teams to care for those with HIV infection or on the part of patients to use their general practitioners but because of a reluctance of hospital based teams to transfer responsibility to their colleagues in the community.

The current arrangements for allocating funds to hospital based providers offer few incentives for HIV specialists to work with primary care teams. The failure to allocate resources to providers in the community must be urgently addressed by purchasers if general practitioners and district nurses are to be encouraged to participate in shared care for patients with HIV infection.

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Patients benefit from shared care

EDITOR,—My experience of funding for care of patients with HIV and AIDS confirms the views expressed by Mark McCarthy and Sarah Layzell.[1] As a result of the way in which funding has been allocated, specialist services (both hospital and community based) have been encouraged to exclude general practitioners from involvement in the management of HIV and AIDS. I believe that the care of these patients will greatly benefit from integration into generic services.

I am a "GP fellow in HIV" recently appointed by North West Thames region to Barnet Family Health Services Authority. This is a part time position which I combine with a partnership in a fundholding general practice in north London. It is a newly created post designed to increase the amount and quality of care offered to HIV and AIDS patients by the primary health care team.

North West Thames region has created two such posts in the past six months in order to develop a seamless service between primary and secondary care and to help general practitioners in managing this relatively new disease. These aims are being achieved through liaison with hospital services, continuing education for the whole primary health care team, and increasing awareness around the subject of HIV and AIDS. Great emphasis is put on prevention and on promotion of sexual health.

My work also confirms the difficulty of obtaining accurate information. The seemingly simple task of ascertaining the numbers of patients from Barnet being treated in different centres revealed inadequate information systems and gross inconsistencies.

The high cost of treatment is often cited by general practitioners as an obstacle to becoming more involved in the management of HIV and AIDS patients. They fear that this is another example of patients being transferred to primary care when the costs become too high. It would be a shame if the right thing was prevented from happening because of the fear that it was being done for the wrong reasons. Expensive drugs should be funded from a central budget regardless of whether the patient is managed in primary or secondary care.

General practitioners are in an ideal position to share in the management of the disease. They are also able to care for and support dying patients and their families and partners. General practice has an essential role to play in preventing HIV and AIDS from becoming a special disease managed in isolation and marginalised to the extent of exclusion from generic services.

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1 McCarthy M, Layzell S. Funding policies for HIV and AIDS: time for change. *BMJ* 1993;307:367-9. (7 August.)

Patients have access to palliative care

EDITOR,—We are worried about the accuracy of Mark McCarthy and Sarah Layzell's informtion on the provision of palliative care for people with HIV and AIDS.[1] One of the implications of their paper is that local hospice units in the region do not accept or admit AIDS patients. They do not seem to be aware of the services available to the Camden and Islington Health Authority, of which McCarthy is director of public health, let alone those in the North East Thames region.

Available to the authority that McCarthy advises are palliative care services which are fully integrated with the hospital and primary care services. Edenhall Marie Curie Centre (the local inpatient hospice unit) and two local support teams (Islington and Hampstead) accept patients with AIDS or HIV infection. All the neighbouring services (seven other support teams and four other hospice inpatient units) have the same policy.

If future resource allocations for HIV and AIDS are to be made by purchasers rather than by direct funding of providers it is disturbing to think that purchasers' decisions about allocation of these resources may be made on the basis of misleading information. Specialist hospital services, in close liaison with local services, are best equipped with the skills and experience that these patients need early in their illness. In the terminal phase people with HIV/AIDS do not differ substantially from others with incurable conditions. At this stage the focus of care should shift back to the local community, where primary care teams and local hospitals are supported by specialist palliative care teams and units.

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Urinary microalbumin excretion and preterm birth

EDITOR,—Ivan J Perry and colleagues report an association between urinary microalbumin excretion at the first antenatal visit and gestational age at delivery.[1] We have also examined the potential use of urinary screening tests for pre-eclampsia and have obtained urine samples from a considerably larger number of women in early pregnancy. We obtained midstream specimens of urine from 500 normotensive, nulliparous women at 19 weeks' gestation and measured urinary albumin concentration by immunoturbidimetry of centrifuged urine samples, using a centrifugal analyser (Monarch). Urinary creatinine concentration was determined with the Jaffe reaction of creatinine with alkaline picrate reagent, measured with a kinetic method. In view of the suggestion that measurement of the ratio of urinary calcium to creatinine concentrations is a better screening test for pre-eclampsia than measurement of microalbuminuria,[2] we measured the urinary calcium concentration, using a red arsenazo dye which binds calcium to produce a complex that can be measured with a perspective analyser.

We did not find any association between the urinary albumin:creatinine ratio and gestational age at delivery ($p > 0.1$, Spearman correlation coefficient 0.017; table). Likewise, we did not find any associations between gestational age at delivery and urinary albumin, creatine, or calcium concentrations (in each case $p > 0.2$). After logarithmic transformations, as performed by Perry and colleagues, we did not find any significant correlations ($p < 0.1$).

Distribution of preterm births (delivery before 37 complete weeks' gestation) by quartile of distribution of urinary albumin:creatinine ratio

Quartile	No of women	Median gestation (interquartile range) (weeks)	No (%) of preterm births
First (0·03-0·21)	126	40 (38-41)	13 (10·3)
Second (>0·21-0·57)	124	40 (39-40)	19 (15·3)
Third (>0·57-0·84)	123	40 (38-40)	18 (14·6)
Fourth (>0·84-4·85)	127	40 (38-41)	15 (11·8)

We suggest that urinary microalbumin excretion is unlikely to be related to preterm birth.

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1 Perry IJ, Gosling P, Sanghera K, Churchill D, Luesley DM, Beevers DG. Urinary microalbumin excretion in early pregnancy and gestational age at delivery. *BMJ* 1993;307:420-1. (14 August.)
2 Rodriguez MH, Masaki DI, Mestman J, Kumar D, Rude R. Calcium-creatinine ratio and microalbuminuria in the prediction of pre-eclampsia. *Am J Obstet Gynecol* 1988;159:1452-5.

Muscle cramps during prednisolone treatment

EDITOR,—J Lear and R G Daniels have reported muscle cramps related to corticosteroid treament.[1] In the past 40 months I have seen 55 patients with the nephrotic syndrome due to minimal change glomerulopathy. Forty five (36 of whom were female) were adults aged over 15. I have treated these patients with prednisolone 1 mg/kg and symptomatic treatment (salt restriction and diuretics) as required. The patients took this dosage of prednisolone for four to eight weeks, depending on their response and the occurrence of side effects, before starting to taper the dose. During this period one of the nine men and 30 of the 36 women complained of muscle cramps, which were sometimes severe and incapacitating.

Initially I thought that this could be related to salt restriction and the use of diuretics with consequent electrolyte imbalances. The mean serum sodium concentration (over the first four to eight weeks), however, was 136 mmol/l (range 133-146 mmol/l) in the men and 133 mmol/l (130-144 mmol/l) in the women. The corresponding serum potassium concentrations were 4·4 mmol/l (3·6-5·0 mmol/l) and 4·5 mmol/l (3·5-4·8 mmol/l) respectively. All the patients had normal serum calcium (corrected for albumin) and magnesium concentrations.

A reduction in the dose of diuretic and liberalisation of salt intake had no apparent effect on the muscle cramps. I used quinine empirically (dose 300 mg twice daily) in 11 of the 36 women, with complete or partial relief of the muscle cramps; these recurred promptly, however, when I stopped the quinine for fear of side effects. The cramps resolved as the dose of prednisolone dropped to less than 10 mg daily.

Lear and Daniels's patients developed muscle cramps while taking either salbutamol or prednisolone. The common factor between these two drugs is their ability to induce hypokalaemia. I hypothe-