. See the testimonial on page 9 from Dr. Vicki Chessin for a first-hand account about the benefits of Family Team Care.

For more information, contact Dr. Kosanovich at 989.583.6047 (jkosanovich@chs-mi.com) or David Nall at 989.583.7611 (dnall@chs-mi.com).

Improving *The Covenant Chart*

Dr. Sara Rivette, Covenant HealthCare Chief of Staff and
Dr. Michael Schultz, Vice President of Medical Affairs

Thanks to everyone who participated in the recent readership survey for *The Covenant Chart*, which asked for input on the value of this publication and how to make it a better tool. We received a total of 34 responses from various physicians and midlevel providers, along with some great insights.

Below are the survey results, which overwhelmingly support the value of this publication to the medical community. Accolades go to the many contributors to date for making it a success.

Going forward and based on survey feedback, we will make the following improvements:

- Invite providers such as nurse practitioners (NPs) and physician assistants (PAs) to author or co-author articles, and include them on the email distribution list.
- Strive to focus on topics of greater interest to all of you (see #3 below).
- Continue to send *The Covenant Chart* by email and print on a quarterly basis.

If you are interested in getting published or want to subscribe to this publication, please see the contact information below for direction and assistance.

To publish an article, contact:

- Jaime TerBush, Physician Liaison
  989.583.4051 (office), 989.395.3480 (mobile) or
  jaimeterbush@chs-mi.com.
- Karen Schafer, Director of Physician Services
  989.583.4045 or
  kschafer@chs-mi.com

To subscribe to the print or electronic version of *The Covenant Chart*, or to switch formats, contact:

- Maryvonne DeSmyter
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We will use the email on file with Medical Staff Services. To update/change or review this email, please contact Patti Roesner at 989.583.6595 or proesner@chs-mi.com.

THE COVENANT Chart 5 MINUTE SURVEY
Summary of Results

1. Do you read *The Covenant Chart*? 21 Yes 11 No 2 Occasionally

2. *The Covenant Chart* provides information of value: 33 Agree 1 Does not apply 0 Disagree

3. Please indicate your top 5 topics of interest (ranked by preference):

1. Disease updates, trends and alerts
2. New medical technologies and treatments
3. Quality and safety initiatives
4. Electronic Medical Records/tools updates
5. Improving physician leadership skills
6. Improving physician clinical skills
7. Health care reform/population health management
8. Improving patient satisfaction/outcomes
9. New Covenant HealthCare services/initiatives
10. HIPPA and other regulatory updates
11. Nursing staff updates
12. Insurance coverage news/trends
13. CMU residency program
14. Covenant HealthCare performance/ certifications/awards

Other: Wound management and basic standards of care

4. I prefer the following format: 25 Electronic pdf sent by email 8 Printed format sent by U.S. mail 1 No comment

5. I prefer the following frequency and length:
22 Quarterly (the current approach)
11 Monthly
1 No comment

6. Do you have other ideas or suggestions for *The Covenant Chart*?*

– I like it the way it is. Thanks for all your hard work.
– Include midlevel providers in the distribution.
– Allow NPs and PAs to author and coauthor.

*Comments edited for brevity.

Achieving the Best of Both Worlds

Higher Quality Imaging and Lower Dose Radiation

GUEST AUTHORS
Dr. Sanjay Talati, Radiology Section Chief / Chief of Neuroradiology and Andy Houthoofd, Computed Tomography (CT) Technologist

Low-dose imaging technologies continue to advance to the point where faster, crisper images can be achieved without the typical tradeoff of higher radiation. In addition, new software has the capability to extract the density of certain materials from the image (e.g. calcium, uric acid and iodine) aiding in diagnosis and treatment.

The LightSpeed CT750 HD from GE Healthcare is a case in point. It features a crushed-garnet detector system that enables 100 times faster detector recovery time, in turn allowing dual energy from a single energy source at the same body location. This provides up to 33% greater detail for the body and up to 47% greater detail in the heart.

It has the versatility of three key settings:

- Standard, high-definition and dual energy:

1 STANDARD SCANNING

Standard scanning is selected when soft tissue structures are being evaluated (since high-definition can impair soft-tissue visualization).

2 HIGH-DEFINITION SCANNING

High-definition scanning is particularly valuable for vascular imaging as it reduces calcium blooming artifacts (plaque) and can accurately measure 75% stenosis on a 3mm vessel within 100 microns.

3 DUAL ENERGY

Dual energy offers 128 slices of unique data per rotation at two energy levels, and 101 user selectable energy levels for viewing. This is used when contrast is needed for treatment decisions.

With this technology, dyes can be injected, images taken and results reviewed. The software recognizes the densities of various minerals, all without re-exposing the patient. Application opportunities are enormous. The composition of kidney stones, for example, can be evaluated to confirm whether a lithotripsy or basket extraction is the best treatment. Similarly, a diagnosis of gout versus osteomyelitis can be made when uric acid is extracted from the image – if nothing changes, it is osteomyelitis.

Other exams that will benefit from the increased detail and radiation reduction are:

- All pediatric exams
- CT urography
- CT colonography
- All oncology exams requiring with and without IV contrast
- CT cardiac and CT angiography (CTA) exams

Covenant HealthCare has purchased two LightSpeed HD Scanners and is in the process of establishing protocols and validating applications. As part of its low-dose thrust, it is also upgrading a 64-slice scanner to a 128-slice scanner in the ECC to provide equal or higher definition at a 40% lower dose.

For more information, please contact Andy Houthoofd at 989.583.6257 (ahouthoofd@chs-mi.com).

Reducing Transfusions in Trauma Patients

Thromboelastogram (TEG) Provides Goal-Directed Decisions

Dr. Sujal Patel, Trauma Medical Director

About 25-35% of seriously injured trauma patients are coagulopathic upon arrival to varying degrees, increasing morbidity. One U.S. study estimates that 40% of trauma fatalities are due to hemorrhage and hemorrhagic shock, and nearly all trauma patients are coagulopathic when they die. Early diagnosis and intervention is clearly important to reducing morbidity and mortality.

The Growth of TEG

Tests that determine the efficiency of blood coagulation are critical to treatment decisions. While standard plasma-based tests such as the International Normalized Ratio (INR), prothrombin time (PT) and partial thromboplastin time (PTT) provide important measures of the coagulation factor function, they do not assess platelet function.

The thromboelastogram (TEG) analyzer helps complete the coagulation picture by showing the interaction of platelets with coagulation. A platelet-mapping assay helps assess platelet function, clot strength and fibrinolysis. Common in the transplant and cardiovascular surgery arena and anesthesiology, TEG is now growing in popularity in the trauma world too as it detects early changes in the coagulation of trauma patients. This capability enables the trauma team to make targeted, goal-directed decisions in the management of transfusion strategy and resuscitation. **With TEG, patient outcomes can be improved and the number of transfusions can be reduced – which in turn reduces patient risk and costs.**

Ordering and Reading a TEG

When a patient enters the hospital with trauma, an initial TEG test may be ordered in the emergency department, but it is not ED-driven. TEGs are also ordered in the OR and ICU where trauma patients spend most of their time. Depending on the need and urgency, two types of TEG may be ordered:

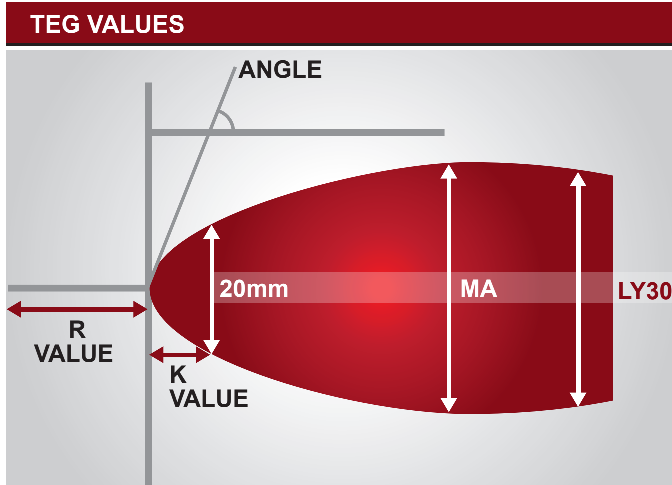
1. Regular TEG, which provides platelet mapping to see how platelets are interacting with coagulation.
2. Rapid TEG is ordered when you need results quickly, for example – when treating a Level 1 hemodynamically unstable patient. It gives a real-time look at the blood clotting reaction time, and how long it takes to form a clot.

As shown in the visual (see Figure 1), several values are used to represent clot formation, including:

- **R value** – time until the first evidence of a clot.
- **K value** – time from the end of R until the clot reaches 20mm, which represents speed of clot formation.
- **The angle** – tangent of the curve made as the K is reached; similar information as the K.

FIGURE 1

TEG VALUES



A representative signature waveform of a normal TEG tracing

- **Maximum Amplitude (MA)** – a mathematical formula that reflects clot strength.
- **A30 or LY30** – amplitude at 30 minutes; percent decrease in amplitude at 30 minutes post-MA gives a measure of the degree of fibrinolysis.

TEG-Driven Decisions

Interpreting TEG data can drive treatment decisions. For example:

- Increased R time indicates the need for Fresh Frozen Plasma (FFP). Note that Coumadin patients would have increased R values.
- Lower R time indicates the need for anticoagulants.
- Lower K and or reduced angles indicate the need for cryoprecipitate in place of plasma.
- Decreased MA indicates the need for platelets to increase platelet adhesion to the vessel wall (desmopressin).
- Elevated LY 30% -- indicates secondary fibrinolysis due to excessive clot breakdown and severe bleeding, in which antifibrinolytics should be considered.

Covenant HealthCare is increasingly using TEG for trauma patients, finding that it significantly reduces the number of transfusions while improving patient outcomes. It provides a snapshot of the patient's condition at the time the test is performed, and should be repeated as warranted clinically.

For more information, contact Dr. Patel at 989.790.4855 or espnmd@att.net.

Open-Ended Feedback Comments
Part 1

Dr. Michael Schultz, Vice President of Medical Affairs

In the last physician and PA/NP engagement survey, we solicited open-ended feedback and thanked everyone for their candor about what is working and what is not. We take all of this feedback seriously and are preparing responses to stated areas of improvement – please look to the upcoming December issue of *The Covenant Chart* for a report. At the same time, we are doing many things right and want to share some of the many positive comments received from all of you. Please see below for representative comments grouped by theme:

PATIENT CARE

- Excellent hospital for patient care and allows me a good opportunity to provide the care my patients need!
- Covenant is a regional leader in providing comprehensive health care.

CULTURE/TEAM

- I thoroughly enjoy my work and interactions with the supporting staff at Covenant HealthCare.
- I am a proud member of the Covenant team and never hesitate to say so.
- The physician lounge update is appreciated.

INITIATIVES

- Epic: I feel Covenant still has and continues to balance … that continued eye-to-eye contact and the personal touch still needed in the sometimes too high-speed society in which medicine still should have time for one-on-one.
- The decision to move forward with HRO is welcomed.

OPERATIONS

- I think you're doing a great job. I would have no idea how to run a hospital as well as you all are doing.
- I am very pleased with my supervision, impressed with the benefits and grateful to work for Covenant HealthCare. I love the work.
- Overall, I am pleased with the health culture at Covenant.

STAFF

- I am impressed by the nursing staff – almost without exception they "appear" at the bedside when I am doing rounds.
- I have worked with some outstanding nurses throughout my tenure with Covenant. From the nurses I've been fortunate enough to meet in my current position, I could assemble a true "Dream Team" that could be surpassed by no other.
- I thoroughly enjoy my work and interactions with the supporting staff at Covenant HealthCare.
- Staff is very professional.

Despite these accolades, we are not willing to rest on our laurels knowing there are issues needing attention. Our goal is to assess and address areas for improvement in a way that not only delivers extraordinary care to our patients, but also an extraordinary work environment to our people.

For more information, contact Dr. Schultz at 989.583.4103 or mschultz@chs-mi.com.

Extraordinary care for every generation.

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Bedside Manner and Patient Recovery— continued from page 1

- Ensure the patient knows your name and title as well as your role and the purpose of the consultation.
- Get down to the patient's level instead of standing over them.
- Ask questions, listen carefully and where appropriate, use humor.
- Include the patient as much as possible. In going through their records, for example, give them a running commentary of what you see.

The following quote is from an article in the 1892 Journal of the American Medical Association: "The true basis of the good bedside manner is a large heart. Some expansiveness of the intellect is undoubtedly an advantage but a humane and sympathizing nature outweighs all other qualities."

That's a message to live by, and one that is proven to impact patient health.

Sincerely,

Dr. Sara Rivette, Chief of Staff