CIAS

Complete Intravenous Access Services, Inc.

Celebrating our 20th Year of professional IV Service

THE VEIN℠
OCTOBER 2014

Venous Education & IV newsletter

Welcome to our first edition of The VEIN!

About Us

Complete Intravenous Access Services, Inc. (CIAS) was formed in 1994 by nursing professionals dedicated to providing a higher level of IV insertions service to nursing home patients. With health costs rising every year, CIAS has been able to provide alternative solutions to the industry at very competitive prices. We employ highly skilled IV nurse specialists with IV team experience to set an unparalleled standard of excellence in the IV insertion and specialty nursing field.

IV Services

- PICC insertion-Ultrasound
- Midline
- Peripheral
- Cathflo/De-Clotting
- 24/7 live dispatch
- 4 hr response time
- No line – No pay guarantee

IV Education

- CADD/PCA pumps
- Routine Line Care course
- Basic IV review course
- Basic IV Cert course-PA
- Policy & Procedure manual

The RAVEN Project

to Reduce Avoidable Hospital Admissions from the Skilled Nursing Home

The RAVEN project in nursing homes represents a powerful new tool to examine, monitor and care for patients with acute changes in condition or palliative needs assessments. This technology coupled with evidence-based assessment protocols can improve access to high-quality care and prevent ED visits and hospitalizations.
We thank Steven M. Handler, MD, PhD, CMD & The RAVEN Medical Director for Telemedicine. Dr. Handler can be reached at his email address: <handlersm@upmc.edu>

Potentially Avoidable Hospitalizations (PAHs)

- PAHs are defined as hospitalizations that could have been avoided because the condition could have been prevented or treated outside of an inpatient hospital setting.
- 26% percent of hospitalizations were considered PAHs
- Had an ALOS of 6.1 days and an estimated cost of $8 billion
- Five conditions were responsible for nearly 80% of PAHs (CHF, COPD/asthma, UTIs, pneumonia, and dehydration/AKI)

(continued on page 2)

Building Patient Rapport

"Knock! Knock!"
I enter the resident's room. Rolling beside me is a large, black, duffle bag. Inside, the bag is filled with all the apparati necessary to slice and slide a midline into the most delicious blood reservoir palpable or to be discovered by ultrasound.

With a friendly smile and brief introduction to the most likely confused and in the lowest-bed-to-the-ground-ever-created resident... I begin my soap box story about how and why I am going to take this harpoon 20g barbaric needle and stick them in the arm with it...

Needless to say, my rapport with this resident is off to a great start. Although our bedside time together will be relatively short, I feel it is necessary to establish a relationship to gain their trust, cooperation and produce a successful outcome.

A project I worked on, for my past employer, has bestowed upon me the confidence to walk into a complete strangers' room and perform the vascular task requested. I wanted to share with you some of those highlights:

(continued on page 4)

The RAVEN Project (continued from page 1)
to Reduce Avoidable Hospital Admissions from the Skilled Nursing Home

THE VEIN
OCTOBER 2014

What is the Complete List of PAH Diagnoses?

- Acute Renal Failure (AKI)
- Altered mental status
- Anemia
- Asthma
- C. Difficile Colitis
- Cellulitis
- CHF
- Constipation/Impaction
- COPD
- Diarrhea/Gastroenteritis
- Failure To Thrive (FTT)
- Falls and Trauma
- HTN
- Pneumonia/Bronchitis
- Nutritional deficiency
- Poor glycemic control
- Psychosis
- Seizures
- Skin Ulcers
- UTI

Skilled Nursing Facility (SNF) Admissions

- PAHs were much more likely for those beneficiaries who were in SNFs—16% of beneficiaries in the study population were in a NH, yet comprised 45% of all PAHs
- In FY 2011, SNFs transferred 25% of residents with Medicare to hospitals for admissions, costing $14.3 billion
- Medicare spent an average of $11,255 on each hospitalization, which was 33.2% above the average cost ($8,447) of a hospitalization paid for by Medicare

Office of the Inspector General (OIG). Medicare Nursing Home Resident Hospitalization Rates Merit Additional Monitoring, 2013.

Why is the SNF Hospitalization Rate High?

- Lack of/inaccurate advance care planning/goals of care
- Resident and family member preferences
- Lack of communication with ED/hospital
- Medicare payment policies and other economic factors
- Mismatch between NH clinical capabilities and goals of care
- Availability and training of nursing staff
- Physician availability and preferences

Office of the Inspector General. Medicare Nursing Home Resident Hospitalization Rates Merit Additional Monitoring, 2013.

CMS Innovation Award

- CMS awarded seven organizations to implement strategies to reduce PAHs for Medicare-Medicaid enrollees
- Reduce AVoidable hospitalizations using Evidence-based interventions for Nursing facilities in Western Pennsylvania (RAVEN)
- One of the core program elements was the provision of telemedicine to supportive after-hours (evening and weekend) assessments of residents that have an acute change in condition

Can Telemedicine Reduce PAHs and Generate Cost Savings?

- **Setting**: Eleven for-profit, chain SNFs in MA participated in a study where telemedicine was provided to cover urgent/emergent calls on weeknights (5-11PM) and weekends (10AM-7PM)
- **Outcomes**: Number of residents hospitalized and cost savings
- **Methods**: Quasi-experimental design, where physicians "signed over their after-hours coverage" to the study team
- **Results**: On avg. each facility generated 21.4 calls/mo.; rate of PAH decreased 5.3% in control group and 9.7% in intervention group; avg. savings to Medicare $151K/yr./SNF

Grabowski DC, O'Malley AJ. Health Aff (Millwood) 2014;33:244-50.

Our Approach to Telemedicine

1. Assess the current condition to better understand how consults are and should be placed to CRNPs/physicians
2. Select diagnostic medical equipment and software for acute change in condition and palliative needs assessments
3. Work with our institutional partners to design and build telemedicine carts and make necessary software changes
4. Test feasibility of technology (including formal study analytics), in advance of deployment to select non-owned facilities (e.g., RAVEN partner facilities)

Introducing Telly

- Telly the telemedicine cart is the newest member of the RAVEN "clinical team"
- Was developed in partnership with the UPMC Technology Development Center (TDC), Center for Connected Medicine, Information Services Division (ISD), and Community Provider Services (CPS)

Progress To Date

- Completed a feasibility study at UPMC Canterbury Place
- Developed and deployed telemedicine carts specifically designed for SNF use to all 19 of the RAVEN-partner facilities
- Trained over 260 bedside nurses at RAVEN-partner facilities
- Gone live in 16 of 19 RAVEN-partner facilities (since 5/14)
- Completed ~25 consultations (since 1/14)

continued in next issue of The VEIN

CIAS Quiz

Test your venous service knowledge (Answers on page 4)

1. If 1000 cc's of IV fluid is to infuse over 8 hours, how many cc's will infuse hourly:

   A. 80 cc
   B. 100cc
   C. 150 cc
   D. 125 cc

2. One liter of fluid is to infuse in 8 hours. The drop factor is 10 drops per ml. How many drops per minute will achieve this?

   A. 20 drops/minute
   B. 18 drops/minute
   C. 19 drops/minute
   D. 21 drops/minute

3. Which one of the following IV access devices requires Heplock 100 units/3 ml flush:

   A. IVAD
   B. PICC
   C. Peripheral short
   D. Midline

4. Which of the following is not a S/S of infiltration:

   A. Edema of surrounding tissue
   B. Cool Skin above site
   C. Warm Skin above site
   D. Sluggish/ stopped flow

5. Peripheral short catheter is appropriate for all of the following except:

   A. PPN
   B. 0.9% NS with 10 meq KCL
   C. D 51/2 NSS
   D. Rocephin 1gram IV x 3 days

6. Immediately after removing IV catheter it should be inspected for:

   A. Color
   B. Leakage
   C. Blood clots
   D. Breakage

7. Incompatibility is an undesired physical or chemical reaction between:

   A. A drug and an infusion solution
   B. A drug and tubing
   C. Two or more drugs
   D. All of the above

8. Nursing measures for a patient receiving PN include all of the following except:

   A. Daily weight
   B. Q4 hour blood sugar finger sticks
   C. I & O
   D. Hang 10% Dextrose at same rate if new PN bag not available

9. A central line is required for all of the following except:

   A. TNA
   B. With a PH <5 or >9 Infusates
   C. Rocephin 1gram qD x 14 days
   D. Vancomycin

10. The layer of skin contains blood vessels, hair follicles, sweat gland, small muscles and nerves is the:

    A. Dermis
    B. Epidermis
    C. Fascia
    D. Intima

ENTER TO WIN! If you share this quiz with your staff, then share their answers with us and we will have a drawing from those entered to win a pizza lunch for your staff... Have fun! 724.226.2003 fax

CIAS
Complete Intravenous Access Services, Inc.
828 Front Street
Creighton, PA 15030
RETURN SERVICE REQUESTED

THE VEIN
OCTOBER 2014

Venous Access Team (VAT)

In this and upcoming issues of The Vein, we`ll be introducing the highly-skilled members of our Venous Access Team (VAT). They are a part of a CIAS staff that includes 16 nurses, six dispatchers and six operation members.

My name is Charles Anthony, I am the Director of Marketing & Business Development. I am a graduate of PITT and since 1981 I`ve been in sales & marketing, most recently in Ultrasound and Digital X-ray.

I have one daughter, Molly. She graduated from Washington & Jefferson College in French & International Studies. Her first job was teaching English in Hong Kong last year and she just started teaching English at a high school in Grenoble, France.

Over the years, I`ve developed a keen interest in Costa Rica. My friend teaches there at a small remote school and I`ve helped provide them with clothes, food, a new dining room, field trips and whatever they need. I do my best to support them. Thanks to the Rotary Club, we are now constructing a new playground/community center. From a dirt field to these photos! If you ever want to visit Costa Rica, give me a call and I can help you arrange a nice trip!

Charles Anthony

Photos from Costa Rica

Flushing Protocols

A. Short Peripheral catheters
   1. Saline 5 cc flush before and after each intermittent use
   2. Saline 5 cc flush q 8 hours when not in use
B. Midline catheters
   1. Saline 10 cc flush before and after each use
   2. Saline 10 cc flush q 8 hours when not in use
C. Central Lines – PICC, Triple Lumen, Tunneled catheters
   1. Saline 10 cc flush before and after each intermittent use
   2. Saline 10 cc flush each port q 8 hours when not in use
D. IVADS/Ports (Implanted venous access devices)
   1. Saline 10 cc flush before each intermittent use
   2. Saline 10 cc flush followed by heparin lock solution 300 units of 100 u/ml after each intermittent use or q 12 hours when accessed but not in use
   - Non-coring needles must be routinely changed q 7 days
   - IVADs must be routinely accessed and flushed with saline 10 cc followed by heparin lock 300 units of 100 u/ml q month when not in use
E. Saline 20 cc flush after Blood Draw
F. All Groshong catheters are saline flush only

Answers (from Page 3)

1: D. 125 cc
2: D. 21 drops /minute
3: A. IVAD
4: C. Warm Skin above site
5: B. 0.9% NS with 10 meq KCL
6: D. Breakage
7: D. All of the above
8: B. Q4 hour blood sugar finger sticks
9: C. Rocephin 1gram qD x 14 days
10: A. Dermis

(continued from page 1)

- Remember to be a good listener
- Personalize your care
- Be a *Person* to them, not just an *Employee*
- Realize that every Resident has a healthy past
- Always ask if they have any questions or concerns
- Have a nonjudgmental attitude
- Use a sense of humor
- Make eye contact
- Be empathetic
- Explain your role to them so they know what to expect from you

Upon completion of our vascular services at the bedside, it is always good manners to thank the Resident for their time and cooperation and a gentle reminder that if they mischievously pull that line out...

...we'll be back...
... to do it all over again!!!

Safe travels,

Amy Galuska