Linkage to care following HIV diagnosis

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Presentation Overview

1) Background
   - What is linkage to care?
   - What do we already know about linkage to care?
   - What is already being done to explore linkage to care in Europe?

2) PhD Aim and objectives

3) Data sources and analyses
   - Literature reviews
   - UK surveillance data
   - Qualitative interviews
   - European data

4) Timeline
What is linkage to care?

- Entry into care following diagnosis with HIV
- Often measured as the time between a patient’s diagnosis and their attendance at an HIV specialist care provider
- **WHO 2015**: the duration of time starting with HIV diagnosis and ending with enrolment in HIV care or treatment\(^1\)
What do we know about linkage?

1) Little available data on linkage to HIV care in Europe

- Few published studies in the literature
- Only a small number of countries routinely monitor linkage to care locally or nationally
- Existing estimates are difficult to compare due to variety of definitions being applied
Current definitions in use

- **HIV diagnosis**: 72 hrs
- **Attendance to specialist after POCT**: 1 month 4 weeks 28 days
- **CD4 or VL**
  - **CD4**
    - 1 month
  - **VL**
    - 4 weeks
    - 28 days
    - 3 months
- **Enrolment to HIV clinic**
- **HIV unit referral**
- **First HIV consult**
- **Receiving HIV care**
- **Enrolment to HIV clinic**
- **Attendance to specialist**
- **CD4 or VL**
- **HIV unit referral**
- **Receiving HIV care**
- **First HIV consult**
- **Enrolment to HIV clinic**

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Linkage to care: proportion of newly diagnosed adults with a CD4 count within 1 and 3 months of diagnosis: UK, 2013

Excludes 1,123 patients diagnosed in 2011, with CD4 counts not available within 12 months of HIV diagnosis.
What do we know about linkage?

2) Prompt linkage to care is important:

- Prompt diagnosis of HIV, swift entry into care and maintaining a high CD4 count through appropriate treatment are associated with increased life expectancy as well as reduced transmission\(^5,20,21\)

- Non-engagement in care has been associated with poor clinical outcomes including delayed ART initiation, virologic failure and mortality\(^22,23,24\)
What do we know about linkage?

3) Linkage to care can be impacted by diagnosis setting

- With the expansion of HIV testing in recent years to non-traditional testing (e.g. GP, A&E, community), there is a risk of patients not linking promptly to care.
- Rates of linkage to care shown to be associated with diagnosis setting in the United States$^{25}$.
- Successful expansion of HIV testing must also be linked to prompt access to medical care, treatment uptake and high rates of retention.
What is being done to investigate linkage to care in Europe?

- Aim: to ensure that HIV patients enter care promptly and study the decrease in the proportion of HIV patients presenting late for care
- Representation from patient advocacy, policy makers, health professionals and EU public health institutions
- June 2014 – June 2017
What is the public health utility of measuring linkage to care following HIV diagnosis? Examples from the UK and other European epidemics
To understand the public health utility of measuring linkage to care following HIV diagnosis in the era of expanded testing.

To assess the impact of linkage to care on the clinical outcomes of people living with HIV in the UK and in Europe.
Objectives

I. To explore current definitions of linkage to care

II. To describe linkage to care using a contextually appropriate definition and quantify risk factors for poor linkage

III. To assess the impact of delays in linkage to care on patient outcomes

IV. To contextualise linkage to care in the era of expanded testing

V. To determine the feasibility of measuring linkage to care at a national level for a sample of countries in Europe
Literature and systematic reviews
(to address objectives (I) and (II))

- **Literature review** to identify how linkage to HIV care following diagnosis is being defined in the WHO European region
- **Systematic review** to identify what proportion of people are being linked to care following HIV diagnosis
- **Meta-data analysis** to quantify risk factors for poor linkage in WHO European region
Analysis of existing national surveillance data on people diagnosed with HIV (UK) (to address objectives (I), (II) (III) and (IV))
Analysis of existing national surveillance data on people diagnosed with HIV (UK) (to address objectives (I), (II) (III) and (IV))

- Explore impact of varying definitions of linkage to care
- Assess delays to linkage to care and describe trends in linkage to care over the past 5 years
- Describe the shift in diagnosis settings over time
- Determine the association between diagnosis characteristics, including setting of diagnosis and linkage to care
- Describe the impact of delays in linkage to care on patient outcomes.
Qualitative interviews of patients poorly linked to care
(to address objectives (I) and (IV))

What are the consequences of being poorly linked?

Qualitative interviews
- Patients delayed in linking to care
- Recruitment from variety of diagnosis settings
- Informed by quantitative analysis

What does linkage to care actually mean to patients?

What happens in the time between diagnosis and accessing care?

What is the patient experience of being linked to care?
Analysis of existing ECDC European surveillance data
(to address objectives (I) (II) (III) (V))

• Explore how linkage to care is currently defined in Europe and determine what other data are currently being collected by ECDC
• Assess the feasibility of utilising the TESSy European HIV dataset to measure linkage to care
• Determine how linkage to care has changed in the past 5 years
• Describe the impact of delays in linkage to care to patient outcomes, in those countries that can report clinical information in the revised dataset
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<td>PHE outcomes analysis and write-up (publish)</td>
<td>Qualitative interview write-up (publish?)</td>
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**Timeline**

- **PhD start Oct 2015**
- **Upgrade M12-18**
- **PhD Hand in M36**
References


21. Marks G, Crepaz N, Janssen RS. Estimating sexual transmission of HIV from persons aware and unaware that they are infected with the virus in the USA. AIDS 2006 Jun 26;20(10):1447-50


