5 Ideas

- Spinal Cord Stimulators & Peripheral Nerve Stimulators
- Multigen Radiofrequency
- Nitinol RF probes - unbreakable
- Vertebroplasty
- Physician involvement with ASC business model success

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5 Best New Ideas in Pain Management

Michael Papenfuse, DO, DABA, DABPM
Matrix Surgery Center
Saginaw, MI
What does this tell us??

- FOCUS on what you can control and what is still paying well

  Spinal Cord Stimulators
  Radiofrequency
  Vertebroplasty
Spinal Cord Stimulators & Peripheral Nerve Stimulators pay well.....

- Investigate your options with companies to partner with
- Get educated and know your choices you have with devices and cost
- Know your reimbursement

SCS Companies

- Medtronic
- St. Jude Medical (formerly ANS)
- Boston Scientific

Spinal Cord Stimulation and Peripheral Nerve Stimulation
SCS & PNS

- Since 2008 CMS has put the cost of the device into the CPT reimbursement
- 63685 or 64590 reimburse the same for the IPG for SCS or PNS: $12,311.90
- Device cost is critical for staying profitable

SCS & PNS

- Matrix Surgery Center is currently the only free standing non-hospital owned ASC in Michigan doing SCS/PNS and intrathecal pump implants and being profitable doing it!
- How do we do it? Medtronic made it happen
  - Device cost control
  - No shelf inventory costs
  - Billing department prior authorizations on all implants

Device Cost Control

- Pick one company
- Rep support is critical to success
- You know what your reimbursement costs are so negotiate your device costs based on Medicare reimbursement. If you do a BCBS or other private payor your margin will even be better!
- Know exactly what your IPG and lead costs are and educate your physicians
Device Cost Control

- Medtronic offers trial leads for the SCS/PNS trial which are 1/3-1/2 the cost of their permanent leads
- Only use the permanent leads for the implant
- Use the best technology (i.e. rechargeable IPG) but use the 1st generation product instead of the latest 2nd or 3rd generation.
- I use Medtronic's Restore IPG most of the time instead of their latest UltraRestore IPG. The cost difference is about 30-35% less.
- This is definitely physician education driven, but once they see they can provide the same level of care but at a substantial savings to the center you will have them on board.

SCS & PNS

- Conclusions
  - It is possible to be profitable doing both trials and implants
  - SCS Company support is critical to success including competitive device pricing to rep. support
  - Physician education on business model also critical to success

Radiofrequency procedures are profitable....

- How? Choices you make....
  - Companies you partner with
  - Equipment you choose
Radiofrequency Companies

- Stryker
- Neurotherm
- Baylis Medical Company
- Cosman Medical
- Covidien: Valleylab acquired Radionics

Multigen Radiofrequency

- Quicker procedure and turn around times
- Less time the patient has to lay prone
- Less radiation exposure due to taking less AP and Lateral images
- Save folders on machine so nurses don’t have to worry about preference cards
- Increase reimbursement through increased volume

Multigen Time Savings

Please enter your own values for the yellow cells

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<th>Time it takes for a typical RF with a single lesion generator</th>
<th>Stryker</th>
<th>40 Minutes</th>
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<tr>
<td>Time spent on RF in a month with a single lesion generator</td>
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<td>Time spent on RF in a month with the MultiGen</td>
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<td>Time saved in a month using the MultiGen</td>
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<tr>
<td>Additional RF neurotomies you could perform in a month using Stryker’s MultiGen*</td>
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Medicare AVERAGE for a typical four level lumbar RF neurotomy**

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<th>Hospital</th>
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Additional earnings per month using the MultiGen***

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<tr>
<td>$8,156.13</td>
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*This assumes you would take all the time saved from using the MultiGen and perform RF neurotomies with the MultiGen using that saved time.

**Please refer to the “2010 RF Reimbursement tab”, this takes into account the total amount received by both the facility and physician in one lump sum for each location.

***This takes the AVERAGE reimbursement for a typical four level lumbar RF neurotomy using the 2010 Medicare national average and times it by the number of additional procedures you could perform in a given month using Stryker’s MultiGen.
**TIME SAVINGS SINGLE LESION RF VS MULTI GEN RF**

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<th>CERVICAL RF 2008</th>
<th>CERVICAL RF 2010</th>
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**NEUROTHERM NT1000**

- Independent Control
  - Allows the MultiGen to offer stagger start, independent time and temp control, ability to restart a lesion if an error occurs while other electrodes are active, bipolar and monopolar at the same time, different gauge and active tip sizes at the same time and pulse an thermal at the same time.
  - No other company offers independent control.

**Baylis**

- Does not offer the ability to operate with different times and temps. In addition, Baylis must start all lesions at the same time. Different probes required to be used for straight and curved needles.

**Neurotherm**

- Must start all lesions at the same time, they must use the same size electrodes and they must start all electrodes at the same time. Only have 3 lesions and cannot do strip lesions for SI joint.

**Stagger Start**

- **Stryker**
  - Ability to start electrodes independently

- **Baylis**
  - All electrodes have to start at the same time

- **Neurotherm**
  - All electrodes have to start at the same time

**Display's all electrode impedances**

- **Stryker**
  - Displays each impedance individually on each electrode tab

- **Baylis**
  - Instead of displaying each electrodes impedance individually Baylis takes the average impedance of the electrodes being used and displays one average impedance value for all four electrodes

- **Neurotherm**
  - Displays each impedance value individually on each electrode tab

**Independent “timers”**

- **Stryker**
  - Each electrode begins to count down individually as it reaches the desired set temperature

- **Baylis**
  - Time is added to each electrode that doesn’t reach the set temperature

- **Neurotherm**
  - Once the first electrode reaches the desired set temperature the other electrodes begin counting down

**Independent “temperatures”**

- **Stryker**
  - Offers the capability of setting each electrode to a different temperature

- **Baylis**
  - All temperatures must be set to the same temp in order to create a lesion

- **Neurotherm**
  - Requires that all electrodes be set to the same temperature before lesioning

**Nitinol RF Probes**

- “Memory Wire” Probes
- Nickel Titanium
- Three companies currently make them:
  - Stryker - retail $2,100
  - Cosman Medical - retail $1,750
  - Neurotherm coming out later this year
  - Epimed - retail $1,750 - Epimed does not currently make an RF machine so they make adaptors for the probes to be used on the Neurotherm and Radionics machines.
- Virtually unbreakable
Nitinol RF Probes (Stryker)

Nitinol RF Probes
- Other RF probes made out of stainless steel and are very fragile
- Neurotherm may be coming out later this year with a nitinol probe
- Nitinol is 3X as strong as stainless steel
- In our own high volume RF practice we started using the nitinol probes in Jul. 07 and did not replace a probe until Oct. 09. We were replacing the stainless steel probes every 3-4 months.
- Stainless steel probes are about half the price

Stryker Nitinol Probe Testing
- Tested 550 autoclave cycles and passed
- 1,200 needle insertions and passed
- 25-1 hour soaks in cleaning solution and passed
- Stainless steel probes failed before 200 autoclave cycles and 575 needle insertions
Nitinol Probes are a definite technologic leap forward that is not a great business model for the manufacturing companies but a step in the right direction for pain medicine facilities.

Radiofrequency

- Conclusions
  - Multigen RF machines reduce stress on patients
  - Multigen machines can reduce procedure time therefore making the case more profitable
  - Nitinol RF Probes last longer and save the center money

Vertebroplasty is still a good option for patients.....
Vertebroplasty

- Controversial procedure in light of the recent New England Journal article
- However, there is flaws in the research and many physicians have seen too many wonderful results to dismiss this therapy
- Medicare requires a diagnosis of osteoporosis in order for them to pay for vertebroplasty

Vertebroplasty

- One level ASC facility reimbursement for lumbar or thoracic levels is: $1218.87
- Equipment cost control key for being profitable
- About 60% of my vertebroplasties are only one level procedures
- These patients represent on going pain management issues and are often repeat patients
Vertebroplasty

- One level Vertebroplasty: use cheapest cement delivery device as possible. Usually have lower cement working time (i.e. PCD system - retail $550-600)
- Multilevel vertebroplasty can use newer more expensive systems (i.e. Autoplex system - retail 750-800)
- Multiple physicians in facility need to agree on one company to increase buying power

PCD System

Autoplex System
Vertebroplasty

- Conclusions
  - Using the right equipment based on the patient diagnosis
  - Appropriate product for the case
  - Knowing your product cost and reimbursement

Physician Owner Role

- Product negotiations
  - Products (Which Company?)
    - Disposable
    - Non-disposable
    - Equipment purchase or lease?
    - Setting par levels for shelf inventory
    - Shipping costs-negotiate!!!

- Equipment
  - Par levels and Shipping Costs
  - Labor Costs-staff models

Product Negotiations

- Work with as few companies as possible.
  - Gives you more buying power by buying higher volume through one company
  - Partnering with Titan Health Corporation enables us to leverage all of the Titans centers when using a primary supplier. This gives us the volume of several centers when negotiating pricing. This can be an issue with some physicians if they want a different company's product and do not use your supplier-educate, educate, educate!
  - Demand integrity from the company and the reps. Misleading or lying about products is a deal killer for me.
Product Negotiations

- Companies cont.
  - Your relationship with these companies is like a marriage, not everyday is perfect. Keep the big picture in focus, don’t let a rep’s misguided decision ruin your relationship with a company. Instead hold the rep accountable and demand your expectations.
  - Physicians can be hot headed sometimes, which can lead to bad long term decisions. In business cool heads prevail, don’t make emotional snap decisions!
  - However, just like a marriage if there is lying and cheating sometimes the relationship will need to be ended.

Equipment

- Buy or lease?
  - When new equipment is purchased physicians need to understand that this has to be for at least 3 years. If new technology comes out they need to wait unless the company is willing to do an even swap and just extend the lease. Be wary of lease extensions and what gets rolled into them.
  - To buy or lease is more a question of where your center is financially. With a newer center which is cash strapped it usually makes more sense to lease. Buying makes sense when the piece of equipment will be used for many years and not replaced with newer technology in a few years.
  - Having a good relationship with your reps will save you money in the long run when it comes to equipment upgrades. Being actively involved as a physician owner in these negotiations is key.

Par Levels and Shipping Costs

- Physicians can play a key role here. They are most familiar with their cases and can help decide what is needed. However, most physicians want more than they really need! (I think it’s a genetic defect!)
- The objective is to keep your shelves with minimal product so your inventory costs remain low. (i.e. Our center orders about 6,000 pain trays per year. We get a weekly delivery with free shipping so our cash outlay is more manageable, not to mention saving storage space.)
- Shipping costs go up when there is poor surgical planning on the staff’s and physician’s part and need to overnight product. This can be avoided with better planning.
- An educated staff is extremely important. Make sure that your materials staff know their job, the computer system, their GPO and their reps. These individuals can make or break you.
Labor Costs

- We all have to live by CMS/JCAOH/AAAHC guidelines, but tightening up staffing models can work.
- Use LPNs instead of RNs
- Use CNAs instead of LPNs
- Flex staff hours when volume is low. This is tricky and there are no right answers for every center. Trying to maintain quality personnel to not compromise patient care but at the same time being fiscally responsible is very challenging. Physicians need to be educated but can also help with these decisions.
- Finally, just use less staff. Everyone is working harder for less reimbursement. It is a fact of life that needs to be appropriately communicated to physicians and staff.

In conclusion....

- **KEY FACTORS**
  - New technology and procedures: do your homework!
  - Equipment: spend the time to research all financing opportunities and use all resources available to you. Shop it out!
  - Cost: whether it is using par level, staff models or product negotiating, know your stuff!
- **PHYSICIAN INVOLVEMENT**
  - Be educated, be involved!