Coordinated Care for High Risk Patients: Learning from HIV and the MAX clinic

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Many slides courtesy of Dr. Julie Dombrowski
No conflicts of interest to disclose
Outline

- HIV Care Continuum
- Risk factors for not linking to HIV care
- MAX Clinic rationale and evolution
- Discuss the MAX clinic model
- Review key patient outcomes using the MAX clinic model for persons living with HIV
- What other ways to engage other patients with chronic diseases
- How to deal with difficult patients
Feel for the audience

What is your role in the medical system?

A. Provider  
B. Social work  
C. Support staff  
D. Other
Feel for the audience

What type of patients do you see or interact with?

A. Palliative care
B. Primary care
C. Specialty care
D. Inpatient care
E. Other
Terms for This Talk

- **Engagement in care** - an umbrella term for the ongoing relationship between a patient and a care provider
- **Linkage to care** - completion of an initial visit with an HIV medical provider after diagnosis (a one-time event)
- **Retention** - keeping patients in care
- **Relinkage** - bringing patients who have fallen out of care back to HIV medical care
Persons Living with Diagnosed or Undiagnosed HIV Infection

HIV Care Continuum Outcomes, 2014—United States

Note. Receipt of medical care was defined as ≥1 test (CD4 or VL) in 2014. Retained in continuous medical care was defined as ≥2 tests (CD4 or VL) ≥3 months apart in 2014. Viral suppression was defined as <200 copies/mL on the most recent VL test in 2014.
## Risk Factors for being out of care

<table>
<thead>
<tr>
<th>Consistent across studies</th>
<th>Possible risk factors – inconsistent findings</th>
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</thead>
<tbody>
<tr>
<td>African-American race</td>
<td>Gender</td>
</tr>
<tr>
<td>Residence in high-poverty area</td>
<td>Age</td>
</tr>
<tr>
<td>Lack of insurance or public insurance (vs. private insurance)</td>
<td>Higher CD4 count</td>
</tr>
<tr>
<td>Lack of primary care prior to HIV diagnosis</td>
<td>Birthplace outside of the U.S.</td>
</tr>
<tr>
<td>Substance use, h/o injection drug use</td>
<td>Latino ethnicity</td>
</tr>
<tr>
<td>Among crack users: Not being helped into care</td>
<td>Depression</td>
</tr>
<tr>
<td>Longer wait time for first appointment</td>
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HIV infection: A single factor among many potential socioecologic disparities

And yet…Models of Linkage to Care

We cannot conclude that patients “aren’t ready” to engage in HIV care if the process to get care is too complicated.
Why do we care?

- Viral suppression is crucial for individual & public health
- Poor engagement in care = key obstacle to suppression
- Health Department & Madison Clinic (HIV clinic at HMC) interventions to re-engage out-of-care patients were not very effective
Importance of No-Show Visits

No-show visits are an independent predictor of mortality

What to do about it

• Relinking people to the same system of care that failed to engage them in the first place was not an effective strategy.

• Can we change the structure of HIV care available for certain high risks persons who have difficulty navigating the medical system?
The Care & Antiretroviral Promotion Program (CAPP): Seattle – King County HIV Care Relinkage Program

List from HIV Laboratory Surveillance of persons who appear to be out of care or poorly engaged in care

Surveillance staff investigate case to determine whether the person has moved away or died

CAPP counselors contact last known HIV medical provider then the eligible PLWH

Individual Interview (~1 hour, $50)
- Identify key barriers to care and treatment
- Make plan with participant to address barriers

Summary sent to medical provider and case manager if participant consents

One Month Follow-up Interview
Barriers to engagement in care

Depression and substance abuse were both highly prevalent (69% and 54%, respectively), and methamphetamine was the most commonly abused substance.

**Barriers to HIV Care (N=248)**

<table>
<thead>
<tr>
<th>Barrier</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No insurance</td>
<td>123</td>
<td>52%</td>
</tr>
<tr>
<td>Forget appointments</td>
<td>88</td>
<td>35%</td>
</tr>
<tr>
<td>Trouble getting appointments</td>
<td>83</td>
<td>32%</td>
</tr>
<tr>
<td>No transportation</td>
<td>77</td>
<td>31%</td>
</tr>
<tr>
<td>Don’t know how to find doctor</td>
<td>69</td>
<td>27%</td>
</tr>
<tr>
<td>Poor relationship with doctor</td>
<td>67</td>
<td>26%</td>
</tr>
</tbody>
</table>

*Dombrowski JC et al. AIDS Patient Care STDS. 2015.*
Interpretation

- Maybe part of the problem is that we have been putting a lot of effort into returning people to the same system that failed to engage them in the first place.

- Bigger picture:
  - How can we more efficiently identify out-of-care persons who can benefit from an intervention?
  - What interventions do we need?
  - Need to match intensity to the needs of the PLWH
Exercise

In your practice:

A. How to identify out-of-care persons who can benefit from an intervention?
B. Why do you think the current model is failing these patients?
C. What interventions are needed?
D. What type of intensity is needed of persons in your practice?
The MAX Clinic

• “MAXimum assistance” HIV care
• A Structural Healthcare Systems Intervention Designed to Engage the Hardest-to-Reach Persons Living with HIV
• Designed for patients who do not engage in traditional HIV medical care despite case management & outreach support
  • Offers high-need patients a fundamentally different structure of care than that which failed to engage them previously.
  • Developed after 2 other interventions we implemented and evaluated proved to be ineffective.
Intervention Component Overview

- High-intensity
- Low threshold
- Incentivized
- HIV care model
- Collaboration
High Intensity Outreach Support

• Intensive patient support and outreach
• A team of **public health DIS (non-medical case managers)**
  - coordinate the clinic and serve as a single point of contact for patients and service providers to facilitate care coordination.
  - They are available to patients and service providers via one phone number that is directly answered without a phone tree and can receive text messages.
• **Medical case managers** provide intensive case management
  - housing assistance and active referrals to mental health and substance use treatment services, at a ratio of no more than 50 patients per case manager.
Low Threshold Incentivized Care

- Minimal requirements for patients to access care, ART, and case management.
- Infectious Disease physicians
  - primary HIV medical care and urgent care on a walk-in basis five afternoons per week (one provider per afternoon).
- MAX case managers on a walk-in basis
- Madison Clinic psychiatrists
  - walk-in basis one half day per week
  - Harborview Mental Health program
- Substance abuse counseling ½ day per week in the clinic
Low Threshold Incentivized Care

- The low-threshold approach is modeled on that used in some methadone and other substance use treatment programs.
- The team takes a harm-reduction approach to substance use, and abstinence is not required for any services
  - Buprenorphine treatment in coordination with the nurse managers on the HMC office-based opioid treatment team
  - Hepatitis C treatment in coordination with the Madison Clinic pharmacy team.
  - Palliative care team involvement
- The physicians offer ART to all patients regardless of their adherence history often starting on the day of their enrollment in the MAX Clinic.
Incentives

• All MAX Clinic incentives are optional.

• To enroll in the Clinic, patients need agree to only two things
  - to engage in conversation with a medical provider
  - to refrain from violence, threats, and slurs directed toward staff and other patients.

• Goal of increasing the priority of clinic visits for patients’ in the context of urgent competing needs (i.e. food, shelter) and providing a contingency management approach for completing lab orders and achieving viral suppression.
Incentives

• Food
  - Refreshments at each clinic visit
  - $10 meal vouchers for HMC (up to once weekly for any type of visit),

• Cash
  - $25 cash for completing laboratory tests ordered by the providers (up to once every two months)
  - $50 for achieving viral suppression (<200 copies/mL) (up to once every two months).

• Bus Passes:
  - Initially, the program purchased unrestricted bus passes for all patients instead help patients obtain disabled bus passes when eligible.

• Cell phones: receive a program-funded cell phone.
  - If the phone is lost, stolen or otherwise separated from the patient, the phone can be replaced after 6 months up to two times.
  - Designed primarily to facilitate communication with patients
Coordinated Care

- Madison Clinic & Public Health – Seattle & King County (PHSKC)
- Co-managed by Madison Clinic (a Ryan White Part C-funded clinic with wrap-around support services)
  - offers comprehensive medical and social support services
  - HIV pharmacy, medical case management, and HIV-specific medical subspecialty care
- Harborview Medical Center is a public hospital managed by the University of Washington that offers comprehensive specialty medical and surgical specialty services.
- STD clinic: handle walk-in visits and the HIV/STD disease intervention specialists (DIS; front-line public health workers) who often interact with out-of-care PLWH
Collaboration with multiple organizations

**Bailey Boushay Adult Day Program** provides medication adherence support and other resources to high needs PLWH in King County;

**Lifelong** is a community-based AIDS Service Organization and Ryan White Part A recipient.

**HEET** provides intensive outreach support for PLWH who have substance use disorders, mental illness, and recent incarceration.

Other key collaborating organizations:
- King County jail release planning program
- Downtown Emergency Services Center
- Other organizations providing support services to homeless persons; and supportive housing facilities
Patients are eligible for the MAX Clinic:

- if they are not taking ART or are not virally suppressed (i.e. VL >200 copies/mL)
- failed to engage in care and achieve viral suppression after lower intensity outreach support.
A medical provider, non-medical case manager, and medical case manager review referrals on a weekly basis.

- Madison clinic
- Collaborative entities
- Other providers in the community
- Health information exchanges
- Inpatient hospitalization
- Jails
- STD Clinic
- STD partner services
- Peer referral
How do we find patients?

- Attempt to contact referred patients
  - Phone
  - Appear in the hospital, ER or Madison Clinic
  - Contact other case managers in the community and other organizations where patients receive services
  - DIS will conduct field visits to the patient’s home or other site of service (e.g. inpatient hospital) to facilitate enrollment.
  - Enlist help of other providers, SW and CM
MAX Clinic Components

Identification of Potential MAX Patients

Case Coordinators [Disease Intervention Specialists (DIS)]
- Intensive support & outreach
- Single point of contact for patients & providers
- Calls, text messages
- Meet patients in hospital, clinic, home, or jail

Enrollment of Patients in MAX Clinic

- **Walk-in medical care**, 5 afternoons per week (in STD Clinic)
- **Snacks and meal vouchers** (each visit, up to once weekly)
- **Cell phones and bus passes** (contingent renewal)
- **Cash incentives** (q2 months)
  - $25 for visit + lab draw
  - $100 for suppressed VL & 1x bonus for 3 in a row ($100)
<table>
<thead>
<tr>
<th>MAX Clinic-Specific Resources</th>
<th>Funding Source for Max Clinic –Specific Resources</th>
<th>Harborview Medical Center Resources</th>
<th>Public Health – Seattle &amp; King County Resources</th>
<th>Other King County Community Resources</th>
</tr>
</thead>
</table>
| Walk-in access to care       | • Medical providers 5 afternoons per week for primary HIV care  
                               • MAX case coordinators and medical case managers available 5 full days per week | • **Ryan White HIV/AIDS Program**  
                               • **Washington State Department of Health** | • Madison Clinic front desk staff, nursing, medical assistants and pharmacy  
                               • Laboratory  
                               • Radiology  
                               • Subspecialty referral  
                               • Emergency department | • STD Clinic front desk staff  
                               • STD Clinic waiting room and patient rooms | N/A |
| High intensity case management | • MAX case coordinators  
                               • Medical case managers | • **Ryan White HIV/AIDS Program** | • Madison Clinic case management supervision  
                               • Outpatient buprenorphine support team  
                               • Mental health case management | • PHSKC Field Services Supervisor  
                               • PHSKC Field Services Supervisor  
                               • PHSKC Field Services Supervisor  
                               • Housing case management  
                               • Community-based case management  
                               • Jail release planners  
                               • Bailey Boushay day program | |
| Financial incentives         | • $25 for clinic visit with phlebotomy, up to once q2 months  
                               • $50 for suppressed viral load, up to once q2 months | • **Research funding (pilot period)**  
                               • State department of health funding (current) | N/A  
                               | N/A  
                               | N/A | |
| Meal support                 | • $10 vouchers in conjunction with a clinic visit, up to once weekly | • **Ryan White HIV/AIDS Program** | N/A | N/A | • Food support |
| Cell phones                  | • 1 per patient, if needed  
                               • Up to 1 replacement per year | • **King County funding** | N/A | • Cell phone contract  
                               | • Federal Lifeline program for low-income consumers (current) | |
| Two-way text messaging for with patients | • MAX Case coordinators | • **Ryan White HIV/AIDS Program (staff time)** | N/A | • Staff cell phones | N/A |
| Bus passes                   | • Case coordinators (to coordinate County bus pass applications, current) | • **Research funding (pilot period)** | N/A | • Transportation to bus pass office (county car)  
                               | • King County disabled bus pass program  
                               • Bailey Boushay day program | |
| Mental health & substance use disorder care | N/A | N/A | • Madison psychiatry  
                               • Harborivew mental health  
                               • Adult Medicine Clinic suboxone program | • Community mental health and substance use programs | N/A |
MAX Clinic opened with 2 MDs & 1 CM
Matt Golden, J. Dombrowski
Allison Moore

MD #3
Meena Ramchandani

1/2015
(N=0)

6/2015
(N=21)

Non-medical case manager #2
Rachel Patrick

1/2016
(N=44)

Medical case manager #1 Mike Nicholson

6/2016
(N=74)

Changed to County disabled bus passes

1/2017
(N=95)

Medical case manager #2
Katherine Lincicum

6/2017
(N=114)

Lowered $ incentives for viral suppression

+2 part-time non-medical case managers

Improved collaborations with outside organizations
Referrals

• A total of 263 unique patients were referred to the MAX Clinic during the first two years.
  • 93 (35%) were ineligible for enrollment
  - 51% Outpatient medical provider or case manager
  - 26% Health department outreach program
  - 9% Inpatient medical team
  - 7% Peer or self-referred
  - 6% automated alert from health info. exchange
## Characteristics of Patients Enrolled in the First Two Years (N=95)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD4&lt;200 cells/mm³</td>
<td>44 (46%)</td>
</tr>
<tr>
<td>Illicit substance or unhealthy alcohol use</td>
<td>81 (86%)</td>
</tr>
<tr>
<td>Methamphetamine</td>
<td>56 (59%)</td>
</tr>
<tr>
<td>Mental illness</td>
<td>68 (71%)</td>
</tr>
<tr>
<td>Unstable Housing</td>
<td>62 (65%)</td>
</tr>
<tr>
<td>Sub use or mental illness or unstable housing</td>
<td>90 (95%)</td>
</tr>
<tr>
<td>Sub use + mental illness + unstable housing</td>
<td>43 (45%)</td>
</tr>
<tr>
<td>Documented history of incarceration</td>
<td>55 (58%)</td>
</tr>
</tbody>
</table>
Achieved ≥1 Viral Load <200 copies/mL, as of 12/31/2016

<table>
<thead>
<tr>
<th>Time enrolled in MAX Clinic</th>
<th>Percent of Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Patients</td>
<td>80</td>
</tr>
<tr>
<td>3 months</td>
<td>43</td>
</tr>
<tr>
<td>6 months</td>
<td>51</td>
</tr>
<tr>
<td>9 months</td>
<td>66</td>
</tr>
<tr>
<td>12 months</td>
<td>81</td>
</tr>
<tr>
<td>18 months</td>
<td>90</td>
</tr>
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</table>

N=95   | N=92   | N=85   | N=76   | N=53   | N=51   |
The Max Clinic successfully engaged & treated high-need PLWH.

This has substantially changed our clinic and health department approaches to re-engaging patients in care.

To date, the clinic has been sustainable with a combination of federal, state and local funding (~120 patients currently enrolled).

High-intensity, high resource interventions are needed to make additional improvements in viral suppression after meeting the UNAIDS 90-90-90 goals.
The WHO goal:
90% of all persons infected with HIV know of their infection
90% of diagnosed persons are on antiretroviral therapy (ART)
90% of those on ART are virally suppressed.
US HIV Care Continuum, King County, June 2016

WHO goal: If each of these objectives is met, 73% of all HIV-infected persons – 81% of all HIV diagnosed persons - will be suppressed. **King County has achieved WHO’s 90-90-90 goal.**

Sources: PHSKC surveillance report
Exercise

Based on our experience, would you change?

A. How to identify out-of-care persons who can benefit from an intervention?
B. Why do you think the current model is failing these patients?
C. What interventions are needed?
D. What type of intensity is needed of persons in your practice?
Other studies

- Strengths-based case management is one of the few interventions that have been studied
  - technique of asking individuals to identify their internal strengths and skills in order to attain needed resources
  - resource intensive

- Outreach and support services in different forms:
  - appointment reminders, health system navigation, health literacy training, and provision of food and transportation

- Peer navigation
  - Characteristics of the persons responsible for recruiting and linking the patient to HIV care strongly influenced the success of linkage to care efforts
  - Highest success rates occurring when the staff member and client had similar social and cultural background
  - Although acceptance of the patient navigator model is widespread, there is little empiric evidence that this intervention is effective

- Social network recruitment

Suggestions to Improve Linkage to Care

1. Eligibility determination should be integrated into clinics wherever possible

2. Allow patients to access case managers before medical providers to address barriers to attending clinic

3. Implement an orientation visit if medical provider not available in short time (5-7 days)
   - Standing orders for basic labs

4. Set-up a formal system to address new patient no-shows
   - Different than routine rescheduling or administrative call
   - Seek out and engage the patient

5. Target vulnerable populations: women, ethnic minorities, youth
Suggestions to Improve Relinkage to Care

• Designate a staff person to re-engage patients in care
  - Systematically identify poorly engaged patients
  - Call to check in, schedule appointment, coordinate with CM
  - Take referrals from providers & CM for outreach

• If your clinic has capacity, consider setting up special procedures for the hardest-to-reach patients
  - Walk-in care
  - Intensive case management and outreach support

• Active referral in which the tester made the treatment appointment or accompanied the patient is associated with a feeling of support higher likelihood of follow through.
The Medical Provider’s Role at the Time of Linkage

- Establish a timeline for care, and if the patient is unwell, return to physical and emotional health
- Visits are frequent and intense at first
- Anticipate a period where fewer appointments are necessary
- Patients can feel overwhelmed by requirements at beginning or experience spacing out of appointments as a personal rejection

- Christopoulos KA, et al, “Taking it a half day at a time”: patient perspectives and the HIV engagement in care continuum. AIDS Patient Care STDs, 2013.
The Provider’s Role in Relinkage to Care

- Assess the patient’s perception of the time “out of care”
- Inquire about barriers (with attention to healthcare system barriers)
  - “What can we do to make this easier or better for you?”
- Make a concrete plan to address the barriers
- Consideration for restarting ART is key
  - Don’t create too high a threshold
- Practitioner behavior is a crucial piece of the engagement and retention
  - explain things in a way that they understand and take the time to get to know them as individuals

How to take care of difficult patients

- Defensive
- Angry
- Manipulative
- Frightened
- Grieving
- Multiple people in the exam room
- Insisting on pain medications
- Entitled attitude
- Under the influence

- Understand barriers
  - Literacy
  - Language
  - Health literacy
  - Difficult social situations
- Know when to stop asking
- Learn own emotions (bias)
- Learn how to say no
- Showing that you care
- Learn to end visit in nice way
- Communicate with care
- Focus on harm reduction
Patient Case

You’re seeing a patient who is insisting on opioids for their “diffuse pain” that cannot be localized. “C’mon doc, just prescribe it…I need this and I won’t take anything else for pain…you want some heroin? I can get you some heroin to try if you give me some ____”

• How would you handle this situation?
Patient Case

Patient who comes in to see you and states I don’t believe in these medications (ARVs). God will be curing my HIV if it’s not already cured and these medications are a waste of my time.

How would you handle this situation?
Patient Case

Patient with a known history of substance abuse is found in the exam room yelling at the wall/window/ceiling, responding to internal stimuli and appears under the influence of substance.

How would you handle this situation?
Patient Case

Patient comes in for an appointment and states “I don’t want to take HIV medications”. They won’t give you a reason. They look upset, suspicious and say “I want to end this visit early and get labs so they can get their money and leave”.

How would you handle this situation?
Overall goals to help engagement or re-linkage

- Ease Structural barriers
  - Increasing clinic hours and ensuring availability
- Novel approaches for specific populations (youth, women)
- Easy, low effort interventions: brochures, posters
- Incentives: cash, cab/bus vouchers, grocery cards (although cash is better)
- Peer navigators
- Medical homes (can provide med management)
- Multidisciplinary teams: case manager, social worker, pharmacist, nurse, and care practitioner.

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