Community IV therapy can benefit both patients and the NHS and the number of services is increasing. These require clear policies and staff training and support.

IV therapy in the community

In this article...

- The benefits of providing IV therapy in the community
- Considerations for setting up a community IV therapy service
- Types of IV therapy appropriate for delivery in the community
- Training and support needed by community nurses

Author Jill Kayley is an independent nurse consultant, community IV therapy UK wide.


Community IV therapy services can be of significant benefit to both patients and the NHS. They can prevent hospital admissions and facilitate early discharge, improve patient safety by reducing the risk of infection and improve choice by enabling patients to stay in their homes.

However, the availability, standard and uniformity of these services varies throughout the UK.

This article describes the benefits of delivering IV therapy in the community and provides guidance for nurses on setting up a service.

Intravenous (IV) therapy is routine practice in UK hospitals, and the need for IV therapy is often a reason for hospital admission. However, community IV therapy services have seen significant developments over the past decade, and now deliver a wider and more complex range of treatments. Factors that have influenced this change include:

- Expansion in the range of skills among community nurses;
- Improvements in technology;
- Drugs with pharmacokinetic profiling that allows once and twice daily dosing;
- Constant pressure on acute hospital beds;
- Patient choice;
- Government policies;
- Growth of private home IV companies.

Despite these developments, not all provider services have established community IV therapy services, and the availability, standard and uniformity of services varies throughout the UK.

The previous government focused on reducing acute admissions and length of hospital stay, providing care closer to patients’ homes and greater patient choice (Department of Health, 2009; 2006; 2002). The latest white paper, Equity and Excellence: Liberating the NHS aims to “put patients at the heart of everything the NHS does”. It seeks to liberate clinicians to innovate, giving them the freedom to focus on improving healthcare services (DH, 2010).

Community IV therapy lends itself well to these aims, and there is considerable demand for further work and development in this area. The time is right for community services to build on existing work and press ahead with this innovative area.

Background

The aim of a community IV therapy service is to prevent hospital admissions and/or facilitate early discharge.

Preventing admissions requires a more intensive infrastructure in terms of nursing and medical input because the need for vascular access and IV therapy is immediate (O’Hanlon et al, 2008). It also requires a GP with a special interest who is willing to prescribe the therapy, cannulate and then monitor the patient (O’Hanlon et al, 2008).

Facilitating early discharge requires a multidisciplinary approach, and good communication between hospital and community staff is essential (Kayley, 2008). Early discharge helps to relieve pressure on hospital beds, and good communication allows more time to plan the IV therapy treatment and length of medical and nursing input in the community.

For senior community nurses looking to develop an IV service, facilitating early discharge provides a more controlled and manageable starting point than seeking to prevent hospital admissions.

Recent developments in community IV therapy services include walk-in IV clinics. Because patients are treated in one place, these clinics reduce travel time and costs for community nurses (O’Hanlon et al, 2008). As well as being time and cost effective, this type of service gives patients more independence as they are not waiting at home for the community nurse to visit.

Administration of IV therapy

A number of health professionals can be involved in the administration of IV therapy (Table 1). In many areas it is carried out by community nurses.

Patients and carers can be involved in the care of the vascular access device (VAD) and IV therapy administration. For patients or carers who have been properly assessed and trained, this is safe and feasible (Matthews et al, 2007). According to Tice et al (2004), the majority of patients or carers who self-administer IV therapy are highly motivated, understand the importance of the treatment and have a sense of autonomy.
**Table 1. Practitioners who can administer intravenous therapy**

<table>
<thead>
<tr>
<th>Practitioners who can administer intravenous therapy</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community nurse</td>
<td>Works in the community</td>
<td>Requires training and support</td>
</tr>
<tr>
<td></td>
<td>Able to monitor patients</td>
<td>Several nurses may be involved in administration</td>
</tr>
<tr>
<td></td>
<td>Works seven days a week</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Flexible hours (am and pm) in many areas</td>
<td></td>
</tr>
<tr>
<td>Rapid response/intermediate care team</td>
<td>Flexible hours</td>
<td>Requires training and support</td>
</tr>
<tr>
<td></td>
<td>May be able to prevent hospital admission or</td>
<td>Several nurses may be involved in administration</td>
</tr>
<tr>
<td></td>
<td>facilitate early discharge</td>
<td>Period of input may be time limited</td>
</tr>
<tr>
<td>Private home IV company</td>
<td>Flexible service</td>
<td>Cost</td>
</tr>
<tr>
<td></td>
<td>Experienced nurses</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Able to monitor patients</td>
<td></td>
</tr>
<tr>
<td></td>
<td>24-hour back-up support</td>
<td></td>
</tr>
<tr>
<td>Practice nurse</td>
<td>Limited number of nurses involved (one or two)</td>
<td>Requires training and support</td>
</tr>
<tr>
<td></td>
<td>Able to monitor patients</td>
<td>Restricted to surgery opening hours</td>
</tr>
<tr>
<td></td>
<td>Enables patient independence</td>
<td></td>
</tr>
<tr>
<td>Lead nurse/specialist community IV nurse</td>
<td>Experienced nurses</td>
<td>Not feasible for long distances, large numbers of</td>
</tr>
<tr>
<td></td>
<td>May be prepared to cannulate (if needed)</td>
<td>patients or frequent dosing</td>
</tr>
<tr>
<td></td>
<td>Would increase their knowledge and experience of</td>
<td></td>
</tr>
<tr>
<td></td>
<td>community IV therapy</td>
<td></td>
</tr>
<tr>
<td>GP</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Kayley (2008)

**Suitable therapies**

A range of IV therapies can be administered in the community, including:

- Antimicrobials;
- Ambulatory chemotherapy;
- Bisphosphonates;
- Iron sucrose;
- Immunoglobulins;
- Parenteral nutrition (PN);
- Blood products;
- Rehydration fluid.

The main area of growth in recent years has been delivering short-term and long-term IV antimicrobial therapy for acute and chronic infections (Seaton et al, 2005; Cooper et al, 2003; Deagle, 2001; Nathwani and Morrison, 2001; Kayley, 2000).

Although a number of antimicrobial drugs can be given once daily, some microbiologists are reluctant to prescribe them because of concerns about causing drug resistance, and prescribe therapy to be administered three or four times a day (O’Hanlon et al, 2008).

Most community nursing teams are unable to visit three or four times a day, so service provision could be outsourced to a private home IV company that can visit several times a day. Anecdotal evidence suggests this is already happening, but it results in fragmented care for patients and a loss of skills for community nurses.

When establishing a community IV therapy service, it is crucial to involve the microbiologist at an early stage to ensure a common understanding of what IV antimicrobial treatments can be effectively managed in the community and by whom.

**Vascular access devices**

Patients receiving community IV therapy need a reliable VAD, which can be placed peripherally or centrally. Types of VADs include:

- Peripheral cannula;
- Midline catheter;
- Peripherally inserted central catheter (PICC);
- Tunneled cuffed central catheter;
- Implanted port.

Patients can have courses of IV treatment in the short term (days), medium term (weeks) or long term (months or years).

Different VADs have advantages and disadvantages, but the choice of device must meet the individual patient’s clinical needs, give reliable and sustainable access for the course of IV therapy and be acceptable to the patient (Dougerty, 2006; Kayley and Finlay, 2003).

**Role of the lead nurse**

It is well documented that a multidisciplinary team approach and a lead nurse with experience in IV therapy are pivotal to the success of any IV service (Depledge and Gracie, 2006; Tice et al, 2004; Cooper et al, 2003; Nathwani and Conlon, 1998; Kayley et al, 1996). Community IV services in the UK are quite diverse, as are the roles of the lead nurse.

The lead nurse is essential to the day-to-day running and overall management of the service and, most importantly, in acting as a bridge between acute and community settings (Kayley, 2008).

Since many areas of the UK do not have lead nurses for community IV therapy services, community nurses are taking on this role. This can be time consuming, putting additional pressure on other work commitments.

Community IV therapy services run more smoothly and effectively when there is a designated lead nurse, particularly as they become experienced in the role (Depledge and Gracie, 2006).

**Training and education**

Delivering IV therapy in the community requires appropriately trained health professionals. To provide the necessary level of care and support, nurses need access to community focused theoretical and skills-based IV training.
Community nurses should also have access to an experienced practitioner who can provide practical support and guidance.

**Policies and procedures**
To provide effective IV therapy services in the community it is necessary to have documented policies, procedures and guidelines. These must be clear, robust, evidence-based, up to date and functional.

It is not uncommon for community nurses to take referrals from several units within one hospital, or from a number of hospitals, which may all have their own procedures and guidelines. This array of information can be confusing for community nurses, who need to be able to provide standardised care for all patients based on national guidance (RCN, 2010; NPSA, 2007; O’Hanlon et al, 2008).

Because community nurses often work in isolation in their patients’ homes, policies, procedures and guidelines have to be consistent, clear and unambiguous (O’Hanlon et al, 2008).

**Conclusion**
Based on the growth of community IV therapy services in the last few years, there is no doubt that this area of healthcare provision will continue to expand.

However, to ensure it is managed safely and effectively, there needs to be appropriate training and support for health professionals in the community.

It also requires a multidisciplinary team approach and good communication between acute and community settings.

A considerable amount of work needs to be done on a national level in relation to the uniformity, standard and availability of IV therapy services. It is hoped that the government’s recent white paper (DH, 2010) will provide the encouragement and the support for this to happen.

---

**References**


