

Speaker Name	Statement
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# **Economic Assessment of Community HIV CNS Role**

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# Money, Money, Money

**Community HIV CNS is often seen as a ‘luxury’ service.**

**The purpose of this economic assessment was to demonstrate the value of the role and to provide evidence to funding organisations as well as BHIVA.**

**With funding from the Burdett Trust for Nursing, the Office for Public Management (OPM) and the Royal College of Nursing (RCN) delivered a collaborative learning programme designed to empower nurses to understand, generate and use economic evidence to continuously transform care.**

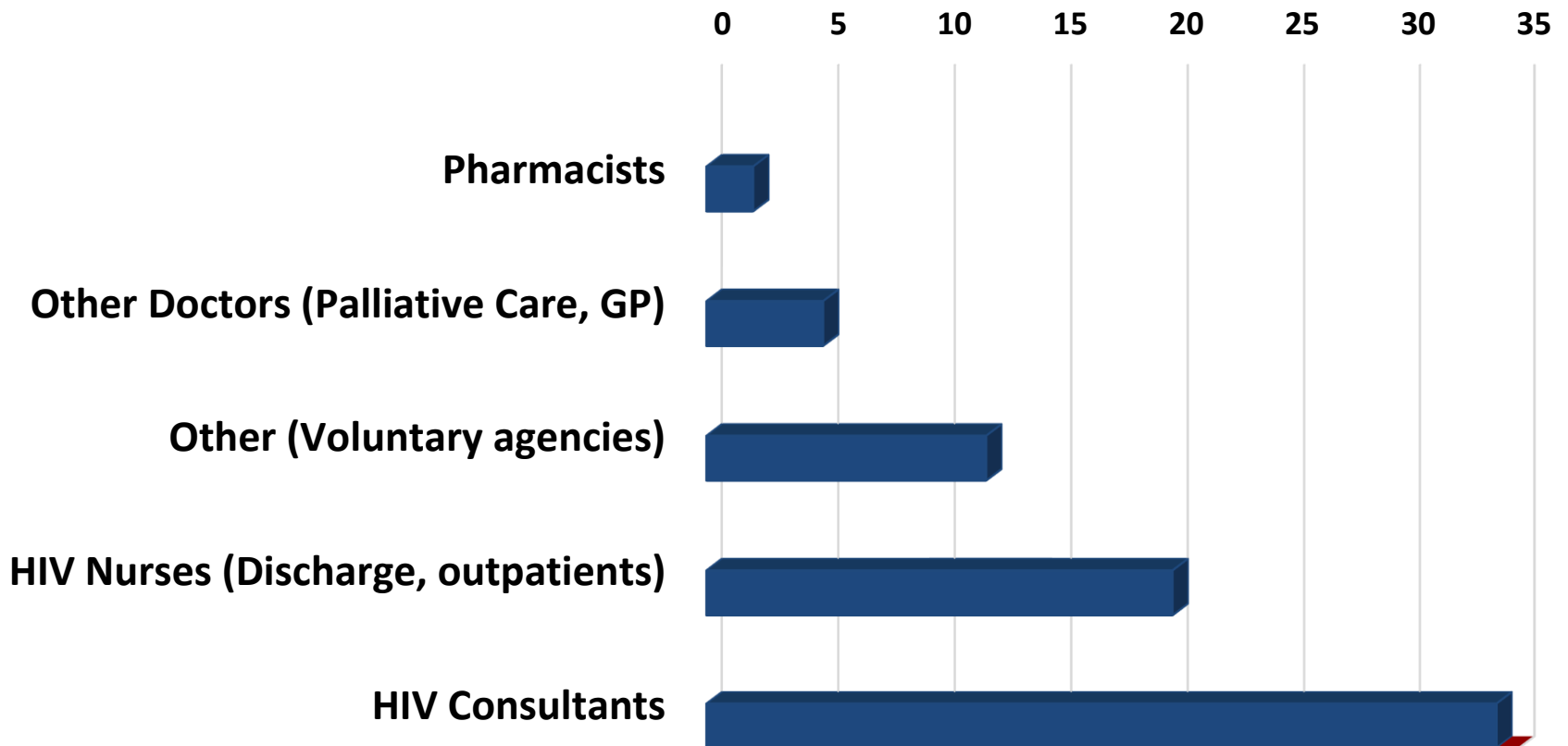
**The Economic Assessment presents the costs and the benefits of providing a Community CNS HIV service. It uses a cost avoidance approach to demonstrate the value of the service and illustrates the impact of the role through 3 case studies.**

# Community HIV CNS Audit

- **Current activity of 21 Community Clinical Nurse Specialists from across London, Brighton and Liverpool.**
- **The roles ranged from Band 6 to 8a with nurses having between 10 and 31 years' experience within HIV care.**
- **Nurses had a range of academic experience with most having undertaken some HIV courses (ENB, University modules) and some with masters in Advanced Nursing Practice, physical assessment, non-medical prescribing, Adult Education and Mentoring courses.**
- **Within London there remains inconsistency within all the boroughs with some having one CNS whilst others have 2-3 and no CNS service in several boroughs, with many CNS's work across boroughs to ensure cover.**

# Who Refers to Community HIV CNS

73 Questionnaire returned (89% referred more than once a year)



# Referral to Community HIV CNS

- **Vigilance** – concerned about home life, safe-guarding, child protection, drugs and alcohol use
- **Chase up those lost to follow-up/re-engage with HIV clinic**
- **Adherence** – monitoring, managing side-effects
- **Psychological support** – emotional not supported by mental health services
- **Onward referral** – to hospice/ specialist HIV (Mildmay, Sussex Beacon etc.), discharge from ward etc.

# Reasons for Referral

Lost to follow up, hard to engage

Poor attender

'Wayward patient', chaotic lifestyle

Onward referral – signposting to local services, rehabilitation

Domestic violence

Safeguarding

Child protection concerns

Safe discharge from hospital

Assessment of home and lifestyle

Community HIV CNS

'Severe mental health'

Psychological support

Drug and alcohol issues

Cognitive impairment and dementia complexes (Capacity issues)

Self-management and Education

Phlebotomy

Pregnancy

Managing side-effects and co-morbidities

Adherence management (starting, switching) Complex Patients (physical, socioeconomic)

# Case load and Case Management

- **The average caseload** (described as those patients ‘seen face-to-face within the last 12 months’) **between 65 and 80 patients per CNS (range 35 - 130)**
- **On average most CNS’s saw between 6 and 24 patients face-to-face each week with between 20 – 50 non face-to-face patient contacts** (described as text/email and phone call, timings not asked).
- **Professional contacts (telephone face to face/email/letters) between 30 - 60 episodes a week (not timed).**
- **Plus admin, teaching, professional development, supervision, MDT meetings, clinics, student placements, other roles (dementia lead, governance).....**



# Community Clinical Nurse Specialist (HIV): Pathways to Outcomes model

## Input

### Direct

Clinical Nurse Specialist (HIV Community). Highly skilled and experienced with 18 years HIV experience.  
Support for role;  
Base – notes, admin  
Travel cost  
IT support  
Safety – lone worker  
Training & development  
Supervision

### Indirect

Referrers to service – HIV Consultants, HIV Clinics and wards, social workers, voluntary HIV services. GP's  
Mental Health teams, drug & alcohol and homelessness teams  
Hospital Discharge teams

## Activities & outputs

HIV CNS provides an expert HIV and overall general health assessment.  
**Vigilance – concerns about home-life, safe guarding, vulnerability, child protection, drug & alcohol use, chaotic. Potential to prevent harm, periods of hospitalisation**  
Rescue work - Management of those 'lost to follow up'/re-engagement with HIV services. Without service patients may remain unsupported which can lead to worsen health and possible hospitalisation.  
**Adherence – assessment of adherence, monitoring ARV's, symptoms and side-effects. Without service potential for poor adherence, medication errors, resistance, which can lead to ill health and hospitalisation. Prevention of onward transmission of HIV**  
Psychological management – providing emotional management for those not supported by mental health services. Service holds patients within community avoids hospital admissions, emergency MH issues.  
**Signposting to appropriate services, onward referral to hospice, specialist HIV care.**

## Groups targeted

### For intervention

HIV positive adults aged 16 and over who have complex physical/social needs and those who are not adjusting to their HIV diagnosis

Carers and families affected by HIV.

### For partnership

HIV Out/inpatient services  
GP's  
Social care services including care agencies, residential/nursing home care as well as social workers  
Mental Health community and inpatient units.  
Psychology.  
Voluntary HIV services – including advice services (CAB) as well as drop in and residential specialist HIV units.

## Outcomes

### Staff outcomes

**For patients to self-manage their health and psycho social care.**  
**Low service DNA rates.**

### Patient outcomes

Positively engaged in their HIV healthcare  
Adherent to HIV medications, prevention of onward transmission  
To self-manage their health and psychosocial care  
Educated, motivated, symptom controlled.  
Family and carers are supported

### Organisational outcomes

Avoiding hospital admissions  
Correct use of HIV services, A&E, ambulance service etc  
Referrers to service

# Economics – For Your Consideration

- **Community HIV CNS role on a band 8a (minus transport and IT costs) plus on costs is £46 per hour.**
- **Avoidance of a hospital (re-)admission is costed at £252 – 500\* per day (palliative care bed). Therefore avoidance of a week in hospital is between £1776 – 3500.**
- **Avoidance of a GP visit is £55-65\* per 17 minute surgery appointment or £38-45\* home visit (for 11.7 minutes).**
- **District Nurses cost between £52 -£62\* per hour but would need additional support and training as well as a change to their referral criteria to undertake the Community HIV CNS role.**

\* Curtis L. and Burns, A (2015) Unit Costs of Health and Social Care 2015. Personal Social Services Research Unit. University of Kent.

## Economics (2)

- **Avoidance of ambulance calls to see, treat and convey to hospital range from £231 – 254. The hear and treat over the phone is £44 and refer on adds to £155 - 180.**
- **Assertive Outreach (mental health) is costed at £51 per hour. If unmanaged crisis resolution is costed at £30,167 per case/per year or £39 per hour.**
- **Prevention of onward HIV transmission means a lifetime costs per case of an estimated at £280,000 - £360,000 per person.**

# ART Wastage

**Darunavir, Ritonavir, Truvada (£673.07 X 12=£8076.84) Average £5000 -£7000 per year**

- If 50% of caseload (60-70 patients) wasted their ART the cost of waste would be around £162,500
- If 80% of patients wasted the cost would be around £260,000

This does not include additional costs such as phone calls, letters, clinic visits, consultations, bloods and other investigations.

# Prevention of Onwards Transmission

**Lifetime costs are estimated at £280,000 - £360,000 (Brown et al, 2013)**

- 12 patients are sexually active (single, escorts, sero-discordant couples), if ART is not managed and supported effectively there is a potential for £3.360,000 – 4.320, 000 costs of onwards transmission

(Brown, A.E., Gill, O.N. and Delpech, V.C. (2013). 'HIV treatment as prevention among men who have sex with men in the UK: is transmission controlled by universal access to HIV treatment and care?'. HIV Medicine, vol. 14, no. 9, October, pp.563-70)

# To replace the Community HIV CNS Role

District Nurse x 12 visits (£52 a visit)	£ 624
Mental health x 12 visits (£51 a visit)	£ 612
Increased GP Visits x 4 (£65 per 17 mins)	£ 260
Avoidance of one week in hospital	£ 3000
Prevention of waste of ART (half a years ART)	£ 3000

With a potential for increased social care needs, ambulance calls and transfers, HIV clinic visits, blood and other tests, A&E visits, increased hospital admission and delayed discharges, increasing mental health emergencies....

Community HIV CNS (£46 a visit x12 )	£ 552
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If the average case load is 65 – 80 patients this equates to around **£484,250 – £596,000** in potential savings.

# The Future is...

- **Raise the profile of the Community HIV CNS**
- **Strengthen funding...make my case.**
- **Develop measurable outcomes.**
- **Develop a model of HIV Community Nursing**  
– **steering group organized, applying for funding.**

# Thanks

- **Thanks to all those CNS's and referrer's who completed the audit.**
- **Thanks to Dr Ann McMahon (RCN) and Chih Hoong Sin (OPM) for their enthusiastic support and endless emails and calls.**
- **Special thanks to Nicky Barsley-Masina, Anna Bamford and Pauline Jelliman for listening to me twitter on about this for the past year!**