Effective Interventions Suggested References

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| Akbari, A., et al. (2008). "Interventions to improve outpatient referrals from primary care to secondary care." Cochrane Database of Systematic Reviews 4. | **Background** The primary care specialist interface is a key organisational feature of many health care systems. Patients are referred to specialist care when investigation or therapeutic options are exhausted in primary care and more specialised care is needed. Referral has considerable implications for patients, the health care system and health care costs. There is considerable evidence that the referral processes can be improved.  
**Objectives** To estimate the effectiveness and efficiency of interventions to change outpatient referral rates or improve outpatient referral appropriateness.  
**Search methods** We conducted electronic searches of the Cochrane Effective Practice and Organisation of Care (EPOC) group specialised register (developed through extensive searches of MEDLINE, EMBASE, Healthstar and the Cochrane Library) (February 2002) and the National Research Register. Updated searches were conducted in MEDLINE and the EPOC specialised register up to October 2007.  
**Selection criteria** Randomised controlled trials, controlled clinical trials, controlled before and after studies and interrupted time series of interventions to change or improve outpatient referrals. Participants were primary care physicians. The outcomes were objectively measured provider performance or health outcomes.  
**Data collection and analysis** A minimum of two reviewers independently extracted data and assessed study quality.  
**Main results** Seventeen studies involving 23 separate comparisons were included. Nine studies (14 comparisons) evaluated professional educational interventions. Ineffective strategies included: passive dissemination of local referral guidelines (two studies), feedback of referral rates (one study) and discussion with an independent medical adviser (one study). Generally effective strategies included dissemination of guidelines with structured referral sheets (four out of five studies) and involvement of consultants in educational activities (two out of three studies). Four studies evaluated organisational interventions (patient management by family physicians compared to general internists, attachment of a physiotherapist to general practices, a new slot system for referrals and requiring a second ‘in-house’ opinion prior to referral), all of which were effective. Four studies (five comparisons) evaluated financial interventions. One study evaluating change from a capitation based to mixed capitation and fee-for-service system and from a fee-for-service to a capitation based system (with an element of risk sharing for secondary care services) observed a reduction in referral rates. Modest reductions in referral rates of uncertain significance were observed following the introduction of the general practice fundholding scheme in the United Kingdom (UK). One study evaluating the effect of providing access to private specialists demonstrated an increase in the proportion of patients referred to specialist services but no overall effect on referral rates.  
**Authors’ conclusions** There are a limited number of rigorous evaluations to base policy on. Active local educational interventions involving secondary care specialists and structured referral sheets are the only interventions shown to impact on referral rates based on current evidence. The effects of ‘in-house’ second opinion and other intermediate primary care based alternatives to outpatient referral appear promising. |

PubMed Link
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### Linkage to Care

**Updated: January 24, 2014**

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<td>Liau, A., et al. (2013). &quot;Interventions to promote linkage to and utilization of HIV medical care among HIV-diagnosed persons: a qualitative systematic review, 1996-2011.&quot; AIDS Behav 17(6): 1941-1962.</td>
<td>This qualitative systematic review examined interventions that promote linkage to or utilization of HIV care among HIV-diagnosed persons in the United States. We conducted automated searches of electronic databases (i.e., MEDLINE, EMBASE, PsycINFO, CINAHL) and manual searches of journals, reference lists, and listservs. Fourteen studies from 19 published reports between 1996 and 2011 met our inclusion criteria. We developed a three-tier approach, based on strength of study design, to evaluate 6 findings on linkage to care and 18 findings on HIV care utilization. Our review identified similar strategies for the two outcomes, including active coordinator’s role in helping with linking to or utilizing HIV care; offering information and education about HIV care; providing motivational or strengths-based counseling; accompanying clients to medical appointments and helping with appointment coordination. The interventions focused almost exclusively on individual-level factors. More research is recommended to examine interventions that address system and structural barriers.</td>
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**PubMed Link**


| Mehrotra, A., et al. (2011). "Dropping the Baton: Specialty Referrals in the United States." The Milbank Quarterly 89(1): 39-68. | **Context:** In the United States, more than a third of patients are referred to a specialist each year, and specialist visits constitute more than half of outpatient visits. Despite the frequency of referrals and the importance of the specialty-referral process, the process itself has been a long-standing source of frustration among both primary care physicians (PCPs) and specialists. These frustrations, along with a desire to lower costs, have led to numerous strategies to improve the specialty-referral process, such as using gatekeepers and referral guidelines. **Methods:** This article reviews the literature on the specialty-referral process in order to better understand what is known about current problems with the referral process and what solutions have been proposed. The article first provides a conceptual framework and then reviews prior literature on the referral decision, care coordination including information transfer, and access to specialty care. **Findings:** PCPs vary in their threshold for referring a patient, which results in both the underuse and the overuse of specialists. Many referrals do not include a transfer of information, either to or from the specialist; and when they do, it often contains insufficient data for medical decision making. Care across the primary-specialty interface is poorly integrated; PCPs often do not know whether a patient actually went to the specialist, or what the specialist recommended. PCPs and specialists also frequently disagree on the specialist’s role during the referral episode (e.g., single consultation or continuing comanagement). |

**PubMed Link**


| Aziz, M. and K. Y. Smith (2011). "Challenges and successes in linking HIV-infected women to care in the United States." Clin Infect Dis 52 Suppl 2: S231-237. | Women currently account for 27% of new human immunodeficiency virus (HIV) infections in the United States, the majority of which are acquired through heterosexual transmission. In the United States, black and Latino persons are disproportionately affected by the HIV epidemic, a disparity that is most dramatically present among HIV-infected women. Many of these women face significant discrimination as a result of race or ethnicity and sex, and they suffer disproportionately from poverty, low health literacy, and lack of access to high-quality HIV care. As a consequence, despite the availability of highly active antiretroviral therapy (HAART), women with HIV often have delayed entry into care and experience poor outcomes. This article reviews risk factors for HIV infection in women, barriers to engagement in care, and strategies to improve linkage to HIV-related medical and social care. |

**PubMed Link**

### Objective
The Antiretroviral Treatment Access Study-II (ARTAS-II) evaluated a brief case management intervention delivered in health departments and community-based organizations (CBOs) to link recently diagnosed HIV-infected persons to medical care rapidly.

### Methods
Recently diagnosed HIV-infected persons were recruited from 10 study sites across the United States during 2005 to 2006. The intervention consisted of up to 5 sessions with an ARTAS linkage case manager over a 90-day period. The outcome measure was whether or not the participant had seen an HIV medical care provider at least once within 6 months of enrollment. Multivariate logistic regression was used to identify significant predictors of receiving HIV medical care.

### Results
Seventy-nine percent (497 of 626) of participants visited an HIV clinician at least once within the first 6 months. Participants who were older than 25 years of age, Hispanic, and stably housed; had not recently used noninjection drugs; had attended 2 or more sessions with the case manager; and were recruited at a study site that had HIV medical care colocated on its premises were all significantly more likely to have received HIV care.

### Conclusions
The ARTAS linkage case management intervention provides a model that health departments and CBOs can use to ensure that recently diagnosed HIV-infected persons attend an initial HIV care encounter.

| Craw, J. A., et al. (2008). “Brief Strengths-Based Case Management Promotes Entry Into HIV Medical Care Results of the Antiretroviral Treatment Access Study-II.” J Acquir Immune Defic Syndr 47(5): 597-606. | **PubMed Link** http://www.ncbi.nlm.nih.gov/pubmed/18285714 | **Objective:** The Antiretroviral Treatment Access Study-II (ARTAS-II) evaluated a brief case management intervention delivered in health departments and community-based organizations (CBOs) to link recently diagnosed HIV-infected persons to medical care rapidly. **Methods:** Recently diagnosed HIV-infected persons were recruited from 10 study sites across the United States during 2005 to 2006. The intervention consisted of up to 5 sessions with an ARTAS linkage case manager over a 90-day period. The outcome measure was whether or not the participant had seen an HIV medical care provider at least once within 6 months of enrollment. Multivariate logistic regression was used to identify significant predictors of receiving HIV medical care. **Results:** Seventy-nine percent (497 of 626) of participants visited an HIV clinician at least once within the first 6 months. Participants who were older than 25 years of age, Hispanic, and stably housed; had not recently used noninjection drugs; had attended 2 or more sessions with the case manager; and were recruited at a study site that had HIV medical care colocated on its premises were all significantly more likely to have received HIV care. **Conclusions:** The ARTAS linkage case management intervention provides a model that health departments and CBOs can use to ensure that recently diagnosed HIV-infected persons attend an initial HIV care encounter. |