Telemedicine Implementation at a Midwestern HIV Clinic: Strategy and Year One Outcomes

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Disclosures

• None
Objectives

• To review implementation science strategies of telehealth services at the UNMC HIV clinic
• To describe year 1 clinic outcomes
UNMC HIV Team

- UNMC HIV clinic developed in 1985
- Ryan White funded C and D
- Four adult physicians, 2 pediatric
- Three nurse practitioners
- Pharmacists & pharmacy technician
- Five ID fellows
- Two nurse case managers and 2 medical assistants
- One front desk receptionist

- Client service team/case management
- Part C & D coordinator
- Phlebotomist/laboratory technician
- Administrative and support staff
- Clinical trials staff
- Psychiatry and dermatology on site
- Mental Health practitioner (recruiting)
<table>
<thead>
<tr>
<th>Demographic Factors</th>
<th>PWH at the SCC (N=1128)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>48.0 [3.00, 85.0]</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Cisgender Female</td>
<td>260 (23.0%)</td>
</tr>
<tr>
<td>Cisgender Male</td>
<td>849 (75.3%)</td>
</tr>
<tr>
<td>Transgender</td>
<td>19 (1.7%)</td>
</tr>
<tr>
<td>Race</td>
<td></td>
</tr>
<tr>
<td>Black or African American</td>
<td>344 (30.5%)</td>
</tr>
<tr>
<td>White or Caucasian</td>
<td>696 (61.7%)</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>180 (16.0%)</td>
</tr>
<tr>
<td>Not Hispanic or Latino</td>
<td>946 (83.9%)</td>
</tr>
<tr>
<td>FPL</td>
<td></td>
</tr>
<tr>
<td>&lt;100%</td>
<td>372 (33.0%)</td>
</tr>
<tr>
<td>Insurance</td>
<td></td>
</tr>
<tr>
<td>Medicaid</td>
<td>122 (10.8%)</td>
</tr>
<tr>
<td>Medicare</td>
<td>202 (17.9%)</td>
</tr>
<tr>
<td>Private</td>
<td>646 (57.3%)</td>
</tr>
<tr>
<td>Uninsured</td>
<td>152 (13.5%)</td>
</tr>
<tr>
<td>Housing Status</td>
<td></td>
</tr>
<tr>
<td>Stable/permanent</td>
<td>1043 (92.5%)</td>
</tr>
</tbody>
</table>
Phase 1: Transformation

• Identified a need to transform our delivery of care model in order to ensure retention in care (RIC) for people with HIV (PWH) during pandemic
• There was a system-wide movement to offer telemedicine visits to patients in ambulatory clinics
  – Training materials disseminated regarding billing, E/M coding
  – Uniform statements to support billing (rationale for telemed visit)
  – Visit templates
• Interim Guidance for COVID-19 and PWH also supported modification of the standard every 6 month visit and lab check during time of pandemic

Needs Assessment: Barriers and Resolution

Patient level Barrier

• 50% of patients do not have MyChart or technology
• Patients were calling to cancel appointments
• Patients using mass transit
• Patients out of medications
• Fear and anxiety regarding COVID-19 in HIV

Resolution

• Utilize telephone evaluation instead of video telehealth
• Switch to telephone instead of cancelling
• Utilize taxi cab
• Provide 90 day supply
• COVID-19 education as part of telehealth, COVID-19 hotline
Needs Assessment: Barriers and Resolution

Clinic level barrier
• Space including waiting and exam rooms, and offices
• COVID-19 screening process
• PPE and NP swab collection
• Variation in providers criteria of who needs to be seen in person
• Staff concerns regarding COVID-19

Resolution
• Reducing the number of patients and staff in clinic
• Adapted organization’s process
• Organizational training team
• Developed a procedure manual for staff and providers
• Weekly meetings to provide updates and discuss concerns
Staff training on telehealth tools and shortcuts (smartphrase)

Developed criteria for telehealth vs. office visits (algorithms)

Implementation Strategy
1. Assess for readiness and identify barriers and facilitators
2. Prepare clinic operations champions
3. Organize clinician implementation meetings
4. All staff training

Developed criteria for rescheduling patients

Just-In-Time training on COVID-19 test collection

Changed physical clinic set-up to accommodate patients seen in clinic (walk-ins, those not eligible for telehealth)

Just-In-Time training on personal protective equipment (PPE)
METHODS

• We continuously updated an algorithm on patient eligibility and monitored outcome through chart reviews between May 1, 2020 to April 30, 2021.
• We collected patient demographics, clinical, and federal poverty level (FPL) information.
• We examined baseline and post-intervention clinic rates of
  – Viral load suppression (VLS, defined as HIV RNA < 200 copies per mL),
  – Medical visit frequency (MVF, defined as percentage of patients who had one visit in each 6 months of the preceding 24 months with at least 60 days between visits)
  – Lost to care (LOC, no follow up within 12 months period).
Established Patients

Complete Phone Encounter Visit
- Patient needs labs now?
- Patient requesting STI screening?

Support staff will schedule routine provider visit with lab in Summer 2020

Established Patient due for Routine Office Visit
- Provider visit w/in past 9 mths
  - VL undetectable
  - Stable CD4
  - Appropriate RF history
    (if available)

SCREEN FOR COVID-19
- Symptoms?
- Travel?
- Known exposure?

POSITIVE COVID SCREEN
- Instruct on self isolation
- Monitor mild symptoms
- Provide hotline 559-0041
- Offer routine appointment in a few weeks

NEGATIVE COVID SCREEN
- Schedule visit as appropriate

Established Patient
- Requesting STI screening or other lab
- Requesting Acute Visit
New Patients

NEW PATIENTS
NOT ELIGIBLE FOR
TELEPHONE ENCOUNTER VISITS
-is this a transfer of care?

Screen for COVID-19
-symptoms?
-travel?
-known exposure?

POSITIVE COVID SCREEN
-instruct on self isolation
-monitor mild symptoms
-provider hotline 559-0041
-offer new patient appointment in a few weeks

NEGATIVE COVID SCREEN
-schedule next available new patient appointment

Transfer of care
-labs stable?
-evaluation by previous provider in the past 6 months?
able to request refills from previous provider?

Newly diagnosed or return to care (not seen at SCC in the past year)

Schedule new patient appointment for Summer 2020
Phase 1 - Transformation
- Needs assessment
- Team planning meetings
- Developing tools and protocols

Phase 2 - Refinement
- Monitoring outcomes
- Adjusting protocols
- Preparing for re-opening

Phase 3 - Recovery
- Sustainability of telehealth
- Establishing new clinic flow
- Preparing for next phase
RESULTS

• We conducted a total of 2298 ambulatory medical visits; 1642 were in person and 656 (29%) were telemedicine visits.
• Out of those, 2177 were follow up visits (649, 30% telemedicine).
• There was no difference of telemedicine utilization based on race (28% in African Americans vs. 32% in Whites); ethnicity (30% in Hispanic vs. 30% in Hon-Hispanic); gender (24% in females vs. 30% in males); or FPL (28% in FPL < 200% vs. 31% in FPL >200%).
• By the end of April 2021, overall clinic VLS rate was 94%, MVF was 48%, and there were 40 patients LOC compared to 92%, 49%, and 43 patients in April 2020, respectively.
CONCLUSIONS

• Telemedicine was a safe alternative to routine in-person HIV care during the COVID-19 pandemic. We observed similar rates of utilization across demographic and FPL status. Applying selection criteria, viral suppression and retention in care rates were not adversely impacted by shift to telemedicine modality.
Questions

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