Value-Based Mental Health Care Delivery

Professor Michael E. Porter
Harvard Business School
Institute for Strategy and Competitiveness
www.isc.hbs.edu

February 29, 2012
Redefining Health Care Delivery

• The overarching goal in health care is **value for patients**, not access, cost containment, convenience, or customer service
• Value is the only goal that can unite the interests of all system participants

\[
\text{Value} = \frac{\text{Health outcomes}}{\text{Costs of delivering the outcomes}}
\]

– Outcomes are the health results that matter for a patient’s condition over the care cycle
– Costs are the total costs of care for a patient’s condition over the care cycle

• How to design a health care delivery system that dramatically improves patient value
Creating a Value-Based Health Care Delivery System

The Strategic Agenda

1. Organise Care into *Integrated Practice Units (IPUs)* around Patient Medical Conditions
   - Organise primary and preventive care to serve *distinct patient segments*

2. Measure *Outcomes* and *Cost* for Every Patient

3. Reimburse through *Bundled Prices* for Care Cycles

4. Integrate Care Delivery Across *Separate Facilities*

5. Expand *Areas of Excellence* Across Geography

6. Build an Enabling *Information Technology Platform*
Three Myths in Mental Health Care Delivery

1. Mental illness is different than physical illness and therefore should be cared for separately.

2. Outcomes for mental health care are too variable and subjective to measure performance.

3. Mental health care should be reimbursed separately to control costs.
Three Myths in Mental Health Care Delivery

1. Mental illness is different than physical illness and therefore should be cared for separately
   - Mental health and physical health are inextricably linked
   - Care for physical and mental illness should be organized around the patient’s needs, with integration of physical and mental health providers
Organizing and Integrating Mental and Physical Health

1. Create IPUs for care of **acute or complex mental health conditions**

2. Integrate **physical health care** into mental condition IPUs

3. Integrate **mental health care** into care for physical conditions

4. Integrate care of **common mental health conditions** into primary care
Organizing Care for Acute or Complex Mental Health Conditions

• E.g., severe forms of depression, bipolar disorder, eating disorders, schizophrenia, etc.

• Care for patients with acute or complex mental health needs should be delivered in **condition-specific IPUs**

• Care should be delivered by a **dedicated, multidisciplinary team** led by specialized mental health providers

• Mental health IPUs should work with primary care providers to **coordinate patient referrals** and delineate responsibility for **long-term management**

• Aggregating acute or complex mental health care into high volume centres of excellence will dramatically **improve outcomes, increase efficiency**, and **reduce excess capacity**
# Care for Acute or Complex Mental Health Conditions

**Schön Klinik Roseneck: Eating Disorders Care**

<table>
<thead>
<tr>
<th>Dedicated to Eating Disorders</th>
<th>Shared with other Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MDs and PhDs</strong></td>
<td><strong>Skilled Staff</strong></td>
</tr>
<tr>
<td>- 6 Chief Psychiatrists</td>
<td>- 4 Social Workers</td>
</tr>
<tr>
<td>- 6 Attending Psychiatrists</td>
<td>- 4 Physical Therapists</td>
</tr>
<tr>
<td>- 12 Staff Psychiatrists</td>
<td>- 9 Exercise Physiologists</td>
</tr>
<tr>
<td>- 24 Psychologists</td>
<td>- 7 Art therapists</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Skilled Staff</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>- 18 Nurses</td>
<td></td>
</tr>
<tr>
<td>- 2 Nutritionists</td>
<td></td>
</tr>
<tr>
<td>- 3 Dieticians</td>
<td></td>
</tr>
</tbody>
</table>
Integrating Physical Health into Mental Health IPUs

- In severe or complex mental health conditions, physical complications are common.
- Mental health IPUs should incorporate the relevant physical health clinicians who treat common complications of mental illness to build experience and expertise in those areas.
### Integrating Physical Health into Mental Health IPUs
Schön Klinik Roseneck: Eating Disorders Care

#### Dedicated to Eating Disorders

**MDs and PhDs**
- 6 Chief Psychiatrists
- 6 Attending Psychiatrists
- 12 Staff Psychiatrists
- 24 Psychologists
- 1 Chief Internist

**Skilled Staff**
- 18 Nurses
- 2 Nutritionists
- 3 Dieticians

#### Shared with other Conditions

**MDs – on call**
- 1 Neurologist
- 2 Internists
- 1 Physical Medicine Specialist

**MDs – rotate through one day per week**
- 1 Dermatologist
- 1 Orthopedist
- 1 Ear/nose/throat Specialist
- 1 Pain Specialist

**Skilled Staff**
- 4 Social Workers
- 4 Physical Therapists
- 9 Exercise Physiologists
- 7 Art therapists
Integrating Mental Health into Physical Health IPUs

- More than a quarter of adults with physical health problems also suffer from mental illness
  - E.g., depression is 2 to 3 times more common following a heart attack or stroke and leads to worse clinical outcomes
- The mental health challenges of acute or complex specialty care are often related to the medical condition being treated
  - E.g., head and neck cancer patients often develop depression due to facial disfigurement after surgery
- Physical health IPUs should include dedicated mental health providers who understand the mental health needs of the patients they treat, detect developing mental illness, and intervene early
  - Social workers or other mid-level providers can occupy such roles, referring out complex cases to psychologists or psychiatrists
### Integrating Mental Health into Physical Health IPUs
#### MD Anderson Head and Neck Center

<table>
<thead>
<tr>
<th>Dedicated</th>
<th>Shared</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Center Management Team</strong></td>
<td><strong>Shared MDs</strong></td>
</tr>
<tr>
<td>- 1 Center Medical Director (MD)</td>
<td>- Endocrinologists</td>
</tr>
<tr>
<td>- 2 Associate Medical Directors (MD)</td>
<td>- Other specialists as needed</td>
</tr>
<tr>
<td>- 1 Center Administrative Director (RN)</td>
<td>(cardiologists, plastic surgeons, etc.)</td>
</tr>
<tr>
<td><strong>Dedicated MDs</strong></td>
<td>- Psychiatrists</td>
</tr>
<tr>
<td>- 8 Medical Oncologists</td>
<td></td>
</tr>
<tr>
<td>- 12 Surgical Oncologists</td>
<td><strong>Skilled Staff</strong></td>
</tr>
<tr>
<td>- 8 Radiation Oncologists</td>
<td>- Dietician</td>
</tr>
<tr>
<td>- 5 Dentists</td>
<td>- Inpatient Nutritionists</td>
</tr>
<tr>
<td>- 1 Diagnostic Radiologist</td>
<td>- Radiation Nutritionists</td>
</tr>
<tr>
<td>- 1 Pathologist</td>
<td>- Smoking Cessation Counselors</td>
</tr>
<tr>
<td>- 4 Ophthalmologists</td>
<td><strong>Skilled Staff</strong></td>
</tr>
</tbody>
</table>

| Skilled Staff | |
|---------------||
| - 22 Nurses (including Triage Nurses) | |
| - 3 Social Workers | |
| - 4 Speech Pathologists | |
| - 1 Nutritionist | |
| - 1 Patient Advocate | |

Integrating Mental Health into Primary Care

- Mental illness is common, yet underrecognised and undertreated
  - 25% of primary care patients have depression or anxiety
  - Primary care providers recognise only half of all mental illnesses
  - Among patients with recognised illness, only half are offered medication
- Patients with mental illness frequently present to primary care with physical health symptoms (e.g., fatigue, insomnia, palpitations)
- Primary care providers, focusing on physical ailments, can overlook underlying psychological causes
- Incorporating mental health clinicians into primary care will improve patient value
Integrating Mental Health Care into Primary Care
Cherokee Health Systems, Tennessee

Source: Center City Exam Pod Layout, 2010
Three Myths in Mental Health Care Delivery

1. Mental illness is different than physical illness and therefore should be cared for separately
   - Mental health and physical health are inextricably linked
   - Care for physical and mental illness should be organized around the patient’s needs, with integration of physical and mental health providers

2. Outcomes for mental health care are too variable and subjective to measure performance
   - Outcomes measurement is even more important in mental health, where little is known about the effectiveness of certain care models and treatment approaches
   - Outcomes measurement is essential in shifting from paying for volume to paying for value
Measuring Outcomes for Acute or Complex Mental Health Conditions

Eating Disorders

- Survival

Degree of recovery / health

- Body Mass Index (weight-to-height ratio)
- Eating disorder severity (E.g., SIAB-S, EDI-2)
- Depression severity (E.g., PHQ-9, BDI)
- General mental health status (E.g., GSI-BSI)

Time to recovery or return to normal activities

- Time to diagnosis and treatment
- Length of stay (days)
- Time to symptom improvement, therapeutic success, and wellbeing
- Time to return to school/work

Disutility of care or treatment process (e.g., treatment-related discomfort, complications, adverse effects, diagnostic errors, treatment errors)

- Prevalence of refeeding syndrome
- Readmissions
- Prevalence of disengagement with therapy

Sustainability of recovery or health over time

- Maintenance of BMI

Long-term consequences of therapy (e.g., care-induced illnesses)

- Infertility
- Premature osteoporosis
- Self-harm behavior e.g., cutting, suicide attempt
Measuring Outcomes for Acute or Complex Mental Health Conditions

Eating Disorders

- Survival

- Body Mass Index (weight-to-height ratio)
  - Eating disorder severity (E.g., SIAB-S, EDI-2)
  - Depression severity (E.g., PHQ-9, BDI)
  - General mental health status (E.g., GSI-BSI)

- Time to diagnosis and treatment
- Length of stay (days)
- Time to symptom improvement, therapeutic success, and wellbeing
- Time to return to school/work

- Prevalence of refeeding syndrome
  - Readmissions
  - Prevalence of disengagement with therapy

- Maintenance of BMI

- Infertility
- Premature osteoporosis
- Self-harm behavior (e.g., cutting, suicide attempt)

- Time to return to normal activities
- Long-term consequences of therapy (e.g., care-induced illnesses)

- Degree of recovery / health

- Survival
Measuring Outcomes for Acute or Complex Physical Conditions
Head and Neck Cancer

1. **Survival**
   - Survival
   - Cancer free survival

2. **Degree of recovery / health**
   - Achieved remission
   - Ability to speak
   - Ability to eat normally
   - Maintenance of facial appearance

3. **Time to recovery or return to normal activities**
   - Time to remission
   - Time to completion of treatment plan

4. **Disutility of care or treatment process**
   - Nosocomial infection
   - Nausea/Vomiting
   - Fatigue
   - Febrile neutropenia
   - Thrombocytopenia
   - Radiation dermatitis
   - Anxiety
   - Depression
   - Pain
   - Loss of speech
   - Need for feeding tube
   - Unnecessary facial disfigurement

5. **Sustainability of recovery or health over time**
   - Cancer recurrence
   - Sustainability of functional status

6. **Long-term consequences of therapy (e.g., care-induced illnesses)**
   - Secondary cancer related to radiation exposure
   - Premature osteoporosis
   - Permanent facial disfigurement
   - Dysphagia
   - Lymphoma
   - Long-term depression due to treatment
   - Hormone imbalance/replacement dependence
Three Myths in Mental Health Care Delivery

1. Mental illness is different than physical illness and should be cared for separately
   - Mental health and physical health are inextricably linked
   - Care for physical and mental illness should be organized around the patient’s needs, with integration of physical and mental health providers

2. Outcomes for mental health care are too variable and subjective to measure performance
   - Outcomes measurement is even more important in mental health, where little is known about the effectiveness of certain care models and treatment approaches
   - Outcomes measurement is essential in shifting from paying for volume to paying for value

3. Mental health care should be reimbursed separately to control costs
   - Bundling payments around medical conditions or primary care patient segments will encourage integration of physical and mental health providers and hasten the adoption of outcomes reporting
Bundled Reimbursement for Mental Health Care

Depression Care at Schön Klinik

- In 2009, Schon Klinik negotiated a bundled price for inpatient depression care
  - Payment depended solely on the outcomes achieved, not the length of stay or services provided
  - Early results showed improved outcomes and shorter lengths of stay

<table>
<thead>
<tr>
<th>Patients under bundled payment</th>
<th>All Schön Klinik depression patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of patients</td>
<td>60</td>
</tr>
<tr>
<td>PHQ depression effect size</td>
<td>1.57</td>
</tr>
<tr>
<td>BDI-II effect size</td>
<td>1.53</td>
</tr>
<tr>
<td>BSI-GSI effect size</td>
<td>1.5</td>
</tr>
<tr>
<td>Average length of stay (days)</td>
<td>40.8</td>
</tr>
</tbody>
</table>

- In 2011, Schön extended the bundle to cover pre- and post-admission outpatient care

- Schön became the single point of contact for newly-diagnosed depression patients, coordinating a network of hospitals, step-down units, and outpatient psychotherapists
Three Myths in Mental Health Care Delivery: Opportunities for London and the U.K.

1. Organize Care into Integrated Practice Units (IPUs) Around Patient Medical Conditions
   - Move to physical and mental health care integration

2. Measure Outcomes and Cost for Every Patient
   - Develop multidimensional, patient-centered outcome measures specific for each condition or patient segment
   - Create a framework of mental health outcome registries
   - Tie reimbursement to universal outcome measurement and reporting

3. Reimburse through Bundled Prices for Care Cycles
   - Develop new packaged reimbursement options for mental illnesses, promoting the integration of physical and mental health care