Evolving Market Dynamics in the Child, Family & Mental Health Service Field

John Talbot, Ph.D., Executive Vice President, OPEN MINDS
May 16, 2011
Outline of the Session

- Disruptive Innovation & The Game-Changing Trends in the Current Market
- Payer Responses to the Shifting Market
- Strategic & Management Issues For Service Delivery Organizations
Environment Drives Strategy. . .

& Strategy Drives Structure. . .

& Systems Support Structure. . .

To paraphrase Peter Drucker. . .
External Environmental Factors Driving Strategy Development In Recession... 

What trends are influencing the market at this time?

An iterative force in the market

Who are our customers and what do they want?

More Competition – Out Of Area, Out Of Industry

What other organizations are competing for our customers?

Seek Less Expensive Alternatives Without Long-Term Considerations

An iterative force in the market

How much are customers willing to pay for services?
Disruptive Innovation & The Game-Changing Trends in the Current Market
Synergistic & Simultaneous Disruptive Innovations in Health & Human Services

Changes in Health & Human Service Budgets & Financing Models

Synergistic Effects On Successful Market Models & Industry Leadership

Emerging Developments in Neuroscience

New Functionality in Telecommunications & Information Management
Sustaining innovation
Incremental improvements
Serve existing customers
In current systems

Disruptive innovation
Disruption of professionals – permits ‘less skilled’ professionals to provide services (and consumer self-service)
Disruption of institutions – permits service delivery in less intensive settings (or at home)
Effect of Disruptive Innovation on Health & Human Services

- Create new markets that undermine market share of existing market leaders
- Brings crisis to established institutions that cannot adopt their business model
Emerging Developments in Neuroscience -- Advances in Brain Science Changing Treatment Models
Scientific Discoveries Fueling Commercial Neuroscience Offerings

- Ability to monitor brain functionality and changes using scanning tools and new biologic tests
- Changing theory of brain development and maturity – longer and later
- Discovery of brain cell regeneration – role of physical exercise, cognitive exercise, etc.
- Better understanding of brain chemistry
- Identification of genetic and epigenetic factors in behavioral and cognitive disability
Recent Commercial Developments

- **Better diagnostics** – brain scans, biomarkers, and more – for mental, addictive, and cognitive disorders
- **Innovative drug delivery systems** – patches, injectables, and genetically-designed drugs – for mental illness, addictions, dementias, intellectual disabilities
- **Virtual reality and alternative reality treatment applications**
- **Neurotech treatments**
New Diagnostics Tools in Behavioral Health

- Early detection of brain changes
- Diagnosis of illness
- Predict the effectiveness of medications
- Monitor the effectiveness of therapies, including medication
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<tr>
<th>Image Description</th>
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<tr>
<td>Methamphetamine Addict</td>
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<tr>
<td>Frontal Temporal Lobe Dementia - Before</td>
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<td>Frontal Temporal Lobe Dementia - After</td>
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<td>Mass Murder (15 Year Old)</td>
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<td>Baseline Surface</td>
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<td>Concentration Surface</td>
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VeriPsych™ is the first and only blood test to aid a psychiatrist in the diagnosis of schizophrenia.

Latest News

Feb 8 2011
VeriPsych Recognized at European Entrepreneur Awards in Zurich
NeuroVR Therapy

Full Immersion VR

“Cave” VR
Office of Air Force Surgeon General
Telemental Health VR Project For PTSD
VirtualGalen – Virtual Reality & Avatars for Autism
Neurotherapy Market Has Two Sectors

- **Stimulation-based or neuromodulation therapies**
  - ✓ Invasive
    - • Vagus nerve stimulation
    - • Deep brain stimulation
  - ✓ Non-invasive
    - • Transcranial magnetic stimulation
    - • Light therapy
    - • Frequency-based light & sound neurotherapy

- **Exercise-based therapies**
  - ✓ Neurofeedback (EEG, HEG, & rt-FMRI)
  - ✓ Cognitive retraining
  - ✓ Mindfulness meditation
Cyberonics’ Vagus Nerve Stimulation Device
Medtronics’ Deep Brain Stimulation Device
Transcranial Magnetic Stimulation in the Physician’s Office
A TMS Investigational Device for Migraine Relief
San Francisco Chronicle
Software designed to make older drivers sharper

CNBC
Brain Exercise

Scientific American
Brain Trainers: A Workout for the Mind

The Wall Street Journal
The Latest in Mental Health: Working Out at the 'Brain Gym'

CBS Sunday Morning
Retraining The Brain

New study on the Brain Fitness Program published in the Journal of the American Geriatric Society
The study, led by Mayo Clinic and USC, shows that the Brain Fitness Program significantly improves memory and attention—and that people notice these changes in their daily lives. Read the press release to learn more or buy now to experience these benefits for yourself.

Catch Posit Science on PBS
Dr. Merzenich and Posit Science InSight are featured in a brand new PBS special, Brain Fitness 2: Sight and Sound. Sight and Sound is a follow-up to last year’s highly popular Brain Fitness Program. Check our schedule for showtimes, or watch a preview here.
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Brain Fitness You Can Trust
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Prevent, Slow Down, Stop or Reverse Memory Loss

Improve Academics, Attention, & Potential

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“Is There Help For My Child?”

Sparks Of Genius
Brain fitness training helps children with attention deficits and learning problems. more...

Tips to Transformation
Spark your children’s genius and watch them soar to new levels of accomplishment more...

“Is There Help For Memory Loss?”

Protect Your Memory
Find out how brain fitness training strengthens memory and sharpens your brain. more...

Tips, Optimal Brain Fitness
Turn memory loss into memory more...
New Science Changing Consumer Expectations

1. **Brain scans and related diagnostic technologies** New technologies provide ‘demonstrable’ evidence of brain condition and changes due to treatment – more of ‘what works’

2. **Prevention and early intervention possible** New brain research changing treatment approaches (age of development, brain cell replacement, etc.) – can prevent behavioral disorders and create new cognitive functioning

3. **Integrated approach with new interventions** New research validates neurotech, enhanced pharma, genomics and biomarkers, virtual realities, exercise, meditative states, nutrition, acupuncture, etc. – creates consumer demand for integrative approaches

4. **Neuroenhancement and cosmetic neurology** Consumers will look for enhanced brain functioning with new tools.

High consumer demand for ‘new science’
New Functionality in Telecommunications & Information Management
Reshaping Service Delivery
The Information Technology Building Blocks of Future Success

**Bioconnectivity** –
Merger of data from EMR, claims databases, and clinical testing data with connectivity technology
Creates comprehensive, web accessible data set

**Informatics** -
Analysis of data gathered through bioconnectivity
Systematic study of the health care delivery system – and the tools and methods to support decisions
Bioconnectivity Data Used in Health Informatics

Clinical Data From New Diagnostics & Emerging Neurotech

Bioconnectivity
Single Real-Time Clinical, Admin, & Cost Data Set

EMRs & EMR Data (NHIN of the future)

Clinical Metrics From E-Health & Remote Consumer Monitoring

Connection of All Data Sets Via Web Tools (With Consumer & Professional Access)
Virtual Treatment Makes Place Matters Less in Service Delivery

Technology changes role of place of service for health services – making some institutional settings for some purposes obsolete

- Remote professional consultation (e.g. virtual surgery)
- Porting the professional to consumer locations via technology – web-based/e-mail, audio, video
- Remote monitoring
- The “smart home” – home automation focused on disability support
Technology Is Reshaping Service Delivery

- Healthy Population
- Chronic Health Population
- @ Risk Population
- Virtually Enabled Health Management
- High Touch Chronic Management with Virtual Monitoring
- Virtually Enabled Risk Mitigation with Virtual and Concrete Health Management
Emergence of Tech-Enabled “Offshoring” Changes Labor Market

Once care is virtual, location of patient and professional increasingly irrelevant

- From intrastate to interstate to international
- Produces ‘unexpected’ out-of-area competition
- Will reduce local labor costs
- Speed-to-response issues for provider organizations
Your LDL cholesterol is still too high.

Please increase your Lipitor from 20 mg a day to 40 mg a day. You can take two pills at a time until you use up your current prescription.

I can call in a new prescription to the higher dose to your pharmacy. Please let me know where to call.

Be well,

GSF
Physician Making An On-Line House Call
PERS Plus System

Basic System

Butler System
CardioNet
Popchilla, Robot-Based Autism Therapy for Children
The SONY Paro

Paro at a nursing home in Japan (Photo courtesy of Dr. Takanori Shibata)

Robot therapy with Paro at a pediatric ward in Stockholm, Sweden (Photo courtesy of Dr. Takanori Shibata)
MEDCottage “Smart Home” Concept

The MEDCottage, or so called “Granny Pod,” is being marketed as “family managed health care as an alternative to long-term care facilities.”
Mental health application for the iPhone and iPod touch smartphones based on cognitive behavioral therapy (CBT) principles to help people with post-traumatic stress disorder (PTSD)
There's always someone to talk to.

Speak to our online counselors, from the convenience of your home!

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Stay anonymous and unload your burdens with someone who can listen and offer help. All sessions start free, meet your personal counselor now.

Ryan Kappel, MSW, LSW
★ ★ ★ ★ ★ (829 reviews)
Experienced individual/family therapist working all types of problems from relationships to at-risk behaviors to depression...

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$2.00/minute

Rafael Morales Tola, MA, MS, MHT-MHRS, MFT
★ ★ ★ ★ (696 reviews)
We all need objective, compassionate and insightful feedback in order to understand, comfort, nurture and motivate ourselves...

Online Contact Live!
$1.39/minute

Thank you for taking the time to help me right when I...
ResCare “RestAssured” Staff Sharing Model Using Remote Technology & Staff

- Remote caregiver
  - ✓ Telecams
  - ✓ Sensors
  - ✓ Two-way audio
- On-call first responder
ResCare “RestAssured” Telecams
Virtual Residential Programs (VRP)™

The Virtual Residential Program provides families, schools and communities with a community-based alternative to unnecessary out-of-home placements. The program also seeks to facilitate the successful reunification of youth with their families following residential, psychiatric or foster home placements.

The Virtual Residential Program (VRP) is a distinctive and effective service that unites highly intensive, multi-systemic in-home services within the structure of a residential approach. The average intensity of VRP services initially is thirty-five hours per week, with a focus on defusing imminent risk factors and implementing crisis stabilization plans. Services are initially planned within an eight-week time frame and extended in four-week increments based on treatment team recommendations and referral source authorizations. Step-down services are available to transition families toward less restrictive services at the earliest possible opportunity.

The VRP Treatment Team, including the client, referring agency representative and parent/guardian, establish the Virtual Residential Schedule, which individualizes daily routines and integrates treatment and behavior management components. The Team also introduces the Five-Phase System, which outlines the physical, emotional, psychological, social and spiritual growth of the client.

Services Provided:
- Autism Services
- Behavioral Monitoring
- Case Management
- Community-Based Surveillance
- Drug Court
- Home Based
- In-Home Tutoring
- Network Management
- Non-Emergency Medical Transportation
- Parent Education
- Prevention Services
- School-Based Services
- Substance Abuse
- Therapeutic Foster Care
- Therapeutic Mentoring
- Violence Prevention
- Virtual Residential Programs
- Workforce Development

Service Outcomes
eGetGoing On-Line Addiction Treatment
NowClinic: Virtual House Call To Go Nationwide in 2010

A screen shot of a virtual exam
The doctor will see you now

See a doctor from anywhere by video, phone or e-mail. Plans starting as low as $49.95 per visit!

Get Started
Change in Health & Human Service Budgets & Financing Models
Confluence Of National Financial & Legislative Events Created The Current Market Dynamics

- Banking crisis
- TARP (including Parity Act)
- Recession and collapse of state budgets
- Stimulus package (ARRA)
- Health care reform legislation
- End of ARRA funds for Medicaid (January 1, 2011)
Plan To Achieve Universal Coverage in 2014

- Current Medicare and Medicaid eligibility remain the same
- Medicaid expansion
  - All adults in households of less than 133% of the federal poverty level
- Employers with 50 or more employees must provide insurance coverage or pay penalty
- Individual mandate becomes effective for those not covered
- Premium tax credit to assist with individual mandate
  - Any household income from 133% up to 400% of federal poverty level will pay a maximum health care premium equal to 2% up to 9.5% of their household income (sec. 5000A, amended sec. 1002)
  - Credits via annual tax returns for premium overcharge
- Health insurance exchanges go live
  - Design to be set up by the states with mandatory call center
  - For companies with 100 or fewer employees and individuals without adequate coverage
September 2010 Provisions of Health Care Reform Bill

- Establishes high-risk health insurance pool for uninsured because of pre-existing conditions (Sec 1101, began 90 days after enactment and ends on January 1, 2014)
- Allows uninsured, dependent, children up to the age of 26 to be covered on parents insurance (Sec. 2714; began six months after enactment)
- Requires states to maintain current income eligibility levels for CHIP through September 30, 2019. From 2015 to 2019, provides states with a 23 percentage point increase in their federal CHIP match rates, with a cap at 100% (Sec 2101)
- Small business tax credits for coverage
January 2011 Provisions of Health Care Reform Bill

- Health insurance plans no longer allowed to have annual/lifetime limits – or preexisting condition rules
- Full coverage of prevention services
- Medical loss ratio standards are set
- Bonuses to health care professionals and provider organizations for use of electronic health records
Planned Sources To Finance Health Care Reform Initiatives

- Pay-for-performance initiatives
- Enforcement of program integrity
- Efficiencies from health IT investments
- Comparative effectiveness research incorporated into program policy
- Enhanced collection of tax revenues from small businesses
- Increased taxes on households with $250,000+ in annual income

Pay-for-performance initiatives lead to enforcement of program integrity, which leads to efficiencies from health IT investments, which leads to comparative effectiveness research incorporated into program policy, which leads to enhanced collection of tax revenues from small businesses, which leads back to increased taxes on households with $250,000+ in annual income.
Likely Effects of Health Care Reform on States (& Counties)

- Estimated Medicaid enrollment increase due to health care reform
- Likely to see larger state variability – and increase in differences between states
- More managed care for Medicaid populations
- While Medicaid expansion is budget neutral to states for first years, states anticipating challenges in managing larger system
- Combination of parity and universal coverage under health care reform will move most state mental health funding to Medicaid
Strategic Implications Of Health Care Reform For Behavioral Health & Human Service System

1. More behavioral health dollars – through universal coverage with parity provisions
2. Most behavioral health dollars will flow through health plans
3. Health care reform legislation creates incentives for primary care focus and community-based care
   - Behavioral health specialists will be focused on complex/chronic cases
   - More services for consumers with complex/chronic conditions addressed in community-based settings
4. More managed care with immediate increase in carve-out financing of behavioral health – with longer-term payer plans for integration
5. Comparative effectiveness research will be ‘operationalized’
   - More focus on consumer outcomes and P4P
   - Comparative effectiveness initiatives will increase private pay market – new tech, services not ‘preferred’
   - Health plan-based financing will draw clear lines between ‘health’ services and ‘social’ services
6. More (and new) competition in behavioral health treatment space
Payer Responses to the Shifting Market
Payer Response to Budget Issues

- Reduced fees to provider organizations
- Reduced eligibility for services at state level
- Reduce coverage of services at state level
- Risk-based, pay-for-performance, and value-based purchasing initiatives (more managed care)
- Privatization and outsourcing

*This financial pressure is speeding the adoption of disruptive innovations.*
Reduced Fees To Service Delivery Organizations

- Many Medicaid plans have put across-the-board rate cuts in place
- Continuing controversy about Medicare specialist rates
- No rate increases in sight
Reduced Eligibility For Services & Coverage Of Services

- Applies to both employer-sponsored and government-sponsored health plans
- Rising coinsurance, deductibles, and copayments
- Medicaid plans continue to eliminate discretionary services from coverage
Risk-Based, Pay-For-Performance, & Value-Based Purchasing Initiatives

- CMS Value-Based Purchasing program
- New NQF measures for mental health
- Move from FFS to bundled case rates
  - ✓ Texas child welfare recommendation
  - ✓ Oregon and Nebraska DD payments
  - ✓ Pennsylvania autism case rate pilot
- Medicaid plans adding value-based purchasing initiatives
  - ✓ Texas Medicaid adding more performance incentives to BH MCO contracts
Privatization & Outsourcing

- Medicare administrative contracting moving to more competitive purchasing
- Medicaid administration
- Medicaid managed care
- Privatization of service delivery in states where states/counties provide community-based services
- Privatization of facility management
Strategic & Management Issues For Service Delivery Organizations
Spending On Behavioral Health Services in Traditional Settings is Declining As % of Overall Service Delivery

- The proportion of treatment for individuals delivered in non-traditional settings is on the rise
- These non-traditional settings include:
  - Primary care delivery locations
  - Non-psychiatric specialists’ locations
  - Disability supports and senior services system (nursing homes, assisted living, group homes, home care, etc.)
  - Child welfare and juvenile justice system
  - Adult corrections system
  - Education system
Growing Trend to Integrate Financing &/or Delivery Systems Across Service Areas

- Dual diagnosis mental health/substance abuse treatment initiatives
- Dual diagnosis mental health/developmental disabilities service initiatives
- Multiple chronic disease management programs
- Mental health in health care initiatives (HMOs, FQHCs, public health initiatives, etc.)
- Mental health in social services (child welfare, disability support service, corrections, etc.)
Emerging Market Model for Behavioral Health (& Other Specialist) Provider Organizations

Location-Based Services
- Destination Specialty Services
- One-Stop Health Service Shopping

Location-Independent Services
- Mobile, Home-Based, & Community Care Services
- E-Health & Remote Services
## Emerging Market Model for Supports for Consumers That Include Residential Arrangements (Child Welfare, DD, Elder Care)

<table>
<thead>
<tr>
<th>Tech-Enabled Medical Home For Consumers</th>
<th>Tech-Enabled Supports Expand Community-Based Delivery Systems</th>
<th>Shift in Residential Arrangements</th>
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</thead>
</table>
| • Facilitated by PHR, RHIO, HIE, medical home, and/or specialty primary care practice | • On-line ("smart home") and in-home services and supports for consumer and their families  
• On-line in-home services and supports for community living arrangements  
• Mobile supports for case workers | • More consumers at ‘home’ with emerging use of community living arrangements, supported housing, and assisted living models  
• Decreased use of group homes, nursing homes, and residential services |
The Shifting Market Power of Specialists

- Market power shift underway
  - The degree of influence that an organization has over another organization
  - The ability of a seller to raise prices without losing business
- The market power and market position of specialists is shifting “downward” in current structure
- Due to disruptive innovation in market
- Key for provider organizations is understanding of competitive advantage of specialists in new market – will always need specialists, but role is shifting
“Specialist” Provider Organization Management Challenges

1. Redefining “demand” for specialty care in current (and future) environment
2. Managing unit costs in era of rate freezes and declines
3. Increased demand for charitable care – by consumer type and by service type
4. Competition for ‘profitable’ consumer care segments
5. Investments in new services
6. Marketing and business development investments
7. Maintaining competitive advantage in face of new technology, rules-based treatment options, industry consolidation, and health care reform
For Non-Profit Organizations, Growing Scrutiny Of Tax-Exempt Status

- Government entities, feeling fiscal pressure for more tax revenues, are beginning to question the tax exempt status of charities
- Local government challenges of property tax exemptions increasingly common
- State governments are starting to challenge tax exemptions
- At the federal level, regulators and legislators have begun to question the tax-exempt status of non-profit health and human service organizations based on minimal service provision to the uninsured
Mastering Disruptive Innovations Key To Competitive Advantage In “New Normal”

- **Bargaining Power of Customers**
  - Payer purchasing policy
  - Financing models
  - Consumer choice and access

- **Threat of New Market Entrants**
  - Primary care
  - Urgent care clients
  - Home care providers

- **Bargaining Power of Suppliers**
  - Labor
  - Proprietary knowledge systems
  - Cost of new technologies

- **Threat of Substitute Products**
  - Neurotech, biotech, and pharma
  - On-line service providers
  - Rules-based ‘automated’ service delivery models
  - Consumer “self-service” tools

**Future Competitive Advantage**
Successful Organizational Response to Chaotic Market & Disruptive Innovation Requires a Scenario-Based Market Oriented Strategy

- Most organizations need to move forward with strategy implementation without “final” information
- Most practical option is concurrent scenario building and planning – with a resulting structured plan for organizational investment
Scenario-Based Planning Process

Build scenarios of likely future situations and high-level implementation plans for each

Determine the “common elements” in the scenario implementation plans

When building the operational implementation plan, implement the “common elements to all scenarios” first

Monitor market intelligence to update scenarios and action plans

Continuously update both the scenarios and the implementation plans based on new market intelligence
Common Planning Scenarios For Organizations in Behavioral Health Market Space

- Elimination of ‘Safety Net’ Funding For Uninsured
- Decrease of Fee-For-Service Rates
- Medicaid or Medicare Coverage of SPMI Population Moved To Managed Care or ACOs
- Expanding Role of Urgent Care Clinics in Community
- Payers Increase Coverage of E-Health Services & Remote Monitoring
- Increasing Proportion of Behavioral Health Expenditures Paid By Individuals
- Mandatory Adoption of EBP Via Comparative Effectiveness Research
- Service Provider Organizations Moved To Case Rate Contracting or P4P
- Widespread Adoption of New Neurotech (Scans, Avatars, Cognitive Retraining, Etc.)
## Transforming Organizations in the Emerging Market

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<tr>
<th>Traditional</th>
<th>“The New Normal”</th>
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<tr>
<td>Inwardly and historically focused</td>
<td>External market orientation</td>
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<tr>
<td>Slow to plan and make decisions</td>
<td>Quick to plan and make decisions</td>
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<tr>
<td>Risk averse</td>
<td>Risk tolerant</td>
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<tr>
<td>Few performance info systems</td>
<td>Widespread real-time performance measurement</td>
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<tr>
<td>Performance data to execs</td>
<td>Performance data to all staff</td>
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<tr>
<td>Compensation based on process and tenure</td>
<td>Compensation based on results</td>
</tr>
<tr>
<td>Centralized control</td>
<td>Decentralized empowerment</td>
</tr>
<tr>
<td>Bureaucratic and multi-level</td>
<td>Non-bureaucratic with few levels of management</td>
</tr>
<tr>
<td>Management training to senior staff only</td>
<td>Widespread staff management training</td>
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The market intelligence to navigate.
The management expertise to succeed.

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