Population Health Clerkship: The Lemuel Shattuck Hospital
Incarcerated and Urban Working Poor

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The Shattuck Mission

- Mission: To address public health needs through the delivery of compassionate medical and psychiatric care to patients requiring multidisciplinary treatment and support.
- Lemuel Shattuck Hospital (LSH) is one of 4 Department of Public Health hospitals in the state.
- Other hospitals include the Pappas Rehabilitation Hospital for Children, Tewksbury Hospital, and Western Massachusetts Hospital.
- LSH is committed to serving patients who are economically and socially disadvantaged.
# Hospital Snapshot

## Lemuel Shattuck Hospital - 2017 Admissions*

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male, Female</td>
<td>80%, 20%</td>
</tr>
<tr>
<td>Racial Minority</td>
<td>43%</td>
</tr>
<tr>
<td>Incarcerated</td>
<td>40%</td>
</tr>
<tr>
<td>Average Age</td>
<td>49 years</td>
</tr>
<tr>
<td>Average Length of Stay</td>
<td>36.7 days</td>
</tr>
</tbody>
</table>

## Common Inpatient Diagnoses*

- Schizophrenia, Schizoaffective Disorder
- Infective Endocarditis
- Bacteremia
- Osteomyelitis

## Common Outpatient Visit Conditions*

- Hepatitis C
- Opioid Dependence
- Dental Caries
- Essential Hypertension

*Raw data obtained from LSH Health Informatics Department, statistics approximated by students
Inpatient by race
- White: 690.57%
- Black: 305.25%
- Latino: 117.10%
- Asian: 22.2%
- Other: 67.6%

Inpatient by sex
- Female: 239.20%
- Male: 969.80%
Average inpatient age: 49 years
Top 10 Inpatient Admission Conditions

1. SCHIZOAFFECTIVE DISORDER
2. ACUTE AND SUBACUTE INFECTIVE ENDOCARDITIS
3. BACTEREMIA
4. OSTEOMYELITIS
5. OBSTRUCTIVE SLEEP APNEA
6. TUBERCULOSIS OF LUNG
7. ENCOUNTER FOR ANTINEOPLASTIC CHEMOTHERAPY
8. CHRONIC RESPIRATORY FAILURE, UNSP W/HYPOXIA OR HYPERCAPNIA
9. STAPHYLOCCAL ARTHRITIS OF KNEE
10. CELLULITIS OF LOWER LIMB

Top 15 Outpatient Visit Conditions

1. ENCOUNTER FOR OTHER SPECIFIED SPECIAL EXAMINATIONS
2. UNSPECIFIED VIRAL HEPATITIS C WITHOUT HEPATIC COMA
3. OPIOID DEPENDENCE, UNCOMPlicated
4. DENTAL CARIES, UNSPECIFIED
5. ESSENTIAL [PRIMARY] HYPERTENSION
6. ENCNR FOR F/U EXAM AFT TRTMT FOR COND OTH THAN MALIG NEOPLM
7. TYPE 2 DIABETES MELLITUS WITHOUT COMPLICATIONS
8. CHRONIC VIRAL HEPATITIS C
9. ENCOUNTER FOR SCREENING FOR RESPIRATORY TUBERCULOSIS
10. HUMAN IMMUNODEFICIENCY VIRUS [HIV] DISEASE
11. ENCOUNTER FOR SCREENING FOR MALIGNEAT NEOPLASM OF COLON
12. SCHIZOPHRENIA, UNSPECIFIED
13. ENCNR FOR FOLLOW-UP EXAM AFTER TRTMT FOR MALIGNEAT NEOPLASM
14. TUBERCULOSIS OF LUNG
15. MALIGNEAT NEOPLASM OF PROSTATE
Medical Risk Exposures

- IV drug use → endocarditis, osteomyelitis, bacteremia, abscesses
- Lack of access → untreated or poorly controlled chronic illness
  - Diabetes
  - Hypertension
  - Mental Health Disorders
- Homelessness → exposure to extreme temperatures, difficult to manage meds for chronic conditions, violence/injuries
Social Risk Exposures

In the Hospital

- Long hospital stays (4 - 8 weeks)
- Ongoing drug use on inpatient floors and Shattuck grounds (PICC lines in patients with SUD)
- Disruptive behavior (e.g. selling drugs on the floors)
- Lack of support systems
- Mental illness
- Lack of access to mental health care
- Recurrent exposure to substances

Outside of the Hospital

- Homelessness
- Polysubstance use
- Physical, emotional, and sexual abuse
- Trauma (adverse life events)
- Complex medical issues (multiple providers, polypharmacy)
- Mental illness
- Lack of access to mental health care
- Recurrent exposure to substances
- Disruptive behavior (e.g. selling drugs on the floors)
- Ongoing drug use on inpatient floors and Shattuck grounds (PICC lines in patients with SUD)
- Long hospital stays (4 - 8 weeks)
Professions at the Shattuck

<table>
<thead>
<tr>
<th>Milieu Therapists</th>
<th>Medical Doctors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Workers</td>
<td>Nurses</td>
</tr>
<tr>
<td>Addictions Counselors</td>
<td>Certified MAT Prescribers</td>
</tr>
<tr>
<td>Psychologists and Psychiatrists</td>
<td>Pharmacists</td>
</tr>
<tr>
<td>Case Managers</td>
<td>Pharmacy Techs</td>
</tr>
<tr>
<td>Physician Assistants and Nurse Practitioners</td>
<td>Dieticians</td>
</tr>
<tr>
<td>Certified Nursing Assistants</td>
<td>Therapists (PT, OT, SLP)</td>
</tr>
<tr>
<td>Administrators</td>
<td>Correctional Officers (8 North inmate floor)</td>
</tr>
<tr>
<td>Students (Medical, PA, NP)</td>
<td>Interpreters</td>
</tr>
</tbody>
</table>
# Interprofessional Care at the Shattuck

<table>
<thead>
<tr>
<th>Acute Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambulatory Care</td>
</tr>
<tr>
<td>Correctional Healthcare for DOC Inmates</td>
</tr>
<tr>
<td>Inpatient Addiction Services</td>
</tr>
<tr>
<td>Outpatient Addiction Services</td>
</tr>
<tr>
<td>Psychiatry/Psychology</td>
</tr>
<tr>
<td>Social Work</td>
</tr>
</tbody>
</table>

Other teams: Case Management, PT, OT, Speech Therapy, Infectious Disease, Palliative Care, Pharmacy, Pastoral Care, Medical Ethics

## Services
- Acute & chronic disease management
- Mental health services
- Social services
- Substance use counseling & treatment
- Discharge planning

[https://www.mass.gov/locations/lemuel-shattuck-hospital](https://www.mass.gov/locations/lemuel-shattuck-hospital)
# The Interdisciplinary Team

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Increases access to specialized care</td>
<td>● Large teams can make communication more challenging</td>
</tr>
<tr>
<td>● Can cover medical and “upstream” social needs in one place</td>
<td>● May have disagreements about the best way to care for a patient</td>
</tr>
<tr>
<td>● More idea sharing and systems in place to provide individualized treatment plans for patients</td>
<td>● Different team members may have better or worse relationships with the patients, and may have access to varying information about the patient’s history makes communication and documentation especially important</td>
</tr>
<tr>
<td>● Patients can connect with and form relationships with a variety of different people, some of whom they may connect with better than others</td>
<td></td>
</tr>
</tbody>
</table>
On- Site Departments

- Medical and Surgical
- HIV Health Care
- Ambulatory Services
- Tuberculosis Care
- Geriatric Evaluation and Treatment
- Correctional Health Care
- Metro Boston Mental Health Units
- On-Site Supported Services

On-Site Bed Summary

<table>
<thead>
<tr>
<th></th>
<th>Medical</th>
<th>Psychiatry</th>
<th>Shelter</th>
<th>Residential Treatment</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>145</td>
<td>115</td>
<td>125</td>
<td>162</td>
<td>547</td>
</tr>
</tbody>
</table>
On-Site Supported Services

Pine Street Inn - Shattuck Emergency Shelter

Substance Abuse Transitional Beds

Primary Care Program for the Homeless

Housing and Employment Search

Living and Recovering Community (LARC)

Women's Hope

High Point Detox

PSI: Shattuck Shelter and Stabilization Program
Advocacy for Our Population

1. **National level:** Substance Abuse and Mental Health Services Administration

2. **State level:** Massachusetts Association for Mental Health

3. **Locally:** Pine Street Inn
About SAMHSA

- **Who they are:** a government agency that is part of the Department of Health and Human Services
- **Advocacy work:** raising awareness of/decreasing stigma around MAT, “Too Smart to Start” campaign, provide grants to related research
- **Criticisms:** current leader, McCance-Katz, has been critiqued for over-emphasizing pharmacological treatment, and under-emphasizing behavioral and community-based treatment; 2012 congressional investigation on the Sandy Hook shooting found SAMHSA partially at fault

About MA Association for Mental Health

- **Who they are:** Non-governmental non-profit with 100+ years of history
- **Advocacy work:** five-tiered approach-- health promotion, prevention, access improvement, system reform, legal advocacy. Allows them to target patients and their families, communities, lawmakers, and healthcare providers in a systematic, purposeful way. Contribute to research on local population health.
- **Criticisms:** Unknown. Boston Globe has published several op-ed's lauding their work.

Source: https://www.mamh.org/
About the Pine Street Inn

- **Who they are:** non-governmental, non-profit shelters/housing assistance in Boston, expanded across New England, plus a vendor at LSH!
- **Advocacy work:** helping folks that are unhoused get registered to vote, street outreach and job training, policy-level advocacy, participation on local community research and dialogue
- **Criticisms:** From a donor/volunteer’s perspective, it is highly rated on Charity Navigator, variable success for clients

Source: http://www.pinetreetinn.org/
Clinicians as Advocates

- Get educated about pharmacological treatments for SUD, such as Suboxone and methadone; talk about them openly with peers and patients.
- Encourage patients and peers to view behavioral treatment as a vital part of healthcare.
- Help to integrate social work into inpatient discharge planning, and avoid discharge to settings that are not conducive to sobriety.
- Do not refer patients to sober living that are not “ready” for recovery.
- Understand that “recovery takes a village.”

Source: Liz Burden, MSW, MPH, Director of Social Work at LSH
Relevant Legislation

The Substance Use Disorder Prevention that Promotes Opioid Recovery and Treatment (SUPPORT) for Patients and Communities Act was signed by President Donald Trump on October 24, 2018.

- Will allow physicians, advanced practice nurses, and physician assistants to deliver MAT in settings other than opioid treatment programs.

- Previously, MAT prescribers were limited to a 30-patient limit within the first year of their MAT prescribing authority; Now, MAT prescribers are limited to a 100 patients. Select prescribers, such as those board certified in psychiatry or addiction medicine, may prescribe up to 275 patients.

- A one-time requirement of 24 education hours was made mandatory for all prescribers to obtain a waiver.
Acknowledgements

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References


Lemuel Shattuck Hospital Health Informatics Department. (2018). In Hudson E. (Ed.), De-identified data from LSH 2017 inpatient admissions and outpatient encounters

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