The Impact of Telemedicine on Patient and Provider Satisfaction and Cost Savings
We have no actual or potential conflict of interest in relation to this presentation
Objectives

1. Participants will be able to summarize the basics of telemedicine consultation as it applies to a correctional facility.

2. Given UCHC provider and patient satisfaction data, participants will be able to benchmark as a comparison with their provider and patient satisfaction scores (telemedicine or face-to-face consultations).

3. Participants will be able summarized the cost savings telemedicine services has provided for the New Jersey Department of Corrections.
Benefits of Telemedicine in Corrections

1. Cost-savings (transportation cost)

2. Increased timeliness and efficiency of health care encounters

3. Reduction in ground transportation to specialists and hospitals

4. Improved times between referrals and appointments

5. Increased access to specialists

6. May improve health care outcomes

7. Minimizes hijacking of the consultation

8. Eliminate need for admission
Telemedicine at UCHC

Telemedicine is being used for specialty clinics. Clinics are scheduled on a monthly basis with some variation:

- **Cardiology (4 x per month)**
- Nephrology (1x per month)
- Surgery (2x per month)
- Orthopedics (1x per month)
- Urology (2x per month)
- Gastroenterology (1x per month)
- Endocrinology (1x per month)
- Oncology (1x per month)
- Infectious Disease (1x per month)
Patient Satisfaction

One of the 1st measures implemented by UCHC in 2005 was an annual assessment of patient satisfaction with mental health services.

The initial goal was to be able to benchmark inmate satisfaction of mental health care to demonstrate the effectiveness of services being provided.

In 2008 UCHC assumed responsibility for the medical services and initiated patient satisfaction with medical care and dental care.
Patient Satisfaction

In late 2014, UCHC began collecting data on patient satisfaction with Telemedicine. For the purpose of benchmarking.

Questions were adapted from the survey developed and presented by Lemuel Shattuck Hospital/UMass Medical School at the Academic & Health Policy Conference on Correctional Health in 2012.

At the end of CY14, UCHC started asking patients for their feedback about the telemedicine services they received. As of 1/14/16, 175 patients responded to the survey.
Patient Satisfaction

Percent of Patients Responding “Yes”

<table>
<thead>
<tr>
<th></th>
<th>UCHC</th>
<th>UMASS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Able to Hear Clearly</td>
<td>92.9</td>
<td>96.2</td>
</tr>
<tr>
<td>Opportunity to Ask Questions</td>
<td>99.1</td>
<td>96.5</td>
</tr>
<tr>
<td>Your Questions Answered</td>
<td>98.2</td>
<td>98.2</td>
</tr>
<tr>
<td>Next Steps Explained to You</td>
<td>98.7</td>
<td>98.2</td>
</tr>
<tr>
<td>Satisfied</td>
<td>96.9</td>
<td>91.6</td>
</tr>
</tbody>
</table>

NJDCC/UCHC Respondents=225; Lemuel Shattuck Hospital/UMASS Medical School Respondents=288

March, 2016

Correctional Health Care Conference
### Primary Care Provider Satisfaction (n=19)

1. **Overall, how satisfied are you with the quality of UCHC’s telemedicine consultations visits**
   - Very dissatisfied: 1 (5.9%)
   - Dissatisfied: 14 (82.4%)
   - Neither: 2 (11.8%)
   - Satisfied: 
   - Very Satisfied: 

2. **Telemedicine consultations are useful in answering questions about patient diagnostic and treatment planning needs**
   - Strongly Disagree: 5 (26.3%)
   - Disagree: 2 (10.5%)
   - Neither: 9 (47.4%)
   - Agree: 13 (72.2%)
   - Strongly Agree: 5 (27.8%)

3. **The quality of telemedicine transmissions are adequate (n=18)**
   - Strongly Disagree: 5 (26.3%)
   - Disagree: 2 (10.5%)
   - Neither: 9 (47.4%)
   - Agree: 11 (57.9%)
   - Strongly Agree: 2 (10.5%)

4. **Telemedicine consultations with the specialist and patient meet standards of good medical care (n=18)**
   - Strongly Disagree: 6 (31.6%)
   - Disagree: 11 (57.9%)
   - Neither: 2 (10.5%)
## Primary Care Provider Satisfaction

5. Telemedicine is a good format for consultations with the specialist and patient

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2 (10.5%)</td>
<td></td>
<td>14 (73.7%)</td>
<td>3 (15.8%)</td>
</tr>
</tbody>
</table>

6. The telemedicine equipment is easy to use

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5 (26.3%)</td>
<td>1 (5.3%)</td>
<td>11 (57.9%)</td>
<td>2 (10.5%)</td>
</tr>
</tbody>
</table>

7. Most patients are satisfied with telemedicine consultations

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 (5.3%)</td>
<td>2 (10.5%)</td>
<td>13 (73.7%)</td>
<td>2 (10.5%)</td>
</tr>
</tbody>
</table>

8. The specific telemedicine medical encounters whether initial or follow-up are appropriate for this form of consultation

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
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<th>Neither</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2 (10.5%)</td>
<td>2 (10.5%)</td>
<td>13 (68.4%)</td>
<td>2 (10.5%)</td>
</tr>
</tbody>
</table>
Primary Care Provider Satisfaction

9. Telemedicine consultations improve communication among patients, primary care providers and specialists

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (5.3%)</td>
<td></td>
<td></td>
<td>15 (79.0%)</td>
<td>3 (15.8%)</td>
</tr>
</tbody>
</table>

10. Telemedicine consultations provide primary care providers with information to improve the care they provide to the patient

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (5.3%)</td>
<td></td>
<td></td>
<td>15 (79.0%)</td>
<td>3 (15.8%)</td>
</tr>
</tbody>
</table>

11. Telemedicine consultations in prison settings improve patients’ willingness to meet with the medical specialists

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 (52.6%)</td>
<td></td>
<td></td>
<td>9 (47.4%)</td>
<td></td>
</tr>
</tbody>
</table>

12. Procedures for telemedicine visits are adequate and meet my needs (n=18)

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 (21.1%)</td>
<td></td>
<td>3 (15.8%)</td>
<td>10 (52.6%)</td>
<td>2 (10.5%)</td>
</tr>
</tbody>
</table>
Primary Care Provider Satisfaction

13. How frequently do you take the opportunity to participate in telemedicine consultations

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>1</td>
<td>5.3%</td>
</tr>
<tr>
<td>Very Rarely</td>
<td>7</td>
<td>36.8%</td>
</tr>
<tr>
<td>Rarely</td>
<td>5</td>
<td>26.3%</td>
</tr>
<tr>
<td>Occasionally</td>
<td>6</td>
<td>31.6%</td>
</tr>
<tr>
<td>Frequently</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very Frequently</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Comments

Item #2: Tend not to answer pt’s questions.

Item #3: Have problems fixing is difficult

Item #6: Equipment problems do not get fixed well

- Frequent breakdowns had no telemed for long time
- An earlier problem has been resolved

Item #11: No Trips!

- Not when scheduled during count times

Item #12: Sometimes does not start on time

March, 2016
Cost Savings

1. Vehicle cost
2. Staff cost including over time
3. Distance for travel
4. Public safety cost (unmeasurable/extremely costly)
References:


