

URGENT CARE

Clinical Pathway Group



INTRODUCTION

This report details recommendations from the North West Urgent Care Clinical Pathway Group for 2010. These were formulated through a series of meetings throughout the year and are based on group consensus, supported by scientific evidence and where appropriate, regional, national and international best practice. Local contacts are provided so further information can be shared. The final version was refined from an interim document 'Recommendations for Commissioners' published February 2010. Children are not covered here as paediatric urgent care was a focus of the Children's Clinical Pathway Group.

SECTION 1: Recommendations for avoiding Emergency Department attendance and hospital admission, particularly in care home patients

1.1 Clinical care plans including advanced care planning should be documented and communicated for care home patients

Many people wish to die in a location other than hospital,¹ though 56% of deaths occur in acute hospitals. With appropriate clinical care plans that are documented, adhered to and shared with other services (such as out of hours [OOH] and other acute providers) many Emergency Department (ED) attendances and hospital admissions could be saved.^{2,3} Use of the Gold Standards Framework⁴ has been shown to reduce hospital admissions by one third and halve the number of hospital deaths.⁵

We recommend care plans should include:

- anticipation and management of acute deterioration for patients with long-term conditions (especially COPD and heart failure) including self-management e.g. physiological parameters to indicate when urgent access to primary or secondary care is necessary;
- end of life planning including patients' preferred priorities for care⁶ and resuscitation preference.

An example of this service has been commissioned by NHS Derby City and Derbyshire County.⁷ In the North West, Warrington PCT has promoted the End of Life agenda, standardising quality palliative care through raising awareness of the Gold Standards Framework and Liverpool Care Pathway. They also introduce written confirmation of future care planning and discussions with patients/families in relation to end of life care, which are forwarded to the GP and palliative care community matron.

1.2 Rationalisation of medical services in care homes

The median number of GPs serving a care home is seven (range 1 – 50) in the UK.⁸ There are initiatives around the country that have realised the benefits of providing care homes with a dedicated medical service (whilst maintaining the resident's choice to opt out).^{9,10} Some offer weekly medical visits that review residents staff are concerned about or that have recently accessed urgent care services. NHS Sheffield have seen a 10% reduction in ED attendances (10%) and 9% reduction in emergency admissions with such a service – a saving of £145,000.¹¹ A recent paper by Donald et al outlines further medical models for care homes.¹²

In the North West, examples are:

- **South Manchester Nursing Home Service:**¹³ Led by a consultant geriatrician supported by a dedicated GP, advanced practitioner and nurse case-manager. The service ensures continuity of care for around 285 nursing home residents by providing access to doctors who know their history and are able to advise on the best treatment without necessarily admitting to hospital. In 2009 it reduced acute admissions by 52.8% compared with 2008 saving £282,000
- **The Options service, Knowsley:**¹⁴ A partnership between NHS Liverpool Community Health, Knowsley Integrated Provider Services and UC24, Options started in January 2009. One of the services available are weekly visits to all Nursing and Residential homes in Knowsley (24 sites and over 1000 beds), regardless of registered GP. Visits include GP bed-side consultations, full health assessments, in addition to well-being and action plans. Options aims to decrease pressure on urgent care services, provide more choice for residents and increase capacity for other GPs
- **Salford:**¹⁵ Started in July 2009, the service includes specialist dementia input, medications review and active case management. At the time of writing, 67% of deaths are now occurring in the care home

1.3 Provision of care closer to home

Recent systematic reviews of 'hospital at home' services suggest they are safe and cost-effective.^{16,17,18} The Directory of Ambulatory Emergency Care for Adults,¹⁹ provides a list of 49 urgent care conditions which do not necessitate acute hospital admission. We recommend these could be implemented through:

- **Re-focusing district nurse and community matron activity:** District nurses and community matrons in NHS Western Cheshire²⁰ provide intravenous antibiotics in the community for ambulatory-sensitive conditions such as low clinical risk score pneumonia and cellulitis, which is more cost-effective than using private companies. Such activity should be combined with appropriate 'care bundles' to identify early deterioration
- **Advanced paramedic practitioners:** Clinicians such as Emergency Care Practitioners (ECPs)^{21,22} have demonstrated success in supporting elderly patients. In the South Yorkshire Ambulance Service,²³ paramedics were trained to assess and look after minor complaints (including the most

frequent reasons for ambulance calls - falls and breathing problems)²⁴ in the patient's residence. Participants were less likely to attend the ED (relative risk 0.72) or require hospital admission within 28 days (relative risk 0.87). Furthermore, costs were £140 lower per episode.²⁵ ECPs were also recommended in the North West Emergency Care Review (July 2009)

- **In-reach services:** There are many successful services that provide support to care homes in the UK. In NHS Bath and North East Somerset between 2005 and 2007, their residential home in-reach service prevented 197 unnecessary hospital admissions and 28 transfers to higher-dependency homes with an estimated final reduction in care cost of £6.33 per care home resident per week.²⁶ A care home in-reach service has been operational in NHS Warrington since 2002 and now includes a community matron, care home discharge facilitator, clinical nurse educator, palliative care nurse specialist and five part-time band six community nurses. The team works across all care homes providing a proactive service. A Single Point of Access is also now in place as a central point of contact for all care homes, where all requests are triaged for advice, nurse or GP assessment within two hours. In 2009-10 from 2008-9, the service reduced ED attendances by 19%, emergency admissions by 22% and total emergency bed days by 47%. A further in-reach service has been piloted using Advanced Nurse Practitioners in Heywood, Middleton and Rochdale,²⁷ who provide consultation and care home staff education. Initial evaluations suggest GP visits have been reduced by 98.7% and hospital admissions by 27.8%
- **Virtual Community Wards:** These services provide a period of support and case management for people with complex medical and social needs in their own home when at risk of unplanned admission to hospital. They consist of a certain number of 'beds' and are staffed in a similar fashion to hospital wards. NHS Croydon²⁸ has saved £1 million in emergency admissions over 18 months enabling the local hospital to close 100 beds. In the North West, NHS Oldham²⁹ has a similar service

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1.4 Improved data sharing

Clinical data sharing improves the quality and safety of care.^{30,31,32,33} Since GPs have been able to opt out of OOH provision, it has been suggested that non-traumatic attendances to EDs have increased,³⁴ which shared clinical information could potentially avert. A single electronic care record shared between primary and secondary care providers has been a target for the National Programme for IT since its inception,³⁵ though this goal is still a long way off and many local solutions are available now.

In the North West, examples of good practice are:

- **Salford:** Where there is full integration between the electronic care record of the acute trust (Salford Royal Foundation Trust) and local GP practices
- **Tameside and Glossop:** Dr Amir Hannan³⁶ of the Houghton Thornley Medical Centres³⁷ has pioneered enabling patients to access their own GP electronic record and other information sites such as Map of Medicine. At the time of writing, over 800 patients at the practice access their own records with great success³⁸ and plans are imminent to do this in a local care home in the attempt to reduce pressure on Urgent Care services. This feature is free from the major provider of GP software, though only around 40 practices in the UK have it enabled
- **NHS Oldham and NHS Bury:** Both PCTs have piloted the Summary Care Record, including end of life documentation in Bury. The recently published evaluation has identified subtle benefits³⁹

1.5 Directing patients to the most appropriate services

For high quality and efficient care patients must be directed to the most appropriate services according to clinical need to receive the right care in the right place at the right time. In the North West, examples of good practice are:

- **Rapid Access Specialty Clinics:** A joint pilot between the acute Trust and the PCT in Bolton⁴⁰ provides consultant-led telephone triage and same/next day assessment for patients requiring emergency assessment but not necessarily hospital admission. GPs can call the acute Trust telephone triage service and speak directly to a consultant to decide the most appropriate action. This may include advice to manage the patients in the community, rapid access to an out-patient clinic, referral to an existing clinic (e.g. DVT) or an admission. The service is currently available for

acute medical patients and will be expanded to other specialties in the future

- **Choose Well:**⁴¹ Choose Well is a regional communications campaign to support demand management for '999' and ED services by sign-posting the public to use the most appropriate services for their condition. The campaign also targets regular users of these services to help organisations develop targeted approaches. One key message is to utilise local pharmacy services and an important audience is NHS staff and those who have regular contact with patients and the public
- **NHS Direct:**⁴² Nationally NHS Direct (NHSD) handles 5 million calls per year, saving 1.2m ED visits and 1.7m GP consultations by directing patients to a lower urgency endpoint than they would otherwise have chosen. In the North West, NHSD handled 595,000 calls in 09/10 and avoided 166,000 ED attendances and GP visits. Nearly half (48%) were completed within NHS Direct without the need for further care, 3.5% were directed to the emergency ambulance service, and 6.7% were directed to attend A&E. NHSD also works with the North West Ambulance Service (NWS) to assess low priority ambulance calls; last year there were over 13,000 of these calls were managed by NHSD
- **The Greater Manchester Urgent Care Co-operative:**⁴³ This proposed footprint-wide collaboration will mandate participants in the model to demonstrate ability to deliver defined standards and will receive a branded mark confirming the authenticity of quality delivered in the organisation. The key priorities identified are: prevention, self care and admission avoidance; access to primary care; access to secondary care and access to acute cancer services
- **NWAS NHS pathways and CMS Directory of Services:**⁴⁴ NHS Pathways (NHSP) is an electronic clinical assessment system for call centres, which enables consistent clinical assessment using a symptom-based approach to refer the patient to the most appropriate provider in their locality. Pathways consist of questions, answer options and care advice sets. The first area for implementation will be Cumbria and Lancashire in April 2011. NHSP will be linked to a dynamic on-line Directory of Services (DoS), which will provide a database of out-of-hospital services with real-time capacity information. DoS can theoretically be used by all NHS organisations and will provide a gap analysis of any failed referrals. There are currently three PCTs using DoS

1.6 Exploration of the benefits of new technology

New technologies exist to improve the efficiency and quality of care that have yet to be fully explored in the North West:

- **Telehealth:** Telehealth refers to the use of audiovisual telecommunications and/or the transfer of electronic information to assist health care professionals remotely. These machines record patients' vital signs from their home and can ask them clinical questions. Results are securely transmitted via telephone line to a central hub. If readings are outside the agreed parameters, an appropriate intervention is instituted such as telephone advice, home visit, advice to see a GP or hospital admission. This has been shown to reduce (re)admissions,⁴⁵ bed days⁴⁶ and provide a more patient-centred service.⁴⁷ In October 2008, a joint venture between the council and PCT in Knowsley⁴⁸ launched a similar scheme to support proactive case management for patients with COPD and heart failure. Their evaluation demonstrated a statistically significant 74% reduction in inpatient costs and non-significant 30% reduction in ED attendance costs
- **Video consultation:** 'Telestroke' to enable remote specialist clinical input via video will start in Cumbria and Lancashire⁴⁹ in November 2010. This technology has yet to be exploited in ED attendance avoidance. A pilot is proposed in NHS Western Cheshire⁵⁰ to use a similar low-cost service to provide advice to staff and potentially patient consultation in care homes. We recommend further pilots to explore the benefits of video in admission avoidance, for example real-time support for paramedics
- **Clinical Dashboards:** These are display tools that provide clinicians from a variety of settings with relevant and timely information to inform daily decisions.⁵¹ In NHS Bolton a dashboard was developed for GP practices to monitor their own patients' recent attendances at ED and out-of-hours services. In 2009-10 the PCT achieved a 3.23% reduction in ED attendances and 3.9% reduction in unplanned hospital admissions saving over £600,000⁵²

1.7 A pro-active approach in Care Homes should be adopted

According to North West Utilisation Management Team data, common causes for care home patient hospital admissions are urinary tract infections (UTI) and dehydration. Practical measures that could be adopted to help prevent these (if deemed appropriate by the care home) are:

- Urine dipsticks to screen for UTIs;
- Use of highly visible utensils for patients who require help with eating and drinking;
- Regular performance of physiological observations

Care home staff can be encouraged to attain higher training, such as the Assistant Practitioner role (level 4 of the career framework), which underpins knowledge and skills through a foundation degree in Health and Social Care.

Nationally NHS Direct (NHSD) handles 5 million calls per year, saving 1.2m ED visits and 1.7m GP consultations by directing patients to a lower urgency endpoint than they would otherwise have chosen



SECTION 2: Recommendations to reduce inappropriate use of '999' ambulances

2.1 Utilisation of North West Ambulance Service data

- **PCTs should analyse and act upon local data sent to them by NNAS:** NNAS currently sends monthly data to PCTs regarding Medical Priority Despatch System (MPDS) frequency and repeat callers in their area, but there is little evidence this is acknowledged. Only 27% of North West NHS organisations stated in the North West Emergency Care Review said they engaged with NNAS. We recommend all PCTs and social services analyse and action local data provided to them by NNAS
- **PCTs should investigate reasons for repeat calls to NNAS further and engage the relevant GP and multidisciplinary community team:** Repeat user data is sent to PCTs regularly by NNAS. This should be investigated further and where repeat calls are made at the same location, this information should be passed to the relevant GP practice for action. The PCT area, in which the call is made, pays for the ambulance response
- **Audit should be commissioned to discover the reasons for '999' ambulance calls:** To address problems resulting in '999' calls, understanding the reasons behind them are necessary. MPDS categories are not diagnoses nor identify the non-clinical reasons as to why patients have called NNAS. We propose a region-wide audit to understand the clinical and non-clinical factors of '999' calls, final diagnosis and outcome. This would be particularly useful for repeat callers from the same address

2.2 Case management for frequent '999' users

Tailoring pro-active multidisciplinary input around identified reasons for the most frequent users of '999' ambulances will release an expensive resource and provide care close to home. This may include domestic addresses and/or commercial addresses. NHS Cornwall and Isles of Scilly have implemented a program utilising community matrons for frequent ED attenders, which saved £1.7m in 2008-09 and won an HSJ award in 2007⁵³

Joint PCT and ambulance venture identifies frequent callers to case manage them. Yorkshire Ambulance Service provides PCTs with a report of their top ten frequent individual and care home callers on a monthly basis. PCTs then establish a care plan via the patient's primary care provider. Kirklees suggests a 60% reduction in admissions and 20% reduction in bed days in those referred to the service.⁵⁴

Similar work is currently being developed by NHS Blackburn with Darwen and NHS Central Lancashire. We recommend that addresses from which greater than 24 calls per year are made should be systematically reviewed urgently so appropriate action can be taken.

2.3 Smoothing of healthcare-related activity

Over one third (35%) of all ambulance activity is generated by healthcare professionals. Most notably, NNAS data shows daily peaks between 1200 and 1400, relating to gaps between morning and afternoon GP surgeries. Furthermore, up to 40% of home visits requested don't get to see a GP and end up calling '999'. We recommend arrangements where GPs do home visits avoiding these peak hours to smooth demand. This is already being trialled in a number of North West PCTs.⁵⁵

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2.4 A pro-active approach to the most frequent clinical reasons for '999' calls

'Falls' and 'Breathing Problems' are the most frequent MPDS category calls made to NNAS. Primary care services can be commissioned to identify patients at risk of falling and instigate prevention strategies, for example:

- **Falls prevention programmes:** Systematic reviews of multifaceted falls prevention programmes have been shown to be effective for reducing fall rates.^{56,57} Exercise alone can reduce rates by 17%⁵⁸ and costs savings of 1.85 times more than the cost of implementation can be made.⁵⁹ Examples of UK falls programmes can be found in the Partnerships for Older People Projects (POPPs)⁶⁰ report and in a recent BMJ paper⁶¹
 - **Effective osteoporosis prevention and treatment:** Including identification of herald fractures
 - **Full falls assessment and falls clinic referrals:** For those patients who have fallen, where appropriate
 - **Falls protocols:** These should be developed and enforced for care homes and businesses (e.g. supermarkets, offices) to aid management if and when they occur
- Breathing problems are often due to exacerbations of long-term conditions (e.g. COPD and heart failure) and are therefore potentially avoidable. Some cost-effective ways to reduce the chances of these calls happening are:
- **Self-management of COPD exacerbations:** Patients with LTC often know better than health professionals when they are unwell. Empowering the patient with home supplies of steroids and antibiotics for self-care could reduce the need to access urgent care services and have been shown to reduce the amount of medication required and potentially number of hospitalisations^{62,63}
 - **Salford's COPD integrated care pathway:**⁶⁴ Salford's award-winning integrated COPD service was the first service in the UK to straddle primary and secondary care, led by a consultant chest physician and respiratory nurse consultant. The service has a strong public health emphasis of raising awareness, social marketing, and screening amongst other measures such as community clinics. As a result, there has been a 20% decrease in hospital admissions and a saving of £200,000 per year

- **Met Office Healthy Outlook Programme:**⁶⁵ This service provides an early warning of weather conditions to help reduce numbers of exacerbations for patients with COPD by encouraging proactive interventions and advising to focus on self care. Data from [Cornwall, Worcester and Rhondda](#) shows hospital admissions have been reduced by 20%. The service costs £21 per patient plus a £10 start up fee; COPD admissions cost around £2500 per patient
- **GP-led community clinics:** The NHS Institute for Innovation and Improvement has published guidance on heart failure⁶⁶ including use of specialist heart failure nurses to aid with GP-led community heart failure clinics. Savings of £263,457 were made over one year in [NHS Islington](#) and could be translated to other conditions



SECTION 3: Stipulated length of stay

Data from the North West Utilisation Management team (UM) suggests a significant number of inpatients experience days when they receive little or no clinical input. Often what is provided during these 'lulls' could safely be delivered in a less acute setting. Patients also experience delays between being deemed clinically fit for discharge and physically leaving hospital. On average UM data suggest length of stay (LoS) could be reduced by two days if only the end delays are targeted. Targeting the 'lulls' in hospital pathways further increases the potential to release bed days.

Data gathered by UM up to the 15th day of acute admissions indicate:

- Only 60% of bed days are 'optimal' – categorised as 'appropriate' and 'inevitable';
- 20% of bed days can be categorised as 'inappropriate' and 'inevitable' ('bottlenecks');
- 15% of bed days can be categorised as 'inappropriate' and 'not inevitable' (possible gaps in alternative services).

This suggests that LoS in the North West can be unnecessarily prolonged in a significant proportion of patients, which can have the following negative consequences on the quality and productivity of care:

- Increased likelihood of medical de-compensation in elderly patients, hospital acquired infections and iatrogenic harm;
- Increasing the amount of time patients spend in hospital;
- Impacting on ED performance and elective activity;
- Contributing to 'seasonal pressures';
- Restricting development of services required as hospital alternatives;
- Potentially impacting on readmission rates in cases where discharge is 'rushed'
- Perpetuating variability in work pressures

If every North West acute Trust achieved a LoS of 3 days for ECOPD, we estimate a saving of 68,355 bed days per year.

We recommend that LoS in acute hospital admissions can be optimised by:

1. Formulating pathways that stipulate LoS and timings of clinical interventions for acute admissions according to the 'ideal' clinical scenario (e.g. chest X-ray and antibiotics day one, discharge day four):

The use of care pathways has been suggested to reduce LoS in a recent Cochrane review.⁶⁷ A similar approach to stipulating LoS has proved successful in elective procedural (particularly surgical) pathways,⁶⁸ though has not yet been tested in unplanned (particularly medical) admissions.

2. Exception reporting against these pathways to inform how best to manage resources:

When milestones along the pathway are not achieved ('bottlenecks'), exception reporting will inform what resources and inputs need to be managed differently to optimise LoS.

It should be noted that LoS should not be looked at in isolation and any recommendations made should be in the wider context of admission avoidance and re-admission reduction.

An evaluation of this approach to optimise LoS in acute hospital admissions is currently underway.

The Urgent Care CPG is currently sponsoring this concept at sites across the North West in two acute conditions:

- Exacerbation of COPD; (ECOPD)
- Transient ischaemic attack (TIA) requiring carotid endarterectomy (CEA)

The outputs of the evaluation will be:

1. Optimisation of LoS in CEA and ECOPD for the organisations in the project;
2. 'Ideal' pathways with stipulations of LoS and timings of key inputs for CEA and ECOPD;
3. A toolkit to enable North West organisations to optimise LoS for any acute condition they wish using this approach

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