Personal Outreach by a Trained Social Worker is an Effective Intervention to Reengage Patients with HIV in Care

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Lauren E. Richey, MD, MPH
MUSC Authors’ Affiliations

- Madelyne Bean, PharmD, BCPS - Clinical pharmacist and faculty member of the Division of Infectious Disease
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- Lauren Richey, MD, MPH - Assistant Professor of the Division of Infectious Disease
Benefits of Retention in Care

• Earlier diagnosis of HIV leads to:
  – Improved clinical outcomes
  – Decreased transmission

• Both require that the newly diagnosed patient
  – Be linked to care
  – Actively engaged in care
  – Retained in high quality care that provides ART
South Carolina Cascade of Care in 2012

- 100% of PLWHA received any care
- 64% retained in care
- 53% achieved viral suppression
- 48% of PLWHA experienced viral suppression

PLWHA = Person living with HIV/AIDS

Community-Based Outreach Pilot Program

• Creation of a new part-time position
  – Funding via Ryan White Part D grant

• Credentials
  – Masters in Clinical Counseling
  – Certified as a Licensed Professional Counselor
  – Certified Addictions Counselor

• Goals
  – Identify and re-engage patients who are poorly retained in care
Community-Based Outreach Pilot Program

• Identified patients not retained in care
  – Attended clinic within the recent 5 years
  – Did not meet HRSA definition of “Retained in Care” in 2014
    • 2 visits to an HIV provider in 1 year, at least 90 days apart
• Determined need for re-engagement in care
  – Consulted EMR, obituaries, or personal communication
  – Categorized as deceased, incarcerated, moved/transfered care, or need of re-engagement
• Protection of patient privacy
  – Outreach with generic voice message or letter
Phone Call Intervention

- Once identified, call placed to phone number(s) in EMR

- Intervention based on patient response
  - If answered, coordinator actively worked to re-engage the patient in care
  - If unable to reach patient, if possible, left generic message for patient to call back
Letter Intervention

• If unable to reach patient via phone call:
  – Letter written and mailed to patient at address noted in the EMR
  – Letter offered assistance with re-engagement
  – Included contact information for the coordinator
Home Visit Intervention

• If patient did not respond to letter, or if letter was returned:
  – Home visit considered if time available

• Response to visit:
  – If patient was home, attempted reengagement
  – If someone other than patient was home, left card
  – If no one was available, left card in sealed envelope with note to “Please call when possible”

• If time available, repeat visits in following week(s) at different times
Response Definitions

• Study response categories
  – Scheduled visit ("No-show")
  – Attended visit
  – Future visit
• All other patients considered "no response"
• Data collection initiated October 1, 2014
  – If no previous visit, automatically met study definition
• Collection completed April 30, 2015
  – Allowed time for response to an intervention
Not Retained in Care in 2014
233 Patients

- 77 (33%) Transferred Care
- 14 (6%) Died
- 14 (6%) Incarcerated
- 128 (55%) Fallen Out of Care
  - 127 (99%) Intervention
  - 1 (1%) No Intervention
  - 5 (4%) Scheduled a Visit
  - 39 (30%) Attended a Visit
  - 13 (10%) Future Visit
  - 70 (55%) No Response
# Demographics

<table>
<thead>
<tr>
<th></th>
<th>Fallen Out of Care (n=128)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age (years)</strong></td>
<td>42</td>
</tr>
<tr>
<td><strong>Male</strong></td>
<td>92 (72%)</td>
</tr>
<tr>
<td><strong>African-American</strong></td>
<td>101 (79%)</td>
</tr>
<tr>
<td><strong>Hispanic</strong></td>
<td>9 (7%)</td>
</tr>
<tr>
<td><strong>Insurance</strong></td>
<td></td>
</tr>
<tr>
<td>Medicaid</td>
<td>26 (20%)</td>
</tr>
<tr>
<td>Ryan White</td>
<td>63 (49%)</td>
</tr>
<tr>
<td>Medicare</td>
<td>21 (16%)</td>
</tr>
<tr>
<td>Private</td>
<td>16 (13%)</td>
</tr>
<tr>
<td><strong>CD4 Count [mean]</strong></td>
<td>415</td>
</tr>
<tr>
<td><strong>Viral Load [median]</strong></td>
<td>275</td>
</tr>
<tr>
<td><strong>Viral Load [mean]</strong></td>
<td>53,341</td>
</tr>
</tbody>
</table>

* Last value on record for patient
**Intervention Results**

127 (99%) Patients

- Phone Intervention (n=25)
- Phone and Letter Intervention (n=88)
- Phone, Letter, and Home Visit Intervention (n=14)
Intervention Results

Phone Intervention (n=25)

- 14 (56%) - Future Visit
- 8 (32%) - Attended a Visit
- 2 (8%) - Scheduled a Visit (but did not attend)
- 1 (4%) - No Response
Intervention Results

Phone Intervention (n=25)

- 14 (56%) Future Visit
- 8 (32%) Scheduled a Visit (but did not attend)
- 2 (8%) Attended a Visit
- 1 (4%) No Response
Intervention Results

Phone Intervention (n=25)

- 14 (56%) Future Visit
- 8 (32%) No Response
- 2 (8%) Scheduled a Visit (but did not attend)
- 1 (4%) Attended a Visit
Intervention Results

Phone Intervention (n=25)

- 14 (56%) Future Visit
- 8 (32%) Attended a Visit
- 2 (8%) Scheduled a Visit (but did not attend)
- 1 (4%) No Response
Intervention Results

Phone and Letter Intervention (n=88)

- 23 (26%) attended a visit
- 58 (66%) scheduled a visit (but did not attend)
- 4 (5%) future visit
- 3 (3%) no response
Intervention Results

Phone and Letter Intervention (n=88)

- 58 (66%) Scheduled a Visit (but did not attend)
- 23 (26%) Attended a Visit
- 4 (5%) Future Visit
- 3 (3%) No Response
Intervention Results

Phone and Letter Intervention (n=88)

- 58 (66%): Scheduled a Visit (but did not attend)
- 23 (26%): Attended a Visit
- 4 (5%): Future Visit
- 3 (3%): No Response
Intervention Results

Phone and Letter Intervention (n=88)

- 58 (66%) Scheduled a Visit (but did not attend)
- 23 (26%) Attended a Visit
- 4 (5%) Future Visit
- 3 (3%) No Response
Intervention Results

Phone, Letter, and Home Visit Intervention (n=14)

- 11 (79%) No Response
- 1 (7%) Future Visit
- 2 (14%) Scheduled a Visit (but did not attend)
- 1 (7%) Attended a Visit
Intervention Results

Phone, Letter, and Home Visit Intervention (n=14)

- 11 (79%) No Response
- 1 (7%) Future Visit
- 2 (14%) Scheduled a Visit (but did not attend)
- 1 (7%) Attended a Visit
Intervention Results

Phone, Letter, and Home Visit Intervention (n=14)

- 11 (79%) No Response
- 1 (7%) Future Visit
- 2 (14%) Attended a Visit
- 0 (0%) Scheduled a Visit (but did not attend)
Intervention Results

Phone, Letter, and Home Visit Intervention (n=14)

- 0 (0%) scheduled a visit but did not attend
- 2 (14%) attended a visit
- 1 (7%) future visit
- 11 (79%) no response
Intervention Results

127 (99%) Patients

- Phone Intervention (n=25)
  - 96% Response

- Phone and Letter Intervention (n=88)
  - 34% Response

- Phone, Letter, and Home Visit Intervention (n=14)
  - 21% Response
# Group Characteristics

<table>
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<tr>
<th></th>
<th>Response (n=57)</th>
<th>No Response (n=70)</th>
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</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td>43</td>
<td>40</td>
</tr>
<tr>
<td>Male</td>
<td>38 (67%)</td>
<td>53 (76%)</td>
</tr>
<tr>
<td>African-American</td>
<td>49 (86%)</td>
<td>51 (73%)</td>
</tr>
<tr>
<td>Insurance</td>
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<td></td>
</tr>
<tr>
<td>Ryan White</td>
<td>25 (44%)</td>
<td>37 (53%)</td>
</tr>
<tr>
<td>CD4 Count [mean]</td>
<td>391</td>
<td>438</td>
</tr>
<tr>
<td>Viral Load [median] *</td>
<td>588</td>
<td>262</td>
</tr>
<tr>
<td>Viral Load [mean]*</td>
<td>42,962</td>
<td>54,781</td>
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<table>
<thead>
<tr>
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<th>Phone and Letter (n=88)</th>
<th>Phone, Letter, Home Visit (n=14)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age [mean] (years)</strong></td>
<td>45</td>
<td>42</td>
<td>31</td>
</tr>
<tr>
<td>Male</td>
<td>19 (76%)</td>
<td>64 (73%)</td>
<td>8 (57%)</td>
</tr>
<tr>
<td>African-American</td>
<td>19 (76%)</td>
<td>70 (80%)</td>
<td>11 (79%)</td>
</tr>
<tr>
<td>Insurance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ryan White</td>
<td>10 (40%)</td>
<td>43 (49%)</td>
<td>9 (64%)</td>
</tr>
<tr>
<td>**CD4 Count [mean] ** *</td>
<td>490</td>
<td>409</td>
<td>338</td>
</tr>
</tbody>
</table>

* Last value on record for patient
Conclusions

• Many of the patients identified were not in need of reengagement
  – 45% transferred care, died, or were incarcerated

• Overall response in 45% of those fallen out of care
  – Suggests that contact with outreach coordinator may be an effective intervention

• Groups were similar
  – Response and non-response groups similar to each other and the poorly retained population as a whole
Limitations

- Lab markers do not represent current HIV disease status in poorly retained patients
- Categorization was time intensive and may have been the result of an intervention
- Time elapsed since last appointment may limit intervention effectiveness
  - Risk of inaccurate contact information increases with time
Future Directions

• Which barriers most often impact retention in care for our patients?
• Which retention interventions are most cost-effective?
• How do we reach patients that were never linked to care?
Questions???