Telemedicine Tackles Mental Health Treatment

Dignity Health Telemedicine Network
Your Direct Connection to Specialized Care

Jim Roxburgh, RN, MPA
Director, Dignity Health Telemedicine Network

Deborah Wedick, RN, CNRN
Manager, Telehealth Services
Dignity Health
Mercy Medical Center Redding/NSSA
CONFLICT of INTEREST

Jim Roxburgh, Deborah Wedick and Dignity Health have reported no relevant financial interest/relationship with any commercial entities that may have ties to this presentation.
OBJECTIVES

• Provide an overview of the DHTN
• Detail aspects of telemental health workflow
• Identify the clinical and financial benefits of a telemental health program
• Detail the success of the Mercy Medical Center Redding Telemental Health program
Your Direct Connection to Specialized Care

Overview

Dignity Health
DHTN PROGRAM GOAL

Provide timely access to high quality specialized healthcare services that are not readily available.
DHTN 计划目标

让人及时获得难以获得的高品质专业健康护理服务
DHTN  The Facts...

- The Mercy Telehealth Network
  Founded (2008)
- Recognized as the Dignity Health Telemedicine Network (2014)
- 80 End Points
- 52 Specialists
- 11 Different Services
- 48 Partner Sites
- 22,401 TOTAL Consults (last 12 months ending March 2016)
# DHTN Services

## ACUTE
- Stroke/Neurology
- Mental Health
- Critical Care
- Nephrology
- Pediatrics
- Newborn Care
- Cardiology
- Infectious Disease

## CLINIC/SNF
- Geriatrics
- Neurology
- Endocrinology
- Pulmonology
- Thoracic Surgery
- Oncology

## TRANSITIONAL
- CHF
- COPD
- Diabetes
- Post Surgery
- Wound Care

## HOME
- CHF
- COPD
- Diabetes
- Post Surgery
- Wound Care

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**Continuum of Care**

- ED
- EMS
- HOME
- ICU
- CLINIC
- SNF

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*Image: Dignity Health Telemedicine Network*
CHECKLISTS

Partner Site → Transfer Center → DHTN Team → DHTN Physician
Telemental Health
Telemental Health

21 Sites

8,437 Consults

3 Minute Response

12 Months

(Ending March 2016)
Workflow
TELEMENTAL HEALTH WORKFLOW

ED BEHAVIORAL HEALTH ADMISSION

ALL BEHAVIORAL HEALTH PATIENTS

Delay...
TELEMENTAL HEALTH WORKFLOW

ED BEHAVIORAL HEALTH ADMISSION

- Mild Risk
- Moderate Risk
- Severe Risk
TELEMENTAL HEALTH ED WORKFLOW

ROUND & RESPOND

Telepsychiatrist **ROUNDS** at predetermined times am/pm

Telepsychiatrist **RESPONDS** to Partner Site requests 24/7
### Mental Health Evaluation Timeline

**Patient Name:**

**Age:**

**Date:**

**Hospitals:**

**If yes, what?**

**Past Psych History:**

**Level of Education**

**Occupation/Retail:**

---

### Labs not available

<table>
<thead>
<tr>
<th>Test</th>
<th>CBC</th>
<th>CMP</th>
</tr>
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<tbody>
<tr>
<td>WBC</td>
<td>Hgb</td>
<td>CRP</td>
</tr>
<tr>
<td>RBC</td>
<td>MCH</td>
<td>MCHC</td>
</tr>
<tr>
<td>MCV</td>
<td>MCH</td>
<td>PLT</td>
</tr>
<tr>
<td>ALP</td>
<td>AST</td>
<td>ALT</td>
</tr>
<tr>
<td>TAST</td>
<td>AST</td>
<td>ALT</td>
</tr>
</tbody>
</table>

---

### Other Labs

**RNA**

**Drug Screen**

---

### Patient Flow

<table>
<thead>
<tr>
<th>Door</th>
<th>Treatment</th>
<th>Discharge</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 min</td>
<td>≤15 min</td>
<td>≤60 min</td>
</tr>
<tr>
<td>≤30 min</td>
<td>≤90 min</td>
<td>≤120 min</td>
</tr>
<tr>
<td>≤60 min</td>
<td>≤120 min</td>
<td>≤4 hrs</td>
</tr>
<tr>
<td>≤90 min</td>
<td>≤4 hrs</td>
<td>≤24 hrs</td>
</tr>
</tbody>
</table>

---

**Goal**

**Actual**

**Difference**

**Comments**
## Dignity Health Stroke Timeline Report

**Patient Name:**

**MRN:**

**Date of Birth:**

**Hospital:**

**Onset Time:**

**Age:**

---

### Timeline:

<table>
<thead>
<tr>
<th>Step</th>
<th>Time Limit</th>
<th>Time Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suspected stroke patient arrives at ED</td>
<td>0 min</td>
<td>11:26 PST</td>
</tr>
<tr>
<td>Initiate ED Rapid Medical Assessment (RMA) including patient history, last known well/time of symptom onset, NIHSS and order CT and lab work</td>
<td>≤10 min</td>
<td>11:36 PST</td>
</tr>
<tr>
<td>Notify Stroke Team (including neurologic expertise)</td>
<td>≤15 min</td>
<td>11:41 PST</td>
</tr>
<tr>
<td>Initiate CT scan</td>
<td>≤25 min</td>
<td>11:51 PST</td>
</tr>
<tr>
<td>Interpret CT scan and labs; review patient eligibility for Activase</td>
<td>≤45 min</td>
<td>12:11 PST</td>
</tr>
<tr>
<td>Activase (tPA) recommended</td>
<td>≤45 min</td>
<td>12:11 PST</td>
</tr>
<tr>
<td>Review patient eligibility for Endovascular Reperfusion Therapy (Intraarterial Thrombolysis)</td>
<td>60 min</td>
<td>12:26 PST</td>
</tr>
<tr>
<td>Give Activase bolus and initiate infusion in eligible patients</td>
<td>≤60 min</td>
<td>12:26 PST</td>
</tr>
</tbody>
</table>

### Goal Time:

- Feb 13 2016 11:26 PST
- Feb 13 2016 11:36 PST
- Feb 13 2016 11:41 PST
- Feb 13 2016 11:51 PST
- Feb 13 2016 12:11 PST
- Feb 13 2016 12:11 PST
- Feb 13 2016 12:26 PST
- Feb 13 2016 12:26 PST

### Actual Time:

- Feb 13 2016 11:26 PST
- Feb 13 2016 11:30 PST
- Feb 13 2016 11:31 PST
- Feb 13 2016 11:45 PST
- Feb 13 2016 11:53 PST
- Feb 13 2016 11:45 PST
- Feb 13 2016 11:40 PST
- Feb 13 2016 12:01 PST

### Difference:

- 0 min
- -6 min
- -10 min
- -6 min
- -18 min
- -26 min
- -46 min
- -25 min

### Comments:
### Mental Health Evaluation Timeline

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 min</td>
<td>Patient Arrives to the ED</td>
<td></td>
</tr>
<tr>
<td></td>
<td>RN Triage</td>
<td>Chief complaint, initial safety plan, immediate bedding.</td>
</tr>
<tr>
<td>≤15 min</td>
<td>ED Physician Completes Order</td>
<td>Med (SMART) clearance, Telemental health consult requested, Psychiatric stratification: - Mild (Green), - Moderate (Yellow), - Severe (Red)</td>
</tr>
<tr>
<td>≤30 min</td>
<td>RN Completes Initial Assessment</td>
<td>Review demographics, Medication reconciliation, Patient registration</td>
</tr>
<tr>
<td>≤60 min</td>
<td>Telepsychiatrist Consult</td>
<td>Recommendations provided to ED physician</td>
</tr>
<tr>
<td>≤90 min</td>
<td>RN/LCSW Activate Treatment Plan</td>
<td>Discharge, Transfer, Observe</td>
</tr>
<tr>
<td>≤120 min</td>
<td>RN/LCSW Initiates “TEAM” Assessment</td>
<td></td>
</tr>
<tr>
<td>≤4 hrs</td>
<td>Follow-up Assessment (if appropriate)</td>
<td></td>
</tr>
<tr>
<td>≤24 hrs</td>
<td>Total Length of Stay</td>
<td></td>
</tr>
</tbody>
</table>

**Goal**

**Actual**

**Difference**

**Comments:**
Indications for Telemental Health Consults
(When to Call)

1. Substance abuse – intoxication, requests detox or rehabilitation center, drug seeking behavior
2. Psychosis – hallucinations, delusions, paranoid, bizarre behaviors, psychosis related agitation
3. Anxiety - anxiety attack, nervousness, restless, irritable, edgy, medication refill
4. Mood – depressed, sad, manic, euphoric, labile, pressured speech
5. Cognitive – confused, memory loss, dementia related agitation, dementia pt with chronic issues that will affect safe discharge
6. Organic – head injury, seizure activity, hyponatremia, delirium-related agitation
7. Other – rape, learning disability, childhood developmental disability (mental retardation or autism)
8. Personality – interpersonal difficulties, domestic violence, molestation
TELEMENTAL HEALTH CHECKLIST

- Provide the following to the Telepsychiatrist
  - Patient Name
  - Clinical Presentation/Hx
  - Vital Signs/Labs (as appropriate and/or needed)
  - Chief Complaint and/or requested needs of facility (legal eval/meds/etc...)
  - Current Medications and Allergies
  - Behaviors or language observed
  - Collateral information obtained and documented from family or guardian
  - If patient has a 5150 or 1799 be prepared to read it to Telepsychiatrist
  - Be prepared to inform the Telepsychiatrist who will be giving and receiving report
Prior to Consultation-
- Robot is placed at the foot of the bed or where most appropriate
- Telepsychiatrist Beams in for consultation
- TelePsychiatrist will make recommendations in Clinical Apps, and they will be faxed to ED or sent to the EMR (for Cerner Sites only)

TelePsychiatrist recommendations will be used by ED Physician to manage disposition
- Social Work or RN to Coordinate DC
- DC Home or other facility
- DC to Psychiatric Facility
- Crisis Observation and Re-Evaluate
TELEMENTAL HEALTH ED WORKFLOW

Door to RMA < 30 minutes

ED Physician Triages Behavioral Health Patient

MILD

MODERATE

SEVERE
TELEMENTAL HEALTH ED WORKFLOW

- ED Physician directs patient disposition or TMH requests consult
- Call DHTC @ 1(888) 637-2941
- Consent patient
- DHTC pages Telepsychiatrist on call - Request to Call Back Time < 5 min.
- DHTC “patches” Telepsychiatrist to Partner Site Physician via phone
- Telepsychiatrist beams in - Request to Beam in Time < 60 minutes
- Telepsychiatrist provides recommendations to Partner Site Physician
- Telepsychiatrist completes/signs consult note < 90 minutes
**Mild Risk**
- No danger to self or others
- No acute distress
- No behavioral disturbance

**Moderate Risk**
- Moderate distress
- Moderate behavioral disturbances, severe distress

**Severe Risk**
- Probable risk of danger to self or others
- **OR**
- Definite danger to self or others
**PLAN**

**Mild Risk**
- Stabilize/Discharge
- Determine social work need for DC
- Follow-up or no follow-up required
- Medication needs
- Education and/or safety plan

**Moderate Risk**
- Telepsych consult
- Med management
- Safety needs
- DC plan
- Re-evaluation plan

**Severe Risk**
- Transfer to inpatient facility
- Address immediate needs
- Safety & Medications
- Consider Telepsych consult
- Admission Packet submitted (5150/labs/ insurance verified/ Med clearance/Psych Evaluation & notes)
- Q4 hour follow-up with DHTC
# Mental Health Evaluation Timeline

**Originating Physician:** Dr. Jones  
**Psychiatrist:** Dr. Uddin  
**Originating Time:** 1300

**Patient Name:** Doe, John  
**Age:** 42  
**Date:** 5/1/16  
**Hospital:** Dominican Hospital

## Timeline:

**Door**
- **0 min**:
  - Patient Arrives to the ED: 1200
  - RN Triage: Initial safety plan, Immediate bedding

**Treatment**
- **≤ 15 min**:
  - ED Physician Completes Order: Med (SMART) clearance, consult, psychiatric stratification
- **≤ 30 min**:
  - RN Completes Initial Assessment: Review demographics, medication reconciliation, Patient registration
- **≤ 60 min**:
  - Telepsychiatrist Consult: Recommendations provided to ED physician
- **≤ 90 min**:
  - RN/LCSW Activate Treatment Plan
  - Discharge
  - Transfer
  - Observe

**Discharge**
- **≤ 120 min**:
  - RN/LCSW Initiates “TEAM” Assessment
- **≤ 4 hrs**:
  - Follow-up Assessment (if appropriate)
- **≤ 24 hrs**:
  - Total Length of Stay: 21 Hrs

<table>
<thead>
<tr>
<th>Goal</th>
<th>1215</th>
<th>1230</th>
<th>1300</th>
<th>1330</th>
<th>1400</th>
<th>1600</th>
<th>1200 5/2/16</th>
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</thead>
<tbody>
<tr>
<td>Actual</td>
<td>1208</td>
<td>1235</td>
<td>1255</td>
<td>1325</td>
<td>1700</td>
<td>1745</td>
<td>0900 5/2/16</td>
</tr>
<tr>
<td>Difference</td>
<td>-7</td>
<td>+5</td>
<td>-5</td>
<td>-5</td>
<td>+120</td>
<td>+105</td>
<td>-3 Hrs</td>
</tr>
</tbody>
</table>

**Comments:**
- ED MD busy with Stroke Alert
- Stratification: Moderate
- Dr. Katz at Bedside
- Call to consult: 25 min
- Pt refused medication
- Treatment needed
- SW/RN/MD Plan: Follow Med plan, Observe and Re-eval in AM
- Pt Cleared
- DC home with Out-Pt Follow up

*Dignity Health Telemedicine Network*
<table>
<thead>
<tr>
<th><strong>Telemental Health Scorecard</strong></th>
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<tbody>
<tr>
<td>Telemental Health Consult Volume</td>
</tr>
<tr>
<td>Request to consult (target &lt; 60 min)</td>
</tr>
<tr>
<td>Sitter Hours</td>
</tr>
<tr>
<td>Crisis Team Cost</td>
</tr>
<tr>
<td>Patient Disposition</td>
</tr>
<tr>
<td>LOS ($140 savings per hour of bed time saved)</td>
</tr>
</tbody>
</table>
The Impact of Psychiatric Patient Boarding in Emergency Departments

B. A. Nicks and D. M. Manthey

Department of Emergency Medicine, Wake Forest University Health Sciences, Winston-Salem, NC 27157, USA

Correspondence should be addressed to B. A. Nicks, bnicks@wakehealth.edu

Received 28 January 2012; Revised 5 June 2012; Accepted 5 June 2012

The financial impact of psychiatric boarding accounted for a direct loss of ($1,198) compared to non-psychiatric admissions. Factoring the loss of bed turnover for waiting patients and opportunity cost due to loss of those patients, psychiatric patient boarding cost the department $2,264 per patient. Conclusions. Psychiatric patients awaiting inpatient placement remain in the ED 3.2 times longer than non-psychiatric patients, preventing 2.2 bed turnovers (additional patients) per psychiatric patient, and decreasing financial revenue.
FINANCIAL IMPACT

- Annual ED Visits = 30,000
- Estimated Mental Health Related Visits 3% = 900
  - Approx $2,200
- Annual Cost Mental Health Visit = $1,980,000
- Annual Reimbursement Mental Health Visit = $675,000
  - Approx $750

Total annual loss = $1,305,000
**Background** - October 2015, “Partner” Hospital’s ED averaged 181 patients visits per day. Average length of stay for Behavioral Health patients was 35.77 hours.

**Initiative Goals:**
- Implemented the “first four-hour” timeline
- Fully leverage Telemental Health capabilities
- January 2016, “Partner” Hospital’s ED averaged 198 patients visits per day. *Average length of stay for Behavioral Health patients dropped from 35.77 hours in October to 25.22 hours.*
- February 2016, “Partner” Hospital’s ED averaged 208 patient visits per day. *Average length of stay for Behavioral Health patients dropped further to 21.06 hours.*
- $272,200 cost avoidance
Joint Commission Standards

- **Patient flow through the emergency department**
- **Requirements**
  - *Standards LD.04.03.11 and PC.01.01.01 are revised standards that address an increased focus on the importance of patient flow in hospitals.*
  
- **EP 6.** This element of performance went into effect January 1, 2014: The hospital measures and sets goals for mitigating and managing the boarding of patients who come through the emergency department.

- **Note:** Boarding is the practice of holding patients in the emergency department or another temporary location after the decision to admit or transfer has been made. The hospital should set its goals with attention to patient acuity and best practice; it is recommended that boarding time frames not exceed 4 hours in the interest of patient safety and quality of care.
TELEMENTAL HEALTH
DISPOSITION OPTIONS

HOME
Opportunity

NAVIGATE TO CLINIC
FQHC opportunity

PSYCHIATRIC FACILITY
BARRIERS
WHY
Because

EVERY

Patient Matters
Dignity Health Telemedicine Network

Your Direct Connection to Specialized Care

Mercy Medical Center Redding
A Success Story
Telepsychiatry-
A Journey of Challenge and Change- Mercy
Medical Center Redding

Deb Wedick RN, CNRN
Manager Telehealth NSSA
April 14, 2016
North State Service Area overview.

QUICK FACTS
Hospitals: ......................... 3
Outpatient Locations: ...... 19
Inpatient Encounters in PSA (2014): ........ 53.2%

The sole provider of many health care services (neonatal ICU, obstetrics, oncology, pediatrics, palliative care, and home health and hospice).

The only Level II trauma center in a geographic area that comprises roughly 25% of California.

LEGEND
= Rural Clinic
= Ambulatory Services
= Hospital
= Medical Groups
North State Service Area Dynamics

Our Performance
- Adjusted Admissions 16,890
- FY15 Operating EBITDA $66,850M
- Increase in Employee Engagement 4.7 points

The largest increase in Dignity Health.

Competitive Landscape
- PSA Inpatient Encounters:
  - MMCR: 47.9%
  - SECH: 32.4%
  - MMCMS: 58.0%
- Competition:
  - SRMC Medical Group
  - Adventist Health in Corning
  - Sutter/Apogee Surgery Center

Demographics
Projecting Population Increase: < 1% over next 3 years

- Median HH Income: $44,396
- Unemployment Rate: 11%
- Adults Age 65+: 19.42% of population

Dignity Health, County and City governments are the largest employers in the service area. The percentage of adults over 65 is 50% higher than the California average of 12.9%.

Payer Landscape:
Fee-for-service for all service except Partnership Health Primary Care Cap.
- Commercial: 17.9% (0.3%) ▼
- Medi-Cal: 29.8% (3.9%) ▲
- Self Pay: 2.1% (1.9%) ▼
Mercy Medical Center Redding - Dignity Health

- 260 beds - Level II Trauma Center, Level III Nursery
  - 57,000 ED visits FY 2015
    - Regional service area for > 22% of California geography.
      - Primary Stroke Center with Interventional capabilities July 2016
        - 8 bed Neuro Intensive Care Unit (virtual) July 2016
  - Early adopter of DHTN services.
    First services – Telestroke, January 2012
    Service Line Growth 2012-2014 30%
    50% Market Share per FY 2014 data
Project Goals: Year One

1. Decreased LOS for Behavioral Health patients.
2. Increased throughput in ED.
3. Increased Provider satisfaction with psychiatric management of anti-psychotic medications.
Telepsychiatry has a smooth adoption by the ED staff. Use is inconsistent at times, but rapidly accepted as a resource. DHTN provides an expert service line manager who participates in developmental activities and data sharing.

July –December, 2014- The Honeymoon
Reality Starts to Dawn – January-June 2015

The Telemental Health Program is working well:

- Consults 100% on time.
- All Quality Metrics for clinical evaluations are met.
- Used on all but mild cases- inpatient adoption initiated.
- Physician relationships are excellent- staff approval all around

BUT LENGTH OF STAY AND ED TIMES HAVE SKYROCKETED...... WHAT’S WRONG?
If you have seen one county- you have seen one county.

- Shortages of Behavioral Health Workers Delay Hold evaluations >72 hours
  - Patient and Community agitation over conditions
  - IP placement at glacial speeds due to bed shortages- insurance issues
  - No designated responsibility for Hospital- County conditions
  - No ownership of granular ED data and tracking- all anecdotal
Finger pointing by most participants in the community’s service providers.

Local media focus on lack of provider and county services for the area.

External experts invited to discuss their programs.

No reliable data to reflect a coherent portrait of the perceived crisis.

Silos- Real time data unavailable or not shared.

Genuine concern of all parties.
The Turning Point.......

47

503
1 Patient stays 47 days.

47 x 24 = 1128 hrs.

Total MH patient hours per system report 503.5
Data doesn’t Lie- does it?

**FY 16 thru Feb.-Sum of ED Patient Hrs by Month and type (from PMT data)**

<table>
<thead>
<tr>
<th>Row Labels</th>
<th>Sum of Total ED Pt LOS discharged (hours) total</th>
<th>Sum of Total MH patients LOS (hours)</th>
<th>Sum of Admitted patients LOS (hours) total</th>
<th>Sum of Total Hrs for Admit and Discharge Patients(hrs)</th>
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</thead>
<tbody>
<tr>
<td>Jul/2015</td>
<td>12488.77</td>
<td>503.59</td>
<td>4146.88</td>
<td>16635.65</td>
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<tr>
<td>Aug/2015</td>
<td>12589.36</td>
<td>541.08</td>
<td>4992.4</td>
<td>17581.76</td>
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<td>Sep/2015</td>
<td>12218</td>
<td>587.73</td>
<td>4696.37</td>
<td>16914.37</td>
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<tr>
<td>Oct/2015</td>
<td>11919.86</td>
<td>750.62</td>
<td>4551.94</td>
<td>16471.8</td>
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<tr>
<td>Nov/2015</td>
<td>11227.41</td>
<td>508.25</td>
<td>4026.92</td>
<td>15254.33</td>
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<tr>
<td>Dec/2015</td>
<td>12435.39</td>
<td>611.53</td>
<td>5202.73</td>
<td>17638.12</td>
</tr>
<tr>
<td>Jan/2016</td>
<td>13847.87</td>
<td>543.63</td>
<td>5281.79</td>
<td>19129.66</td>
</tr>
<tr>
<td>Feb/2016</td>
<td>13832.79</td>
<td>640.75</td>
<td>4872.52</td>
<td>18705.31</td>
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</table>

This total excludes Mental Health Hrs
<table>
<thead>
<tr>
<th>MONTH</th>
<th>Psych Visits</th>
<th>ED Visits</th>
<th>Psych Rate</th>
<th>Tele Health Cons</th>
<th>Psych ED Hrs</th>
<th>Non-billable Psych Hrs</th>
<th>cost @ $135/hr</th>
</tr>
</thead>
<tbody>
<tr>
<td>July</td>
<td>120</td>
<td>4423</td>
<td>2.7%</td>
<td>134</td>
<td>3060</td>
<td>2662</td>
<td>$359,370.00</td>
</tr>
</tbody>
</table>

### July 2015 ED Visits

- **Total ED Visits**: 4,423
- **Psych Visits**: 120 (3%)
- **ED Visits**: 4,233 (97%)
Reality Check: 2.7% of visits using 16% of resources.

<table>
<thead>
<tr>
<th>Total ED Visit Hours</th>
<th>Standard Visit Hours</th>
<th>Admission to Hospital Hours</th>
<th>Psych Visit Hours</th>
</tr>
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<tbody>
<tr>
<td>19694</td>
<td>12488</td>
<td>4146</td>
<td>3060</td>
</tr>
</tbody>
</table>

July ED Hours by Usage

- Total ED Visit Hours: 19,694
- Standard Visit Hours: 12,488 (63%)
- Admission to Hospital Hours: 4,146 (21%)
- Psych Visit Hours: 3,060 (16%)

Dignity Health. Mercy Medical Center Redding
# FY 2015- Granular Data- A walk thru 56K + Charts

## Encounters

<table>
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<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td># of BH patients</td>
<td>112</td>
<td>104</td>
<td>101</td>
<td>92</td>
<td>91</td>
<td>96</td>
<td>107</td>
<td>90</td>
<td>136</td>
<td>101</td>
<td>123</td>
<td>112</td>
</tr>
<tr>
<td>AVG LOS min. all BH</td>
<td>1125</td>
<td>823</td>
<td>1339</td>
<td>1041</td>
<td>1009</td>
<td>1063</td>
<td>842</td>
<td>979</td>
<td>1246</td>
<td>1773</td>
<td>1150</td>
<td>1517</td>
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<tr>
<td>overnite census</td>
<td>71</td>
<td>53</td>
<td>62</td>
<td>48</td>
<td>43</td>
<td>42</td>
<td>44</td>
<td>48</td>
<td>73</td>
<td>55</td>
<td>61</td>
<td>54</td>
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<tr>
<td>total ED hrs</td>
<td>18109</td>
<td>15830</td>
<td>15,750</td>
<td>16221</td>
<td>15367</td>
<td>15749</td>
<td>18635</td>
<td>18122</td>
<td>19938</td>
<td>17845</td>
<td>19003</td>
<td>17737</td>
</tr>
<tr>
<td>total psych hrs</td>
<td>2100</td>
<td>1426</td>
<td>2365</td>
<td>1596</td>
<td>1530</td>
<td>1701</td>
<td>1502</td>
<td>1469</td>
<td>2825</td>
<td>2985</td>
<td>2359</td>
<td>2832</td>
</tr>
<tr>
<td>% ED psych/total</td>
<td>11.6%</td>
<td>9.0%</td>
<td>15.0%</td>
<td>9.8%</td>
<td>10.0%</td>
<td>10.8%</td>
<td>8.1%</td>
<td>8.1%</td>
<td>14.2%</td>
<td>16.7%</td>
<td>12.4%</td>
<td>16.0%</td>
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</table>

## Costs

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</thead>
<tbody>
<tr>
<td>boarding costs</td>
<td>$216,675</td>
<td>$144,247</td>
<td>$265,005</td>
<td>$172,665</td>
<td>$159,805</td>
<td>$194,130</td>
<td>$154,035</td>
<td>$152,415</td>
<td>$353,100</td>
<td>$305,110</td>
<td>$257,040</td>
<td>$328,995</td>
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<tr>
<td>consult costs</td>
<td>$6,720</td>
<td>$14,560</td>
<td>$3,780</td>
<td>$2,800</td>
<td>$3,500</td>
<td>$2,660</td>
<td>$2,100</td>
<td>$4,480</td>
<td>$9,100</td>
<td>$16,940</td>
<td>$17,080</td>
<td>$13,230</td>
</tr>
<tr>
<td>Total Cost</td>
<td>$223,395</td>
<td>$158,807</td>
<td>$268,785</td>
<td>$175,465</td>
<td>$163,305</td>
<td>$196,790</td>
<td>$156,135</td>
<td>$156,895</td>
<td>$362,200</td>
<td>$322,050</td>
<td>$274,120</td>
<td>$342,225</td>
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</table>

## LOS

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</thead>
<tbody>
<tr>
<td># pts los &lt;240 min</td>
<td>30</td>
<td>37</td>
<td>22</td>
<td>28</td>
<td>27</td>
<td>31</td>
<td>21</td>
<td>36</td>
<td>30</td>
<td>32</td>
<td>36</td>
<td>36</td>
</tr>
<tr>
<td># of pts los &gt;240</td>
<td>82</td>
<td>67</td>
<td>79</td>
<td>59</td>
<td>63</td>
<td>69</td>
<td>76</td>
<td>69</td>
<td>100</td>
<td>71</td>
<td>91</td>
<td>76</td>
</tr>
<tr>
<td>Total pts. Los - all % of pts los &gt;240 min</td>
<td>112</td>
<td>104</td>
<td>101</td>
<td>92</td>
<td>96</td>
<td>107</td>
<td>90</td>
<td>136</td>
<td>101</td>
<td>123</td>
<td>112</td>
<td>1265</td>
</tr>
<tr>
<td>% of pts los &gt;240 min</td>
<td>73%</td>
<td>64%</td>
<td>78%</td>
<td>64%</td>
<td>69%</td>
<td>72%</td>
<td>71%</td>
<td>77%</td>
<td>74%</td>
<td>70%</td>
<td>74%</td>
<td>68%</td>
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## LOS

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<tbody>
<tr>
<td>Avg LOS pts &gt;4hrs in hrs</td>
<td>1414</td>
<td>1196</td>
<td>1731</td>
<td>1540</td>
<td>1276</td>
<td>1490</td>
<td>1141</td>
<td>1221</td>
<td>1652</td>
<td>2223</td>
<td>1495</td>
<td>2164</td>
</tr>
<tr>
<td>in hrs</td>
<td>23.56</td>
<td>19.93</td>
<td>28.85</td>
<td>25.66</td>
<td>21.26</td>
<td>24.83</td>
<td>19.01</td>
<td>20.35</td>
<td>27.53</td>
<td>37.05</td>
<td>24.91</td>
<td>36.06</td>
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</thead>
<tbody>
<tr>
<td>Pediatric pts</td>
<td>0</td>
<td>0</td>
<td>11</td>
<td>5</td>
<td>15</td>
<td>9</td>
<td>15</td>
<td>12</td>
<td>15</td>
<td>11</td>
<td>10</td>
<td>19</td>
</tr>
</tbody>
</table>
Validation - Does this model replicate?

- **MMCR**

  ![Pie Chart of Psych Hours Breakout as a percentage of ED Hours for MMCR]

  FY15 Total Cost - $2,306,042

- **Hospital Across Town**

  ![Pie Chart of Psych Hours Breakout as a percentage of ED Hours for Hospital Across Town]

  FY15 Total Cost - $2,348,292
Two pronged plan going forward: Local County Level

- Introduction of a development plan
- Grant for Innovations Walk-In Services
- County Worker embedded in both EDs.
- Partnership for 8 bed CSU
Enterprise Solutions

Recognition that the problem exists across the Dignity Health system in varying degrees.

Gap Analysis for all Dignity Health Hospitals.

Stratification for process and best practice in the ED to be integrated with other initiatives.

Automated data collection for stratified models that reflect granular data at a 95% or better confidence level.

Tool kit with applications effective system wide.
But What About Telepsychiatry?

The addition of Telepsychiatry services led to a crucial evaluation of all of the components of Behavioral Health in the MMCR Emergency Department. All aspects of the provision of care were affected: bedside, process flow, staff morale, financial and physician services and county practices were re-examined after the introduction of this service.

The introduction of Telepsychiatry services has resulted in the delivery of care to over 1,000 patients in its’ inaugural year and has had a marked effect on the quality of care rendered.
Telepsychiatry is a TOOL and must be used appropriately.

**KEY FACTORS** drive successful programs:

**MOVEMENT**- Defined process and flow.

**MEASUREMENT**- Identified and validated data tools.

**MODESTY**- Consensus of expectations and limits of use.

**MONEY**- Know your financials.

**MIRTH**- There’s always something!
Thank You