

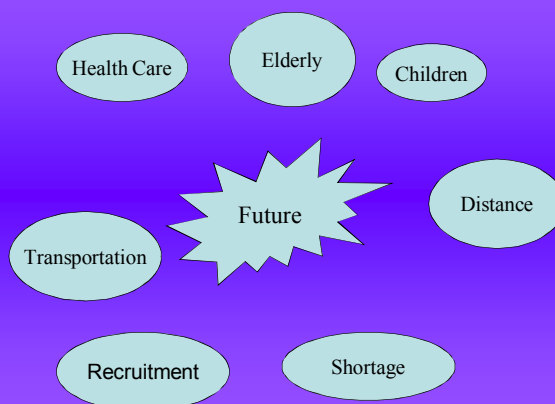
## Telehealth in Rural New York

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Systems

## Telehealth and Rochester General Health Systems (RGHS)



## The Creation of a Cyber-Hospital: A Healthcare Strategy and Delivery Network For Regionization of Specialty Care



### The Need

- 50% of Surgeons in New York State are 50 and over
- Over 60% of retired physicians retired from medicine by age 65
- Majority of physicians with plans to retire from patient care intend to do so by age 65

### The Need

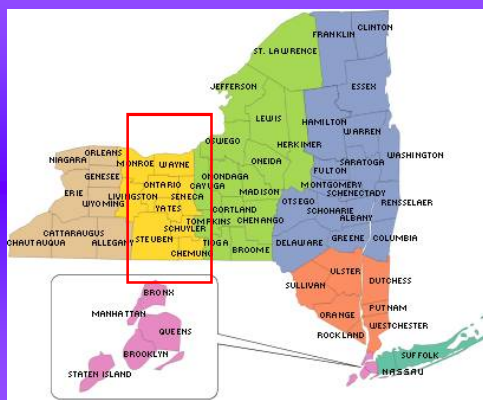
- Limited specialists to treat the rural population.
- Patients go without care – health worsens.
- Treatment of disease becomes more costly – early treatment would eliminate this.
- Transportation can be a problem for many patients traveling to tertiary centers.

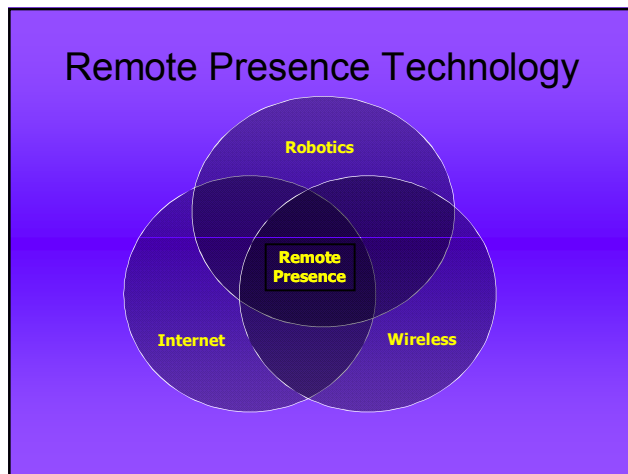
### Telehealth is a SOLUTION

- Specialists can be accessed real time and treatment initiated.
- Patients receive care early in their disease.

#### Telehealth impacts

- Access to care
- Cost containment
- Quality enhancement





### Static and Dynamic Settings

<u>Static</u>
<ul style="list-style-type: none"> <li>• Outpatient Clinics</li> <li>• Non-patient encounters                             <ul style="list-style-type: none"> <li>– Radiology</li> <li>– Pathology</li> <li>– Dermatology</li> </ul> </li> </ul>

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### Static Technology



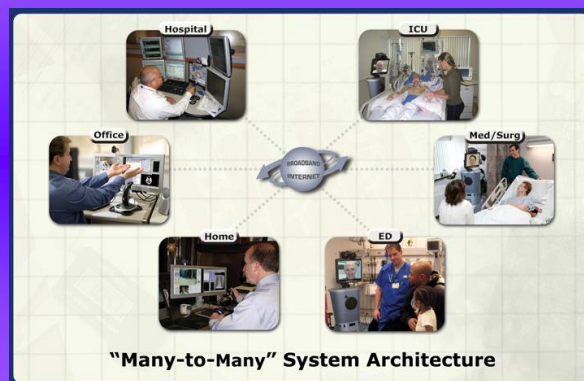
The RP Robots

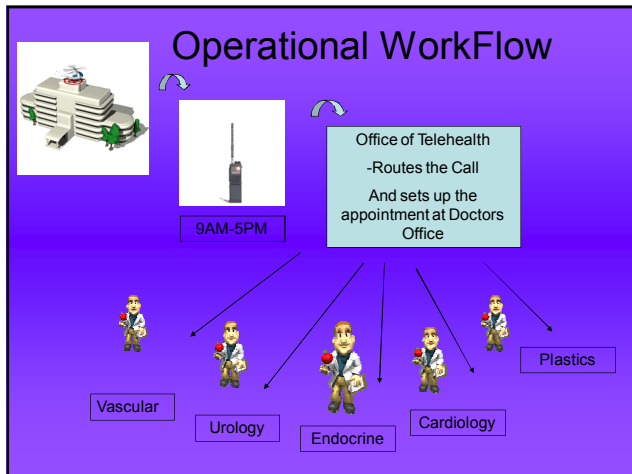
Control Station



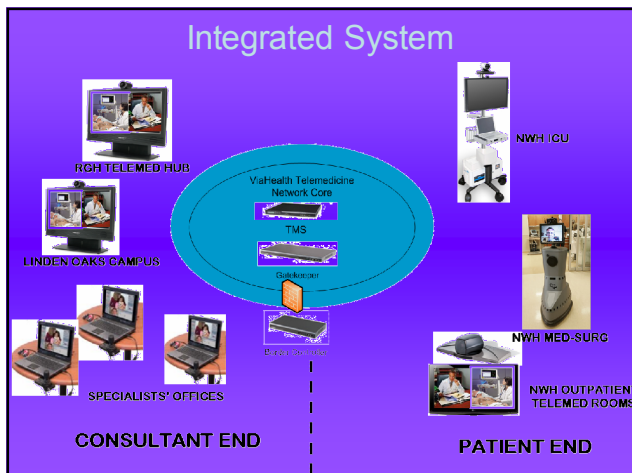
Doctor-Robot-Patient Relationship

### Expertise Anytime, Anywhere





- ### MOVI
- Physicians will be able to access consults from their PC/Laptop
  - Expands consults to 24/7
  - Increases accessibility



- ### Current Specialists – Outpatient consults
- Bariatric Surgery
  - Cardiology
  - Genetic Counseling
  - Gerontology
  - Infectious Disease
  - Nephrology
  - Plastic Surgery including breast reconstruction and hand surgery
  - Rheumatology
  - Urology
-

Current specialists – **Inpatient consults**

- Cardiology
- Genetic Counseling
- Gerontology
- Infectious Disease
- Intensivists
- Nephrology
- Plastic Surgery including breast reconstruction and hand surgery
- Pulmonologist
- Rheumatology
- Urology

Future specialists:

- Dermatology – outpatient
- Psychiatry – pilot to start soon for outpatient

Other Telehealth programs at RGHS

- |  |   |
|--|---|
| <p><u>Emergency Department</u><br/><u>RGH</u></p> <ul style="list-style-type: none"> <li>• Pilot for tele home care – CHF patients</li> <li>• Specialty consults to enhance patient flow</li> <li>• Connect to rural hospitals to facilitate ease of transfer</li> </ul> | <p><u>New York State Burn Surge Program</u></p> <ul style="list-style-type: none"> <li>• Area hospitals designated to respond to burn victims including:             <ol style="list-style-type: none"> <li>1. <b>RGHS</b></li> <li>2. <b>Park Ridge</b></li> <li>3. <b>Thompson</b></li> <li>4. <b>NWCH</b></li> </ol> </li> </ul> |
|--|---|



NYC-NYS Burn Surge Partnership

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>• Organizations             <ul style="list-style-type: none"> <li>– New York State Department of Health</li> <li>– New York City Department of Health and Mental Hygiene</li> <li>– University of Rochester Medical Center / Strong Memorial</li> <li>– Weill-Cornell Medical Center / New York Presbyterian Hospital</li> <li>– Erie County Medical Center / University at Buffalo (SUNY)</li> <li>– Westchester Medical Center</li> </ul> </li> <li>• Grant Support August 2007<br/>US Dept. Health Human Services</li> </ul> | <ul style="list-style-type: none"> <li>• Individuals             <ul style="list-style-type: none"> <li>– James Clyne</li> <li>– Robert Burhans</li> <li>– Debra Berg, MD</li> <li>– Elliot Lazar, MD</li> <li>– Christopher Lentz, MD</li> <li>– David Ellis, MD</li> <li>– Ivan Gotham, PhD</li> <li>– Jackie Pappalardi, RN</li> <li>– William Maiiha, MD</li> <li>– Linh Le, PhD</li> <li>– Lewis Soloff, MD</li> <li>– Paul Amyiot</li> <li>– Larry Chertoff</li> <li>– Susan Miller</li> <li>– Fritz Sticht</li> </ul> </li> </ul> |
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[www.MDRN.us](http://www.MDRN.us)

Figure 2. [www.mdrn.us](http://www.mdrn.us) website

- Medical Disaster Resource Network
- Up to date inventory of telemedicine hub networks used to provide care coordination and services in response to large scale disasters
- Long term goal: develop telemedicine response to improve surge capacity, integrate into disaster plans

Purpose of the Program:  
Gap to be Addressed

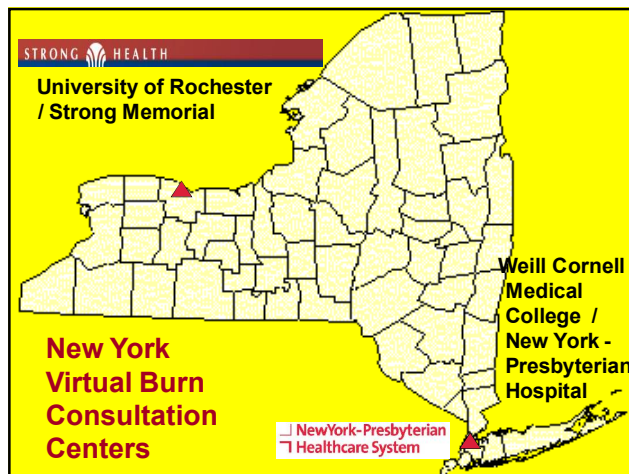
- 9/11 Experience 22 burn patients, able to discharge patients to create additional immediate burn capacity
- HRSA NPHPP Guidelines
  - 50 severe adult and pediatric burn beds per million population

Purpose of the Program:  
Gap to be Addressed

- New York City
  - 8.1 million population = 400 burn beds
  - 4 burn centers = 71 beds
- New York State (excluding NYC)
  - 20 million population = 1000 burn beds
  - 6 burn centers = 51 beds
- New York State (Total)
  - 10 burn centers = 122 beds / 50 surge beds possible
  - Limitations on ability to increase beds

## Conclusion

- To accommodate the initial stabilization and treatment of these victims, **NYS** and **NYC** trauma centers and other major acute care facilities may need to care for critically ill burn-injured patients until such time that definitive care within a burn center can be accommodated.



Virtual Burn Consultation Centers

### Roles

- Participate in design of triage algorithm
- Serve as hub for the project and test with spoke hospitals
- Receive host training for WebEx and drill technology and its attributes in support of consultation with pilot hospitals
- Establish video-bridge capabilities and evaluate with selected pilot hospitals

### Burn Decision matrix

- **Tiered Hospitals**
  - Tier 1 Burn / Trauma Centers
  - Tier 2 Non-Burn / Trauma Centers
  - Tier 3 Non-Trauma Acute Care Hospitals
  - Tier 4 Long-Term Care Facilities
- **Patient Severity Index**

### Current Activities

- Establish statewide “robust” 24x7 Call Center capabilities
- Activation of Burn Referral Process – Upstate
- Limited and Comprehensive Drill Exercise

### Current Activities

- In-depth Evaluation Ongoing
- Exploring Opportunities for Regional Collaboration
- Current Readiness Status Level



### The Future for Telehealth in Relationship to Healthcare Reform

- Improve the inequities in healthcare discrepancies.
- Decrease cost.
- Increase effectiveness in chronic disease management.
- Enhance efficiency in clinical decision making, prescription ordering, and mentoring.

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