University College London Hospitals NHS Foundation Trust

# Evaluation of the London Pathway for Homeless Patients

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UCL Hospitals is an NHS Foundation Trust comprising: The Eastman Dental Hospital, The Heart Hospital Hospital for Tropical Diseases, National Hospital for Neurology and Neurosurgery, The Royal London Homoeopathic Hospital and University College Hospital (incorporating the former Middlesex and Elizabeth Garrett Anderson Hospitals).

### **Outcomes of the London Pathway**

Average duration of unscheduled admissions for homeless patients at University College Hospital reduced by 3.2 days per patient

Projected annual net savings of £300,000 for the health community following application of the London Pathway at UCH

Appropriate durations of stay increased with double the number of homeless patients staying 6-10 days

Savings mainly generated by reducing the number of homeless patients staying longer than 30 days from 14% to 3%

Weekly multi-agency care planning meetings for complex homeless patients implemented

Total proportion of homeless patients discharged with multi-agency care plans increased tenfold from 3.5% to 35%

Care planning extended to include homeless frequent attenders at A&E and homeless patients referred for routine surgery

Where liaison psychiatric assessments carried out, proportion summarised in discharge letter increased from 33% to 75%

Where methadone treatment plans necessary, information in discharge letter increased from 25% to 100%

#### Background

A growing body of evidence demonstrates the significant impact of homelessness on health. For example, homeless patients in Leicester attend A&E 6 times as often as the housed population, are admitted 4 times as often, and stay twice as long. This results in unscheduled secondary care costs 8 times that of housed patients and is still associated with an average age at death of 40.2 years<sup>1</sup>. Homeless patients (including hostel dwellers) admitted to hospital in Glasgow with a drug related problem are 7 times more likely to die over the next 5 years than housed patients with the same drug related reason for admission<sup>2</sup>. A 25 year old man living in a Canadian shelter or rooming house has only a 1 in 3 chance of surviving to 75 years old, compared to 2 in 3 for all 25 year old men in Canada<sup>3</sup>.

#### References

- 1. Leicester Homeless Primary Health Care Service. Annual Report 2007/8. Leicester City NHS Community Health Service.
- 2. Morrison DS. Homelessness as an independent risk factor for mortality: results from a retrospective cohort study. International Journal of Epidemiology 2009;38:877–883
- 3. Hwang SW et al. Mortality among residents of shelters, rooming houses, and hotels in Canada: 11 year follow-up study. BMJ 2009;339:b4036

#### Case History 1, Male aged 44

Winter admission via ambulance at 6.30am, found collapsed in the streets with hypothermia. This patient had been discharged the previous day from another London hospital after a 17 day admission for treatment of an alcohol withdrawal fit. They established that he had been sleeping rough for 8 months after leaving a flat in a south-west London Borough. He had been discharged to the appropriate Housing Options unit with a discharge letter. The Housing Officer had decided that the discharge letter did not establish that the patient was vulnerable and priority need, but also felt that he looked too unwell to be out of hospital so sent him back to A&E. The patient was not readmitted, returned to the streets, collapsed and was admitted to UCH.

UCH admitting team planned on prompt discharge but referred him to the homeless team. Detailed assessment by homeless team found the patient to be delusional and cognitively impaired. Psychiatric assessment confirmed Korsakoff's psychosis – an illness caused by alcohol related brain damage. The homeless team liaised with the duty manager of the Housing Options unit, wrote and faxed over a detailed medical report specifying the patient's disabilities and vulnerabilities with a needs assessment form and persuaded UCH to keep him in hospital until placed. The patient's delusions resolved with alcohol detoxification treatment and he was discharged after 8 days into temporary accommodation with alcohol specific support workers. He has not returned to hospital.

#### **Development of the London Pathway**

During 2009 Nurse Trudy Boyce and Dr Nigel Hewett were invited by the Hospital Board to develop homeless services in University College Hospital by means of a homeless ward round.

A needs assessment phase of 3 months from April to June 2009 was used to gather data on existing routine care provided by an established housing coordinator, followed by a 6 months pilot phase from July 2009. For half of the pilot phase (October to December 09) this has been an entirely clinical service with no housing coordination input. This has offered the opportunity to evaluate any change in outcomes provided by an entirely clinical service.

During the pilot phase a weekly multidisciplinary "paper ward round" has been established and well attended.

A full time nurse homeless health practitioner coordinates care and visits homeless patients daily, supported by a regular General Practitioner led ward round.

A care pathway has been devised which we are calling the London Pathway, backed up by draft care plans and protocols.

Inclusion of Care Navigators – people with an experience of homelessness to offer peer mentoring and support is being developed.

This paper summarises the outcomes demonstrated by the evaluation. The unplanned absence of the housing coordinator gave the opportunity for comparing the London Pathway with the previous status quo. A variety of positive outcomes are detailed in this paper, but most significant has been a reduction in the average duration of stay for homeless patients.

As a result of these outcomes there is considerable interest in the London Pathway from the GLA, DH, CLG and from other London Hospitals. An application for research funding is underway to investigate more fully the benefits of applying the London Pathway at a second major Teaching Hospital and to compare the outcomes for homeless patients with a Hospital Trust which does not have this service.

We are also supported by UCLH estates in drawing up detailed plans for a community "Sanctuary" unit to provide medical care for homeless patients in a community setting, to further reduce in patient stays and re-attendances.

#### **Evaluation**

This analysis is based on all 57 patients who were referred to the clinically led homeless ward round pilot during October and November 2009 (in the absence of a housing coordinator) and followed up until discharge. These were compared to 57 consecutive patients managed by a housing coordinator and evaluated during the needs assessment period April to June 2009. Patients referred include complex patients in hostels and other temporary accommodation, as well as rough sleepers.

There are the following differences between the two groups

- Average duration of stay reduced from 12.7 days to 9.5 days, an average reduction of 3.2 days per admission
- Over a typical year with about 250 homeless admissions at UCH there is the potential for a reduction from 3175 to 2375 bed days, a total reduction of 800 bed days.
- The standard daily cost of acute admission (as charged by the hospital to overseas visitors) is £500 per day. 800 days at £500 per day suggests potential savings of £400,000 per year. Estimated total staff costs of implementation of London Pathway £100,000 per year, so net saving to health community of £300,000.
- These improvements are in the context of a baseline service provided by a full-time housing coordinator in the hospital. The potential benefits of the London Pathway are likely to be even greater in the majority of hospitals which do not have the services of a housing coordinator.
- Initial analysis of duration of stay for the two groups suggests that the Ward Round has doubled the
  number of patients staying 6-10 days (perhaps by preventing premature discharge) and the savings
  were made by reducing the number of patients staying longer than 30 days from 14% to 3%, perhaps
  due to multi-agency working and the paper ward round.



- Proportion of improved housing outcomes (eg: rough sleeping on admission, hostel on discharge) and numbers of patients taking own discharge unchanged between the two groups. This demonstrates no detrimental effect from the lack of a housing coordinator during the study period.
- Weekly multi-agency paper round meetings increased the proportion of patients receiving multi-agency care plans ten fold from 3.5% to 35%.
- Additional benefits include care planning for A&E frequent attenders for whom the multi-agency team develops a computerised care plan accessible to casualty staff whenever the patient presents
- Care planning also extended to homeless patients referred for planned surgical treatment (increasing numbers of referrals are eligible for NHS treatment, but no recourse to public funds so cannot get housing) may need to plan for longer admissions than usual as cannot get suitable housing

Analysis of hospital discharge letters for the two groups of patients showed the following changes

- Relevant housing information increased from 50% to 57%
- Where GP follow up necessary advice notes increased from 80% to 89%
- Where psychiatric assessments carried out, proportion summarised in discharge letter increased from 33% to 75%
- Where community methadone treatment plans necessary, information in discharge letter increased from 25% to 100%
- No change in recording of hospital outpatient follow up plans

The combined sample of 114 patients admitted over 5 months allows for a detailed analysis of the types of illness episode resulting in hospital admission for homeless patients

Primary reason for admission	Number	Percentage
Alcoholic collapse or fit	20	17%
Korsakoff's, ataxia, alcoholic psychosis (neurological sequelae of alcohol)	7	6.5%
Trauma secondary to alcohol, head injuries, fractures	8	7%
Gastrointestinal consequences of alcohol (gastritis, du, oesophageal varices, cirrhosis, pancreatitis)	16	14%
Sub-total all alcohol related	51	44%
Infection secondary to IVDU (septicaemia, abscess, ulcer, endocarditis)	18	16%
HIV (of which 2 also had TB)	9	8.5%
Sub-total all drug related	27	24%
Other/miscellaneous	15	13%
Falls/trauma unrelated to drink or drugs	8	7%
Malignant disease	5	4%
Suicide attempt	4	3.5%
Chronic Obstructive Pulmonary Disease (smoking related)	4	3.5%
Total	114	

This data confirms the widely published observation that complications of alcohol and drug abuse are the principal triggers for hospital admission. Substance misuse has complex links to poverty, childhood trauma, mental and physical ill health and can arise in response to the stress of homelessness, as well as being a cause of homelessness.

#### The London Pathway has 4 key components

- Regular hospital ward rounds of homeless patients led by a General Practitioner the only health professionals trained to deal with physical ill-health, mental ill-health and drug and alcohol misuse in a social and psychological context
- Homeless Health Practitioners a specialist nurse to coordinate the hospital care and discharge planning of homeless patients with complex needs and coordinate a weekly care planning meeting (paper ward round) to include Social Workers, mental health teams (hospital and community), drug and alcohol workers, discharge liaison teams and representation from Housing Options.
- Care Navigators a team of people with an experience of homelessness supporting the HHP to provide befriending, mentoring, advocacy and long term follow up and support
- Sanctuary a collaborative venture between health, housing support and social care to
  provide intermediate care in the community for homeless patients with tri-morbidity. Will
  accept patients who are well enough to leave hospital, but not likely to cope in hostels or on
  the streets and homeless patients from the community who are deteriorating towards
  another hospital admission.

#### Case History 2, Male aged 54

This alcohol dependent intravenous drug user collapsed in a central London hostel. He was admitted under a surgical team with septicaemia and multiple abscesses of arm and legs, requiring repeated incision and drainage operations followed by painful dressing changes. There was a risk of amputation being necessary. Having missed several doses of methadone in the community, this medication had to be re-titrated. In severe pain, he was constantly asking for morphine on the ward and threatening to leave. Ward staff feared that he was abusing morphine. The homeless team intervened and explained that methadone use and heroin addiction had produced a high opiate tolerance, so high levels of opiate analgesia were appropriate in this case. Liaison with drug in-reach services supported the surgical team in building up the methadone dose to pre-admission levels. The patient was visited daily by the homeless team, befriended and encouraged to stay, relationships with ward staff markedly improved. He made telephone contact with his daughter. Phone calls and a medical letter to the benefits agency confirmed that the patient was unable to attend a benefits interview, so benefits were maintained. Regular calls to hostel staff kept them informed of progress. After 27 days he was ready for discharge, but still needing regular morphine analgesia. There was concern about safe storage in a hostel environment. Telephone advice from the Drug team suggested discharge with weaker analgesia, but having needed morphine 4 hourly throughout his admission this was likely to lead to conflict, or relapse onto heroin in the community. The Pain Team were invited to give an opinion and confirmed that his morphine use was entirely appropriate. His GP agreed to prescribe daily dispensing of morphine for pain and the local drug team resumed his methadone prescription, with dressings arranged with the district nurse. The patient contacted a local AA meeting and found a sponsor to help with maintaining abstinence from alcohol. He has kept subsequent out-patient follow up appointments and has not required re-admission. He still has all of

his limbs and toes..

# The London Pathway has 4 objectives, shown by this flow chart.

Draft care plans and protocols are being developed to provide detailed support for the work of the homeless team and to test replicability in other hospitals.

## **Objective 1** Think Homelessness!

Check housing status for all patients on admission. If homeless or temporary housing refer to the Homeless Health Practitioner.

# **Objective 2**

### **Homeless Team Coordinate Care**

Patient seen by Homeless Health Practitioner, visited by the Homeless Ward Round, needs assessed and Homeless Care Plan started.

## **Objective 3** Care Plan Meeting

Complex needs cases referred to weekly Homeless Paper Ward Round for multi-agency care Plan and Sanctuary assessment.

## **Objective 4** Community Support

HHP refers to Care Navigator Team & assesses need for Sanctuary Placement (ongoing medical needs and complex case).