REACH Call Overview
For: University of Virginia Health System

Garfield Jones – VP of Sales
Shelly Clark – VP of Clinical Services
03/24/2010

It's always about the patient
You have 3 basic options in your choice for building a telehealth program

- Buy videoconferencing hardware from a proprietary hardware vendor and set up and try to run the program on your own
- Lease videoconferencing equipment from a proprietary hardware vendor who provides support based primarily around the videoconferencing component.
- Buy “standards-based” equipment from a company that provides support based primarily around the consult module, which includes videoconferencing

WHERE DO YOU THINK THE FUTURE IS HEADED?

What is REACH?

REACH is a convenient, web-based portal for Telemedicine Services, enabling access to the highest standards of care from anywhere in the world.

The REACH solution includes:

- A user-friendly interface with integrated decision support tools and SOAP workflow, designed for and by physicians
- Automatic data collection for seamless support of
  - EMR / HL7 integration
  - Billing (up to Level 5)
  - On-demand reports
  - Quality metrics & Audits
  - Research
  - National registry integration
- Advanced, standards-based video-conferencing
- Experienced consultants to help build and grow telemedicine networks
- Call coverage support through industry partners
The REACH Advantage

Optimizing standards of care
- Web-based decision support tools
- Consistently applied
- Universally accessible

Centralized data collection
- On-demand statistics and consultation reports
- Manage outcomes and referral networks
- Use for clinical research and registries

Technology platform flexibility
- Customizable / Expandable clinical modules
- Integration with advanced video-conferencing solutions
- Accessible from PC or Mac

How REACH works:
Hub & Spoke Model
What You Need
All You Need Is What You Have

Spoke
- Cart*
- CT scanner
- Internet access

Physician
- Laptop/PC
- Standard Web cam
- Internet access

Hub
- Nothing

* Recommended/provided by REACH

Where is REACH?

Q2 2009

100 contracts in 10 states

Stroke Care Anywhere™
Where is REACH?

Proprietary and Confidential

Flo Healthcare Cart with Axis camera
GlobalMedia cart with Polycom camera / codec

GlobalMedia cart with GlobalMedia IREZ 5770 camera and EasyShare VC
Clinical convenience and ease of use

Web-based access from any PC
- With a broadband connection
- Non-web-based video-conferencing options available

Integrated consulting dashboard
- No moving around between windows

Comprehensive decision support tools
- Patient Vitals and Labs
- DICOM Image Viewer
- NIHSS
- SOAP layout and Consult notes
- tPA Countdown, Recommendation and Rollback
- Automatic calculation of tPA dosage (patient safety)

Documentation
- Completes medical record
- Streamlines billing (up to Level 5)

ED tools
- See consult progress in real-time
- Update patient data in real-time

Customer comments

The REACH interface is set up in a logical order that intuitively follows the decisions that the neurologist will need to make.

Dr. Kenneth Gaines,
Chairman Department of Neurology, Ochsner Baptist Medical Center
Telemedicine program-building expertise

<table>
<thead>
<tr>
<th>Support Category</th>
<th>REACH Support team</th>
<th>Activities</th>
</tr>
</thead>
</table>
| Business         | • Former Administrators  
                  • Former telemedicine program coordinators  
                  • Sales & Marketing | • Guidance on credentialing, financing, call coverage, resource needs, network development  
                  • Sharing models used by other successful networks; personal introductions to other networks  
                  • Recruitment of additional spokes  
                  • Telemedicine Marketing Kit |
| Clinical         | • Clinicians        | • Develop clinical protocols to optimize standards of care  
                  • Automating order sets.  
                  • Identify workflow for triaging patients, initiating consult requests, gathering patient data, establish guidelines for patient transfers  
                  • Training and Dry runs |
| IT               | • Network engineers  
                  • Developers    | • IT readiness assessment  
                  • Clinical module development (as needed)  
                  • Telemedicine program technical project planning |

Data collection and Reporting

- Automated collection for all customers
- Centralized
- Secure access, HIPAA compliant
- View by hub, spoke, or network
- Reports on:
  - Onset to Consult times
  - Onset to Treatment times
  - tPA decisions
  - Transfer decisions
  - Etc.
- Potential to integrate with GWTG
- EMR Integration (via HL7)
- Used for:
  - Stroke center certification
  - Billing
  - Outcome management
  - Network management
  - Marketing
  - Research
  - Quality metrics
  - Audits
Sample Reports Available

- tPA vs. no tPA (aggregate & monthly)
  - Arrival to registering the patient in REACH
- Recommended for Transfer (aggregate)
  - Arrival to consultant sign-on
- Most common reasons cited for no tPA (aggregate)
  - Arrival to NIHSS decision
- Average door to tPA (aggregate)
  - Arrival to tPA recommendation
- Average onset to door (aggregate)
  - Arrival to tPA administration
- Average door to NIHSS (aggregate)
  - Total length of the consult
- Average onset to tPA (aggregate)
  - *Arrival to ED physician evaluation
- *Arrival to CT scan

Concrete Outcomes

> 2100+ consults to date (all documented)

**Increased tPA Availability**

2008 Data from REACH System

- 441 total consults, 92 recommendations for tPA
  - 384 presented < 3 hours of symptom onset
  - 57 presented > 3 hours symptom onset
- 24.0% tPA rate amongst patients presenting within 3 hours
- Comparative study – 19.4% tPA rate amongst patients presenting within 3 hours *(Arch Neurol. 2004;61:346-350)*

**Faster Onset-to-Treatment Times**

February 2003 – March 2006

- 50 tPA administered via REACH
- 2% rate of symptomatic intra-cerebral hemorrhage
- REACH mean onset to treatment 127.6 min. vs. Hub ED 145.9 min.
  *(JEmerMed. 2009; 36: 12-18)*
### MCGHealth - 2003 to 2009

<table>
<thead>
<tr>
<th>Site</th>
<th># of Consults</th>
<th># tPA Indicated</th>
<th># tPA Given</th>
<th>% Transfer to MCG</th>
<th>% Treated with tPA</th>
<th># Hospital beds</th>
<th>Miles Away</th>
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<tbody>
<tr>
<td>Cobb Memorial Hospital</td>
<td>72</td>
<td>21</td>
<td>27</td>
<td>29%</td>
<td>38%</td>
<td>102</td>
<td>70</td>
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<tr>
<td>Coliseum (start March 2010)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0%</td>
<td>0%</td>
<td>214</td>
<td>123</td>
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<tr>
<td>Doctors Hospital of Augusta</td>
<td>27</td>
<td>7</td>
<td>0</td>
<td>26%</td>
<td>0%</td>
<td>250</td>
<td>5</td>
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<tr>
<td>Elbert Memorial Hospital</td>
<td>83</td>
<td>12</td>
<td>30</td>
<td>36%</td>
<td>52</td>
<td>83</td>
<td></td>
</tr>
<tr>
<td>Emanuel Medical Center</td>
<td>156</td>
<td>37</td>
<td>74</td>
<td>24%</td>
<td>47%</td>
<td>72</td>
<td>76</td>
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<tr>
<td>Fairview Park</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0%</td>
<td>0%</td>
<td>190</td>
<td>95</td>
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<tr>
<td>Jefferson Hospital</td>
<td>61</td>
<td>5</td>
<td>24</td>
<td>8%</td>
<td>39%</td>
<td>65</td>
<td>45</td>
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<tr>
<td>Jenkins County Hospital</td>
<td>37</td>
<td>5</td>
<td>17</td>
<td>14%</td>
<td>46%</td>
<td>10</td>
<td>49</td>
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<tr>
<td>McDuffie RMC</td>
<td>143</td>
<td>28</td>
<td>59</td>
<td>30%</td>
<td>41%</td>
<td>54</td>
<td>35</td>
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<tr>
<td>Morgan Memorial Hospital</td>
<td>33</td>
<td>4</td>
<td>13</td>
<td>12%</td>
<td>39%</td>
<td>20</td>
<td>92</td>
</tr>
<tr>
<td>St. Mary’s</td>
<td>6</td>
<td>3</td>
<td>0</td>
<td>50%</td>
<td>0%</td>
<td>176</td>
<td>105</td>
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<tr>
<td>Tift RMC</td>
<td>62</td>
<td>17</td>
<td>0</td>
<td>27%</td>
<td>0%</td>
<td>191</td>
<td>240</td>
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<tr>
<td>Washington County RMC</td>
<td>196</td>
<td>40</td>
<td>94</td>
<td>20%</td>
<td>48%</td>
<td>66</td>
<td>62</td>
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<tr>
<td>Wills Memorial Hospital</td>
<td>96</td>
<td>14</td>
<td>54</td>
<td>15%</td>
<td>56%</td>
<td>25</td>
<td>56</td>
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<tr>
<td><strong>Totals</strong></td>
<td><strong>977</strong></td>
<td><strong>193</strong></td>
<td><strong>392</strong></td>
<td><strong>20%</strong></td>
<td><strong>40%</strong></td>
<td><strong>1,487</strong></td>
<td></td>
</tr>
</tbody>
</table>

Reasons tPA not given:
* 7 families refused treatment with tPA
* 1 patient not eligible due to uncontrolled hypertension

### REACH Consults as of 02/02/2010

<table>
<thead>
<tr>
<th>Site</th>
<th>Start Date</th>
<th># of Consults</th>
<th># tPA Indicated</th>
<th># tPA Given</th>
<th>% Transfer to MUSC</th>
<th>% Treated with tPA</th>
<th>% Transfer to MUSC</th>
<th>Hospital beds</th>
<th># ED Visits per year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Georgetown</td>
<td>5/1/2008</td>
<td>60</td>
<td>15</td>
<td>12</td>
<td>34</td>
<td>20%</td>
<td>57%</td>
<td>131</td>
<td>30,000</td>
</tr>
<tr>
<td>Waccamaw</td>
<td>5/6/2008</td>
<td>79</td>
<td>26</td>
<td>24</td>
<td>37</td>
<td>30%</td>
<td>47%</td>
<td>140</td>
<td>24,000</td>
</tr>
<tr>
<td>McLeod</td>
<td>5/7/2008</td>
<td>108</td>
<td>27</td>
<td>27</td>
<td>15</td>
<td>25%</td>
<td>14%</td>
<td>450</td>
<td>61,000</td>
</tr>
<tr>
<td>Grand Strand</td>
<td>9/1/2008</td>
<td>33</td>
<td>8</td>
<td>8</td>
<td>26</td>
<td>24%</td>
<td>79%</td>
<td>220</td>
<td>62,000</td>
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<tr>
<td>Marion</td>
<td>9/18/2008</td>
<td>26</td>
<td>7</td>
<td>6</td>
<td>14</td>
<td>23%</td>
<td>54%</td>
<td>124</td>
<td>23,000</td>
</tr>
<tr>
<td>Williamsburg</td>
<td>12/23/2008</td>
<td>41</td>
<td>15</td>
<td>13</td>
<td>30</td>
<td>32%</td>
<td>73%</td>
<td>25</td>
<td>12,000</td>
</tr>
<tr>
<td>Coastal</td>
<td>01/22/2010</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>33%</td>
<td>100%</td>
<td>45</td>
<td>18,000</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>564 days</strong></td>
<td><strong>350</strong></td>
<td><strong>99</strong></td>
<td><strong>91</strong></td>
<td><strong>158</strong></td>
<td><strong>26%</strong></td>
<td><strong>45%</strong></td>
<td><strong>1,135</strong></td>
<td><strong>230,000</strong></td>
</tr>
</tbody>
</table>

^ Nationally <20% receive tPA

Reasons tPA not given:
* 7 families refused treatment with tPA
* 1 patient not eligible due to uncontrolled hypertension
## Partnerships • Integrations • Relationships

<table>
<thead>
<tr>
<th>Partnership/Integration</th>
<th>Details</th>
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</thead>
<tbody>
<tr>
<td><strong>Polycom Channel Partner</strong></td>
<td>Technology integration – infrastructure, video endpoints</td>
</tr>
<tr>
<td><strong>Physician Call Services, Technology Licensing</strong></td>
<td></td>
</tr>
<tr>
<td><strong>American Heart Association</strong></td>
<td>Technology Integration – national GWTG stroke registry</td>
</tr>
<tr>
<td><strong>Customer in-servicing on use of tPA</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Cart supplier</strong></td>
<td>Technology Integration – video endpoints</td>
</tr>
</tbody>
</table>

*Under development*

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## Customer comments

If you look at our HealthGrades rating, for 2009 we had a 5-star rating on care of stroke -- about 60 cases with zero deaths. You can't get much better than that. REACH … really helped us step up our care to current standards.

Harry L. Wingate, MD,  
ED physician at Elbert Memorial Hospital
DEMO

Consult Module Demo

Questions?

THANK-YOU FOR THIS OPPORTUNITY!
Taking the guesswork out of telemedicine

- Will the system align with our workflow and standards of care?
- Will clinicians find it easy to use?
- Will it get used frequently?
- Will we get an ROI?
- Are our results predictable?
- Will the system integrate with our EMR, reporting needs, etc.?
- Will we get help in implementation?
- Will we get support building our program?
- Will we have visibility to our program’s performance?
- Can we expand our capabilities easily?
- Will the solution support continuous innovation?

THANK YOU

Q&A
Telemedicine Ecosystem

Complementary Partnerships
- Inter-operable solutions
- Scalable

REACH Call provides:
- Clinical consulting modules
- Reporting
- Network-building expertise

NeuroCall provides:
- Neurology Call Coverage

GlobalMedia provides:
- Advanced video-conferencing camera/cart
- Video-conferencing software (EasyShare MD)

NeuroCall partnership

Neurology Call Coverage
- Credentialed Neurologists: Licensed in 23 states
- Coverage options ranging from monthly to nights/weekends to specific days only
- Fees driven by ED volume translated to estimated # of neurology consults and stroke consults

NeuroCall initiated customers who need coverage
- NeuroCall re-sells, deploys, uses, and supports (tier 1) the REACH service.
- Sources their cart from GlobalMedia

REACH initiated customers who need coverage
- NeuroCall generates a separate contract for coverage
- Sales should engage NeuroCall to discuss fees and services
- Preference to offer advanced video-conferencing solutions to support NeuroCall physicians
Ben Franklin’s “T” Test for Spokes

- You have two basic choices when a suspected stroke patient comes into your ED:
  - A. Get them ready for transfer
  - B. Treat them with the help of a stroke tele-neurologist

CONS

- you earn virtually nothing
- optimal patient treatment (tPA) might be delayed
- there is NO chance to have a significant success which you can publicize in your community
- chance of lawsuit for “failure to treat”
- overall staff morale may be negatively affected
- no chance at being a designated stroke center
Ben Franklin’s “T” Test for Spokes

- **PROS**
  - You KEEP them in your ED longer and earn revenue for ED work-up codes (APC’s – Ambulatory Patient Codes)
  - patient has a chance to get the best timely treatment
  - you get the chance to admit them and get $14K tPA reimbursement
  - whether they get tPA or not you get the chance to keep them and get to bill for any therapies and codes that you are equipped to handle
  - If you have a great outcome, you get to “announce to your community” that you can really help stroke patients quickly”
  - Minimize chance of lawsuit
  - Staff morale is enhanced
  - Staff capabilities gradually improved
  - Major step towards meeting designation criteria (if of interest)

Medico-Legal Status

- There have been NO documented telemedicine lawsuits outside of teleradiology (according to the lawyers that presented at the recent ISC and the American Telemedicine Association which has been tracking this data for the past 18 years)
- 68% of lawsuits regarding tPA are for failure to treat
- According to presentations at the ISC you are 30 times more likely to get sued for failure to treat than a bad outcome
- 58% of the time the ED physicians are sued in tPA cases
- In the remaining 42% of suits, both the ED physician and the neurologist are sued together
- Plaintiffs won in 64% of suits
- Average amounts won in suits ranged from $100K to $30M
- Tele-stroke does not increase or reduce the neurologist’s liability
Patient Benefits

- Stroke care close to home regardless of geographical barriers
- Eliminates travel/transfer, reducing onset to treatment time
- Increased chances for better functional outcome

Physician Benefits

- 100% mobility to perform consults from anywhere
- Medicare and Medicaid reimbursement for 2-way audio/video consults
- No lost opportunity cost for taking call
Questions to ask yourself if you are a HUB

- Would you like to have the ability to shift payor mix in your catchment area?
- Would you like to have better management of transfers from referring hospitals?
- Would you like to place your expertise and center of excellence anywhere anytime with no limitations

Hub Benefits

- Appropriate transfer of appropriate stroke patients arriving in better condition
- Increased reimbursement for downstream treatment
- Reduced transfers of inappropriate patients
- Increased relationships with community hospitals in surrounding areas
- Build a true Telemedicine Outreach Network
Spoke Benefits

- Increased admissions
- Reimbursement for tPA
- Achieve Primary Stroke Center status
- 24 x 7 x 365 access to specialists

The complete telemedicine solution

**Clinical Applications**
- Stroke
- Expandability to
  - Acute Neurology
  - Sepsis
  - Trauma
  - Psych
  - Burn
  - Cardiology
  - Neurosurgery
  - Orthopedics
  - ER, etc.

**Communications**
- Basic: Audio via phone, Video via Axis
- Advanced audio/video conferencing: Polycom, GlobalMedia

**Decision support tools**
- PACS/DICOM Image Viewer
- Vitals
- Labs
- NIH Stroke Scale
- SOAP layout

**Physician call services**
- Matchmaking for customers needing neurology call services: NeuroCall

**Performance**
- Statistical reports
- Network-building expertise
- Centralized monitoring

**Reporting & Records**
- Centralized data collection
- Consult reports
- Consult note templates
- Decisions/Recommendations
- Prescriptions
- National registry integration: Outcome Sciences

**LEGEND**
- Current REACH capabilities
- Technology Partnerships and Business Development
**Coding Update - Telemedicine Codes**

### Reimbursement for Selected Codes

<table>
<thead>
<tr>
<th>Physician Code</th>
<th>Telehealth</th>
<th>Description</th>
<th>Time</th>
<th>Medicare Allowable**</th>
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</thead>
<tbody>
<tr>
<td>992.43^</td>
<td>GT</td>
<td>New OP Consult</td>
<td>40 min</td>
<td>$99.26</td>
</tr>
<tr>
<td>992.44^</td>
<td>GT</td>
<td>New OP Consult</td>
<td>60 min</td>
<td>$155.78</td>
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<tr>
<td>992.45^</td>
<td>GT</td>
<td>New OP Consult</td>
<td>80 min</td>
<td>$194.75</td>
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<tr>
<td>992.55</td>
<td>GT</td>
<td>Initial IP Consult</td>
<td>110 min</td>
<td>$203.55</td>
</tr>
<tr>
<td>G0406</td>
<td>GT</td>
<td>Follow-up IP Consult</td>
<td>15 min</td>
<td>$37.40</td>
</tr>
<tr>
<td>G0407</td>
<td>GT</td>
<td>Follow-up IP Consult</td>
<td>25 min</td>
<td>$66.84</td>
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<tr>
<td>G0408</td>
<td>GT</td>
<td>Follow-up IP Consult</td>
<td>≥35 min</td>
<td>$95.85</td>
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</table>

* History, Exam and Medical Decision Making Required

** Medicare Allowable FY09 Area 99 (Orlando, FL)

*** Medicare pays 80%, Beneficiary pays 20%, (fee is adjusted annually by the Medicare Economic Index) [MLN Matters: MM6349, 12/19/08, Effective 1/1/09-12/31/09]

****No RVU assigned

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### Key Takeaways

- **Customer’s standards of care can be consistently applied and made universally accessible**
- Designed by physicians, for physicians
- Ease of use → Increased user acceptance → Increased utilization → Quicker ROI
- Seamless data capture and integration
- Customized solution
- True partnership and support
- Help prevent medication errors
- Rapidly deployed, Easily upgraded and Expanded
- Increased publicity, expanded referral base and outreach programs