Liverpool Intermediate Care Services

A systems approach to determining a future service model and capacity requirements

March 2006
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1 Introduction

1.1 Background and local context

The health and social care partners across Liverpool have developed close working relationships in the delivery of intermediate care services over a number of years. However, services remain relatively uncoordinated with capacity not always being used effectively and patient/client pathways not always being optimised.

There are, therefore, a significant number of challenges in the local health and social care systems, both locally and as a result of national policy, that need to be addressed. Such challenges raise questions as to the nature, distribution and capacity of intermediate care, questions that now need addressing in a more systematic and comprehensive way.

The North Mersey Future Healthcare Project, in proposing a new model of care for these services, states ‘that intermediate care should reflect a system ‘which provides optimal treatment and care for patients across the health and social care system………through the active case management of patients in their ‘journey’ through the healthcare system, by teams of professionals working in service networks to standardised, evidence based protocol with defined pathways of care.’

1.2 Project brief and approach

In September 2005 the Liverpool PCTs commissioned the Whole Systems Partnership to undertake a piece of work that would bring local partners together to explore the implications of such an approach in a way that scoped future capacity requirements using a ‘system dynamics’ approach. Such an approach would enable participants to test out ‘what if’ scenarios, based on local client need, as a result of new models of working, particularly those associated with greater network management across an ‘intermediate tier’ of care. In addition it would:

- Support group learning and the development of a common framework and language for describing system change;
- Anticipate system behaviour and impact in a ‘safe’ environment;
- Identify key levers in a change process;
- Enable delays and feedback to be identified and built in to an understanding of system behaviour;
- Inform the development of more strategically relevant performance monitoring.

The approach involved participation in three workshops that built up to a strategic model. The model enabled simulation of future capacity requirements and thus informs the development of a programme of change over a 3 to 5 year to realise the new model of intermediate services.

The following components (illustrated in Figure 1 over page) made up the project between September and December 2005:

1. Undertaking 3 stakeholder workshops at key stages of the project to:
   a. Define the boundaries and key questions to be addressed;

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b. Explore people’s ‘mental models’ of the system including anticipated system behaviour and anticipated impact between different parts of the system;

c. Quantify this system map to simulate the system behaviour and consider potential impact and/or capacity requirements as a result of strategic changes.

2. A series of one-to-one discussions at an early stage of the project with key individuals to inform and help identify the key issues and any critical issues from either a particular organisational or professional perspective.

3. Exploring alternative futures using the modelling tool and identifying key performance targets, building these into recommendations for phase 3 of the local approach.

4. To provide written and online material that supports communication of key issues arising from the modelling work.

Figure 1  Approach to delivering on the project

The model produced at the conclusion of the project has been made available to individuals at both the PCT and the Local Authority\(^2\) with appropriate training and a detailed user guide to enable further queries or scenarios to be developed beyond those reflected in this report.

This report provides a summary of the project conclusions and suggestions as to next steps in both implementation and ongoing development of the modelling approach.

\(^2\) Michelle Urwin at Liverpool North PCT and Johnny Keville at Liverpool Social Services.
2 Engagement process

2.1 Workshop process

Details of workshop participants and outputs are contained in Appendix 1. This section summarises these and leads through to the preliminary conclusions and recommendations emerging from both the engagement process and the development of a systems model.

2.1.1 Defining the key issue

Fundamental to the development of a systems model is the definition of a key question. This enables focus to be maintained and encapsulates the main concern of participants in the process. In this regard the description of the key issue or question being asked evolved slightly through the process from:

*What capacity and distribution of intermediate care services are required to enable older people to remain at home or to be supported in the community for as long as appropriate.*

To:

*What levels of need are there for the people of Liverpool for intermediate care and related services that will enable them to remain at home or to be supported in the community for as long as appropriate.*

This change emphasised the growing desire to model levels of need, albeit ‘schematic’ and reflecting current service configuration, rather than to start from a question of capacity. In other words, where would we be in terms of capacity if need were the true driver rather than the often opportunistic development of services currently in place.

2.1.2 Describing the system

The approach developed through the workshop process to encapsulate and address the question being asked is reflected in Figure 2.

![Figure 2](http://www.thewholesystem.co.uk)

Figure 2 An alternative approach to identifying levels and location of care needs
This illustration represents:

- A single system;
- Driven by need from four main sources;
- Needs-led in terms of the response;
- Pathway managed in that more than one service at any one point in time or in sequence may be needed;
- With the location where need is met ‘biased’ toward home based care wherever appropriate.

This model therefore encapsulates the desired state of intermediate services and presents a basis for quantification.

2.2 Themes emerging from interviews conducted

Appendix 2 contains a list of individuals who participated in either one-to-one or small group discussions. The emerging themes, that have been woven into the workshop process, include:

- That Intermediate Care is thought of quite broadly but that the dominant part of the system is the bed base;
- The breadth and variety of intermediate care services, often developed ‘opportunistically’ has resulted in many remaining as projects rather than becoming part of an intermediate care system;
- Overall the IC and related ‘system’ is seen as being complex with eligibility focussing on exclusions. This can result either in gaps in the service and/or delays where ‘moving-on’ becomes difficult;
- Significant gaps in the system would appear to be in the area of home based IC support, particularly on discharge from hospital;
- The potential to establish the use of intermediate care capacity as a key point on the pathway from hospital to long term care or all clients with the aim of maximising rehabilitation/reablement and, where possible, avoiding such admissions;
- The need for greater alignment and potential integration of social care and health care related parts of the intermediate care system – current arrangements appear to present as two parallel systems instead of a single integrated system;
- The need for more flexibility in the use of intermediate care capacity to reflect a broader intermediate tier function with a key aim of sustaining and maximising independence and avoiding/minimising the risk of inappropriate admissions to either hospital or long term care;
- Therapy input is focussed on the ‘complex and sub-acute’ end of IC but there is potential for greater support in community/home settings;
- There would seem to be some potential in exploring the use of a small number of extra care housing units for intermediate/re-enablement functions;
- Independent sector capacity is valued with examples of strong nurse leadership and reablement functions being undertaken. However, commissioners need to be sure that the right people are admitted and that there are appropriate incentives and monitoring of utilisation;
- There is seen to be significant benefit in having access to the community geriatrician clinic in North Liverpool;
• Boaler Street has grown to meet demand but it is becoming unclear as to the primary driver (acute sector pressures) and some concern over levels of need being transferred;

• In Mental Health services there are concerns that Leighton Dene is not being used to capacity and that alternative ways of supporting people with mental health needs (for example the spot purchasing approach adopted in Southport);

• That there is a real need for stronger pathway management between services and potential for alignment and integration across physical and mental health needs;

• That the extent of ‘exclusions’ from intermediate care, or client groups for whom a bed based solution may not be best, for example those with mild confusion, visual impairment, alcohol abuse, learning disability, people who are too young and people who choose not to enter intermediate care because of the ‘stigma’ associated with nursing home beds.

Because of the current plans and potential implications resulting from the recruitment of community matrons this area has received significant attention in the development of this project. The following observations have been made:

• That whilst long term conditions, chronic disease management and community matrons are not strictly seen as part of intermediate care they have significant potential for impacting on the level and distribution of intermediate care capacity needed;

• There is a need to work through relationships with existing specialist community teams (e.g. COPD, Heart Failure etc) which may have both an Intermediate Care and Long Term Conditions function and with other community professionals including therapists;

• Care should be taken not to over-estimate early impact of community matrons on Intermediate Care services, particularly in diverting people from an acute admission;

• However, there is an anticipated impact on sub-acute IC capacity making this client group’s needs more complex.

3 The ‘model’

3.1 Model design – the baseline

Whilst improved flexibility across intermediate care and increased ‘pathway’ management will bring greatest benefit to clients and patients there remains the need to properly scope capacity at different levels of need. This is therefore a key element in the approach to modelling the service – an approach that seeks to represent the system schematically rather than precisely in order to provide an approximation of the key elements of the future system.

At the third workshop on the 22nd December a quantified model of an intermediate care system was presented that could accommodate different assumptions about levels of need from different cohorts of patients/clients requiring intermediate care and different assumptions about where this care could be provided.

A baseline scenario had been developed that reflected:

• The current rate of admissions to IC (c.1,200 a year);

• Existing lengths of stay and occupancy levels for current IC beds;
• An approximation of allocation between ‘levels of need’ based on number of beds in the system\(^3\).

This produced a profile of the existing bed based intermediate care capacity that reflected:

• Sub-acute beds at Aintree Hospital, Ward 35 (9 beds for Liverpool residents), at Kent Lodge (60 beds from November ’05) and Sir Alfred Jones Memorial Hospital (24 beds) – a total of c.93 beds;
• ‘Nursing’ beds in the Independent sector (Ennerdale, Rowan Garth and Walton Manor) totalling 40 beds;
• ‘Residential’ level beds at Boaler Street (22 beds) and Leighton Dene (15 beds) – a total of c.37 beds.

In addition there are mental health beds at Leighton Dene. However, these are not included in this baseline as there was considerable debate about the use of these beds. Scoping the potential levels of mental health needs and the role of such bed in the future needs further debate.

3.2 Developing a future scenario

Building on the baseline scenario participants in the third workshop developed a challenging set of future assumptions about the development of capacity in response to levels of need and location of care. They considered:

• The implications of a developing community matron ‘sector’ where alternatives to hospital admission could access intermediate care capacity (the model is based on additional referrals from community matrons equivalent to additional 20 per wk (c.1000 a year) using ‘kaiser pyramid’ assumptions and local projections of recruitment over 3 year period);
• A growth in referrals as an alternative to acute admission from c250 a year to 1,000\(^4\), again over a period of time (to be determined);
• A growth in the ability to discharge patients through intermediate care of c.60% over a period of time (to be determined) from c.950 to 1,500\(^5\);
• Additional referrals from social care to address the needs of 50% of all care home admissions for a period of intermediate care.

Current bed based intermediate care services would be used where appropriate (see below) rather than as a default position and existing or new community based capacity in intermediate care would be developed. The bed base would be scaled consistent with an 85% occupancy level (current levels in some areas are significantly below this). Finally, assumptions about pathway management mean that lengths of stay in bed based intermediate care capacity would also reduce as more accessible move-on capacity, still within the intermediate care sector, would be developed.

The third element of the future shape of intermediate services relates to workshop participants expectations about levels of need and location of care. Table 1 identifies the four ‘sources’ of intermediate care referrals as column headings. The first task of the workshop participants was to anticipate the distribution of levels of

\(^3\) Full details of model assumptions are contained in the ‘User Guide and Technical Document’ for the model made available separately.

\(^4\) This would equate to approximately 4\% of all unscheduled care hospital admissions for the >65 year old registered patients in Liverpool PCTs.

\(^5\) This would equate to approximately 8\% of all acute hospital discharges for >65 year old registered in Liverpool PCTs.
need from each of these sources, for example for those entering intermediate care as an alternative to hospital admission 40% would required sub-acute, 30% nursing and 30% residential based intermediate care (these must add up to 100%). As a second set of assumptions estimates were made as to where this intermediate care could be provided – i.e. what percentage could be provided at home. For example, in the case of alternatives to hospital admission at a sub-acute level 5% could be provided at home whilst at a nursing level this rises to 70% and at a residential level 90% (given appropriate service development and integrated responses in the community).

<table>
<thead>
<tr>
<th></th>
<th>Alternative to hospital admission</th>
<th>Discharge destination</th>
<th>Community matron referral</th>
<th>From care home pathway</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-acute</td>
<td>40% (5% @ home)</td>
<td>50% (10% @ home)</td>
<td>10% (10% @ home)</td>
<td>40% (0% @ home)</td>
</tr>
<tr>
<td>Nursing</td>
<td>30% (70% @ home)</td>
<td>30% (60% @ home)</td>
<td>30% (50% @ home)</td>
<td>30% (67% @ home)</td>
</tr>
<tr>
<td>Residential</td>
<td>30% (90% @ home)</td>
<td>20% (80% at home)</td>
<td>60% (80% at home)</td>
<td>30% (67% @ home)</td>
</tr>
</tbody>
</table>

Table 1 Assumptions about levels of need and location of care

3.3 Model outputs

On the basis of the scenario and planning assumptions described above the model is able to indicate an approximation of the future shape of intermediate care services across levels of need and between bed based and community based responses. A final assumption built into this model is changes in the demographic profile of the Liverpool population, which has a marginal upward impact over the timescale of the model, i.e. 3 to 5 years. This is summarised in Table 2 below.

<table>
<thead>
<tr>
<th></th>
<th>Baseline assumptions</th>
<th>Possible future (3-5 years)</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>IC episodes</td>
<td>1,209</td>
<td>3,850</td>
<td>x3 over 3yrs</td>
</tr>
<tr>
<td>Sub-acute beds</td>
<td>93</td>
<td>102</td>
<td>+9</td>
</tr>
<tr>
<td>Nursing beds</td>
<td>40</td>
<td>29</td>
<td>-11</td>
</tr>
<tr>
<td>Residential beds</td>
<td>37</td>
<td>16</td>
<td>-21</td>
</tr>
<tr>
<td>TOTAL beds</td>
<td>170</td>
<td>147</td>
<td>-23</td>
</tr>
</tbody>
</table>

➢ Plus support at home for:
  ➢ 8 people at a ‘sub-acute’ level;
  ➢ 56 people needing nursing support;
  ➢ 126 people needing home care/reablement support.

Table 2 Model outputs based on workshop participants assumptions

This suggests a challenging future scenario that would require careful planning and a programme of change spanning the anticipated 3 to 5 year period. If such a programme of change were embarked on the modelling approach also informs the development of performance and activity targets as well as regular reviews of
model assumptions and pathways as new ways of working and/or new services are evaluated.

3.4 Recommended next steps

This exercise has provided a rich and enhanced appreciation of the challenges facing intermediate care services as they seek to emulate the service models increasingly being described at both a national and local level. It has also fundamentally challenged the current shape and distribution of intermediate care services across Liverpool. It is clear that these services, and the benefits they offer to patients and clients, are not being optimised. It is now imperative that a programme of change be developed that moves the service, in a staged and planned way, toward this optimisation.

The modelling approach can be built on to aid in this process. Each of the suggested actions below can be supported by the use and development of the model and its outputs.

Suggested next steps and model enhancements include:

1. Ensuring ‘buy-in’ to the model – challenging and developing the assumptions.
2. Developing a resource profile (financial and human) of existing services and how this might need to change and develop to meet the needs reflected in the model. This exercise would also serve to further test model assumptions in terms of ensuring that changes in capacity are realistic, balanced across different sectors and affordable through individual or joint agency investment/allocation of resource.
3. Developing the model to reflect a timed sequence of dependent actions and system changes.
4. Mapping existing community services onto levels of need in order to enter a fundamental re-design phase for these services such that they increasingly work within an intermediate care system rather as separate projects or services.
5. Developing a performance and activity monitoring system that reflects the pathway of change and is used to monitor progress and evaluate impact.
6. To consider the potential impact of the proposed changes on other ‘adjacent’ sectors, for example acute hospital admission and capacity impact and long term care places.
7. Determining the extent of intermediate care needs that require an element of mental health support or that need to respond to the needs of people with a learning disability who are growing older. This will ensure that these elements of service are properly sized, with a preference for provision in the community wherever possible.
Appendix 1: Workshop participants and interim workshop outputs

This appendix has been compiled from reports produced after each of the first two workshops. Outputs from the third workshop held on the 22nd December are integrated into the report. This appendix therefore provides additional detail not contained in the body of the report and represents ‘work in progress’. It illustrates the developmental process and the engagement of a wide range of individuals in the process. Full reports from each workshop have been made available to participants separately.

1 Workshop participants

Kate Craddock – Lead Commissioner, Older People’s Services, North, Central & South Liverpool PCTs
Joanne Forrest – Deputy Chief Executive, North, Central & South Liverpool PCTs
Linda Mason – Commissioning Lead,
John Brownhill - Health and Social Care Partnerships, Supported Living Portfolio, Liverpool City Council
Sarah Darcy - Project Manager, Integrated Services in Neighbourhoods, Liverpool City Council
Therese Patten – Associate Director, Unplanned Care, North, Central & South Liverpool PCTs
Dave Jones - Nurse Consultant, Unplanned Care, North, Central & South Liverpool PCTs
Sue Harvey - Public Health Development Manager, North, Central & South Liverpool PCTs
Trish Bennett – Director of Nursing, North, Central & South Liverpool PCTs
Michelle Urwin - Information Analyst, North, Central & South Liverpool PCTs
Ian Campbell - Assistant Director of Finance (Strategy & Planning), Central Liverpool PCT
Bernie Cuthel – Director of Patient Services, North, Central & South Liverpool PCTs
Val Vernon - Associate Director for Service Improvement, Royal Liverpool & Broadgreen Hospitals (NHS) Trust, North, Central & South Liverpool PCTs
Paul Marr – Development Manager, Liverpool City Council
Jonny Keville - Policy & Implementation and Management Information Teams, Liverpool City Council
Brenda Spoors - Associate Director, AHP Services, North, Central & South Liverpool PCTs
Susan Connor - Divisional Senior Nurse, University Hospital Aintree
Jacqui Candy – Urgent Care Development Manager, University Hospital Aintree
Raj Mungur – Clinical Services Manager, University Hospital Aintree
Susan Flemming - Specialist Information Analyst (Commissioning), North, Central & South Liverpool PCTs
Lorraine Norfolk - Community Interface Manager, North, Central & South Liverpool PCTs
Deborah Morris - Directorate Manager, RLBUHT
Tina Wilkins - Commissioning Lead, South Sefton PCT
Barry Fearnehough - Senior Management Information Officer, Supported Living Information & Intelligence
Carol Hughes – Intermediate Care Services, North, Central & South Liverpool PCTs
Ann Marie Cresham – Discharge Planning Team, University Hospital Aintree
Michelle Timoney – Commissioning Lead, Long Term Conditions North, Central & South Liverpool PCTs
Suzy Smallwood - Information & Analysis, North, Central & South Liverpool PCTs
2 Workshop 1: 3\textsuperscript{rd} October 2005

2.1 The Issues

2.1.1 Context

Identifying the issues to be addressed is an important first step to establishing the baseline from which to model services. The process of identifying these issues also enables some of the fundamental challenges to be identified as well as beginning to challenge language and service models that may not optimise the development of a fully integrated, commonly owned intermediate care system.

A range of questions were posed to form the basis for the whole system enquiry. There was consensus that the project should address patient need rather than how existing assets and services can be deployed. It was agreed that the health and social care community should be able to define what the role of 'intermediate care' is.

The planning process is therefore suggested as:

![Planning Process Diagram]

\textbf{Figure 3 Approach to the design of a new system of intermediate care}

2.1.2 Key Questions

Participants in the workshop discussed potential questions that needed to be answered. These included:

1. How do we keep individuals in the community?
2. How many intermediate care beds do we need?
3. How does intermediate care contribute to reducing long term admissions?

Such objectives are reflected in key performance indicators that each organisation is charged with delivering, for example:

- Increasing the \% of over 65s helped to remain at home;
- Reducing admissions to residential care;
- Reducing occupied bed days in the acute sector (-5.2\% by 2008) through, for example reducing length of stay at the Royal and Aintree hospitals by 2 days and reducing readmissions, which are currently running at 12\% at Aintree.
A suggested wording for the modelling issue (derived from the small group and plenary discussions at the workshop) would be:

What capacity and distribution of intermediate care services are required to enable older people to remain at home or to be supported in the community for as long as appropriate.

- Services must be delivered within the constraints of:
  - financial pressures
  - national and local operational targets
  - recognition of existing services and structures.
- A time frame of 10 years is required to inform the redesign plans at the Royal Liverpool University Hospital.
- Plans will evolve over time as levels of need vary and political targets change.

2.1.3 Other issues identified

Other issues collated during the workshop are reflected in Table 1.

<table>
<thead>
<tr>
<th>What are the boundaries and partnerships especially in North Liverpool?</th>
<th>How do we develop services to support integrated neighbourhood structures?</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the timescale for change, considering Section 31?</td>
<td>What is the HR requirement?</td>
</tr>
<tr>
<td>Competition between organisations. Will competition increase with contestability and will choice affect delays?</td>
<td>What supporting infrastructure will we need? e.g. Transport, OOHs, clinical cover for more risk.</td>
</tr>
<tr>
<td>What are the costs? What will be arrangements for charging health and social services?</td>
<td>How can we share information across agencies and systems (HMIS, financial decisions) etc.</td>
</tr>
<tr>
<td>What should be the criteria for city wide admission to all IC beds? How do we admit people appropriately to beds rather than keep them out?</td>
<td>What should the discharge arrangements be from intermediate care?</td>
</tr>
<tr>
<td>Acute policy. Reduction in beds, reduction in lengths of stay; increases in throughput. Therapy/rehabilitation not PBR and earlier discharge in acute setting.</td>
<td>Number of intermediate beds are expected to decrease over 12 months through improved case management</td>
</tr>
<tr>
<td>Provision should be home based or community based as close to usual residence as possible.</td>
<td>Should feel ‘neighbourhood effect’ over next 12 months.</td>
</tr>
<tr>
<td>Who should provide residential care and where (geographically) should this be provided?</td>
<td>Mental Health Merseycare</td>
</tr>
<tr>
<td>Intermediate Care is accommodating younger people (now 16+)</td>
<td>Strategic Planning</td>
</tr>
<tr>
<td>Delayed transfers of care</td>
<td>Co-ordination of the system</td>
</tr>
<tr>
<td>Managing demand for high intensity home care packages</td>
<td>Workforce planning</td>
</tr>
<tr>
<td></td>
<td>Bed focussed rather than patient focussed</td>
</tr>
<tr>
<td></td>
<td>More therapy planning</td>
</tr>
<tr>
<td></td>
<td>The role of unplanned care</td>
</tr>
<tr>
<td></td>
<td>NHS Direct / Careline /Call Management</td>
</tr>
<tr>
<td></td>
<td>What’s our strategy for using day-centres and day hospitals in the system</td>
</tr>
</tbody>
</table>

Table 3 Issues raised during workshop session
2.2 Key resources

2.2.1 Knowledge capture

As a second exercise participants were divided into four multi-disciplinary sub-groups and were asked to address the following questions:

- Identify the components of the intermediate care services across Liverpool;
- Describe their functions and relationships to other parts of the service;
- Combine these in a systems map or pathway representation;
- Describe any anticipated impact between different services in terms of direction and scale

In listing current services participants were asked to reflect four types of services as illustrated in Figure 3.

Figure 4  intermediate care and related services

Appendix 1 & 2 contains the ‘raw’ outputs from this exercise that can now be used to inform and refine our understanding of the network of services that go to make up the local system. Interdependencies between key resources are also identified where these were described at the workshop.

The task of the ‘remodelling’ project is not, however, to define the detail of each service element and quantify precisely the capacity, throughput and impact of each element. This would only serve to reinforce the complexity that is known to exist. Rather the exercise should be used to distil the key elements and ‘categories’ of services and broad relationships, capacity and impact in order to gauge, in the context of known and projected levels of need, what the broad shape of intermediate care should take. Services identified in this exercise can then be considered against a new framework which will allow for an implementation plan to

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6 The level of detail contained in this work is unlikely to be reflected in the final model. However, it does have potential as a baseline for local partners to build a better understanding of the local resource in anticipation of future partnership arrangements or Section 31 agreements.
reflect movement toward a new model of care built on a better understanding of required capacity and whole system impact.

2.2.2 Initial interpretation

Appendix 1 shows how participants grouped existing staff and resources by: - intermediate care, intermediate tier, Tier 2 and the rest.

Figure 4 provides a diagrammatic overview of those resources grouped by beds, teams and other services. Where there have been different views expressed by the workshop groups, services have been placed on the boundary. Where there may be duplication of services, these have been placed adjacent. Examples of duplication are: 2 falls services, respiratory and COPD, independent sector or SSD interim beds may be identified separately as Rimrose House\(^7\) or SAJMH, SAJMH may be Sir Alfred Jones.

![Figure 4: Categorisation of staff and resources from Appendix 1](image)

2.2.3 Patient flows and the impact of resources

The next step in the analysis is to identify the main patient flows in the intermediate care system and the resources that impact on those patient flows.

At a high level, older people ‘in need’ may be classified as:

- At home
- Home based intermediate care
- Bed based intermediate care
- In hospital

The resources may be classified as:

- Staff making decisions about access and discharge;

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\(^7\) Rimrose House is a facility for South Sefton patients and not therefore available for Liverpool residents.
2.3 Next steps

The next steps for the project have been agreed as:

- Undertaking a range of one-to-one or small group discussions to enhance our understanding of key elements of the service and thereby ‘make sense’ of the existing complexities.
- To arrange for two further workshops to take the project forward.
- To develop an approach to modelling to share at the second workshop that reflects the ‘modelling issue’ identified.
- To gather background information about ‘high level’ activity data and demographic changes over the period for modelling.

Figure 5 shows a map of pathways for older people ‘in need’ and intermediate care resources. This is a qualitative map providing a bridge between the workshop output and the quantitative simulation model. It should serve the purpose of informing the group about the proposed boundaries and level of detail of the simulation model. It also provides an opportunity for feedback on experts' knowledge of the system before detailed quantitative modelling is undertaken.

The rectangles show older people ‘in need’. The solid connecting arrows (between rectangles) show where it is seen as desirable to appropriately increase patient flows. The dashed arrows show where it is seen as desirable to appropriately decrease patient flows. Health and social care resources are included (as ellipses) and the diagram shows where these resources impact on the flows of older people.

The diagram is not exhaustive nor is it likely to be 100% accurate at this stage.
<table>
<thead>
<tr>
<th>Resource</th>
<th>Group 1 - green</th>
<th>Group 2 - blue</th>
<th>Group 3 - pink</th>
<th>Group 4 - yellow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kent Lodge</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interim beds SSD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ward 35 Aintree IC ward</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leighton Dene EMI beds</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAJMH</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Broadgreen Ward 10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independent Sector</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rimrose house</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boaler Street NH beds</td>
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<td>Comm. Elderly Rehab Team</td>
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<td>Sir Alfred Jones NH beds</td>
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<tr>
<td>Pulmonary Rehab team</td>
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<tr>
<td>Actrite PCT</td>
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<tr>
<td>Intermediate Care Team – cover LPool IC units + ERT</td>
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<tr>
<td>Discharge Planning Teams</td>
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<tr>
<td>Rapid Response Team</td>
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</table>

It should be noted that no attempt has been made here to rationalise the contributions by four different groups at the first workshop. The table is reproduced to indicate the current understanding of what services, performing what function are within the scope of intermediate care.
<table>
<thead>
<tr>
<th>Resource</th>
<th>Group 1 - green</th>
<th>Group 2 - blue</th>
<th>Group 3 - pink</th>
<th>Group 4 - yellow</th>
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<tr>
<td></td>
<td>I.C.</td>
<td>I.T</td>
<td>T2</td>
<td>Rest</td>
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<tr>
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<td>Rehab and Home Team - Aintree</td>
<td>2 OTs 2 physios 2 technical instructors</td>
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<tr>
<td>Community Matrons</td>
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<tr>
<td>IV Therapy Team</td>
<td>5 staff Lpool, 3 Nurses Sefton</td>
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<tr>
<td>Everton Road</td>
<td>2 matrons, 1 physio, 1 OT, social workers</td>
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<td>Boaler Street day care</td>
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<tr>
<td>Rapid Access falls service</td>
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<tr>
<td>Boaler Street falls</td>
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<tr>
<td>Tissue Viability Team</td>
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<td>Community equipment</td>
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<tr>
<td>Day services</td>
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<tr>
<td>Social workers - hospital</td>
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<tr>
<td>District Nurses</td>
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<tr>
<td>Resource</td>
<td>Group 1 - green</td>
<td>Group 2 - blue</td>
<td>Group 3 - pink</td>
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<td></td>
<td>I.C.</td>
<td>I.T</td>
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<td>Rest</td>
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<td>MOSAIC</td>
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<td>2 Occ Therapists</td>
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<td>CERT PCT</td>
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<tr>
<td>Aids and adaptations</td>
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<td>Home Care SSD</td>
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<tr>
<td>Day Care SSD</td>
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<tr>
<td>Day Hospitals NHS</td>
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<td>Residential homes</td>
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<tr>
<td>Nursing homes support</td>
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<tr>
<td>Respite NHS</td>
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<td>Respite SSD</td>
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<td>Community Nursing</td>
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<td>Community Therapy</td>
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<tr>
<td>Walk in Centres - Health</td>
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</table>
3 Workshop 2: 18th November

3.1 Workshop 2 objectives

The objectives for the second workshop were identified as:

1. To review outputs from the first workshop and confirm or challenge the direction for the project.
2. To receive feedback from one-to-one and small group discussions and consider implications for the project.
3. To explore pathways through intermediate care to determine future model based on levels of need.

3.2 Reviewing progress at workshop 2

3.2.1 Approach

After the initial workshop it was agreed that the following work would be put in place:

- Undertaking a range of one-to-one or small group discussions to enhance our understanding of key elements of the service and thereby ‘make sense’ of the existing complexities.
- To arrange for two further workshops to take the project forward.
- To develop an approach to modelling to share at the second workshop that reflects the ‘modelling issue’ identified.
- To gather background information about ‘high level’ activity data and demographic changes over the period for modelling.

These activities were undertaken and fed back to participants at the second workshop. This part of the report summarises the input and the response from that workshop.

3.2.2 Key question

After the first workshop a ‘key question’ was proposed that captured the central issue for the remodelling work. It read as:

*What capacity and distribution of intermediate care services are required to enable older people to remain at home or to be supported in the community for as long as appropriate.*

Discussion at this workshop challenged some elements of this statement, particularly:

- That the focus should not be solely on older people;
- That a key objective for intermediate care was the avoidance of an acute episode or a premature admission to long term care;
- That the service, as it is described and modelled, should be person centred and not restricted to age or place;
- That there was a need to consider what an appropriate level of community services was to enable the intermediate care sector to function effectively.

In the light of these comments a possible re-wording of this key question would be:

*What levels of need are there for the people of Liverpool for intermediate care and related services that will enable them to*
remain at home or to be supported in the community for as long as appropriate.

In discussing intermediate care participants agreed that we should focus on the core set of services that perform a transitional function between someone’s own home and an actual or potential alternative care setting.

3.2.3 Feedback from one-to-one discussions

Participants in the workshop confirmed the key themes identified from the one-to-one discussions including:

- The dominance of a bed-based model for intermediate care;
- That services are seen and operated as ‘projects’ that don’t always integrate well across the system;
- That eligibility criteria for intermediate care services tend to exclude people rather than include them;
- There is a real need to agree the interface and impact on intermediate care of community matrons and chronic disease management as this is rolled out.

Additional comment was made regarding:

- The potential contribution intermediate care could make to planned care discharges;
- That undertaking an assessment for someone’s long term care needs in a hospital bed was not ideal;
- That governance issues regarding access and ‘gate-keeping’ to the service needed to be addressed but should result in greater flexibility not more rigidity;
- That with an increase in the numbers of older people with ‘confusion’ a predominantly bed based service did not always offer these people the best environment for re-ablement;
- The need to consider other mental health needs of people who require intermediate care services – should they be ‘specialist’ or should mainstream services be supported by specialist input and in what balance?
- The need to reflect in language and the modelling both the medical needs of patients and the social model of re-ablement – start with a person with an intermediate care need not an occupied hospital bed!
- The need to have provision that is flexible and responsive;
- The need to ensure intermediate care is not used as a ‘waiting area’ for ongoing, long term care;
- The need to become ‘smarter’ at the discharge and review process following an episode of intermediate care;
- The concept and challenge of a ‘risk averse’ culture which was more prominent in the acute sector than in the community leading to less likelihood of early discharge to intermediate care;
- The potential use of ‘smart homes’ to support people in the longer term – should intermediate care prepare people for such long term alternative care/home settings;
- The potential use of day centres and day hospitals as part of an intermediate care network of services;
- The need to consider the re-modelling in the context of the real world of financial constraints and a shrinking acute sector.
3.3 An approach to re-modelling

The ‘as-is’ intermediate care services and potential pathways identified as an output of the one-to-one discussion is reflected in Figure 2. It suggests a number of challenges in any re-modelling work, namely:

- That the point of entry, rather than need, seems to determine the response e.g. Care-line to ART/UCD to LINC;
- The need for IC as a therapy led rehabilitation function from hospital only seems to be possible in a bed – i.e. no equivalent of the SSD IC community team;
- Capacity in each area of service does not allow for flexible use of resources e.g. independent sector IC beds and LA beds, although there may be significant overlap in client needs.

![Figure 5 An existing 'as-is' representation of the intermediate care system](image)

Figure 3 therefore represents a possible alternative approach to viewing the intermediate care system. It allows questions to be asked that identify appropriate levels of need for each client irrespective of where they originate and the provision of care in the most appropriate care setting, i.e. in a bed or at home. It also suggests the need to manage people’s intermediate care ‘episode’ as a pathway rather than just ‘entry/exit’ of an individual service. Such an approach would require a fundamental redesign, as illustrated in Figure 4.

Such an approach would facilitate our ability to answer such questions as:

1. What new pathways are emerging or are desirable that will impact on intermediate care capacity? For example:
   a. Community matron access to ‘step-up’ IC beds;
   b. Ambulance and GP OOH services access to IC services, bed based or home based;
   c. Provision of or Development or further development of rapid access clinic.

2. Are choices about supporting people with IC interventions in a bed or at home dictated by need or by available services either at the point of discharge or as an alternative to hospital admission?
3. Are there parts of the community system that do not have sufficient capacity for onward referral leading to inefficiencies in the IC service?

![Diagram](image)

**Figure 6** An alternative approach to identifying levels and location of care needs

![Diagram](image)

**Figure 7** The redesign option

### 3.4 Exploring pathways

As an aid to exploring the potential re-modelling of intermediate care, vignettes were provided for group discussion and consideration (see appendix). In particular people were asked to consider, from their own experience a typical and then an ideal pathway for the people described in the vignettes as they access and progress through the intermediate care system.

The group work that following highlighted or re-enforced a number of the emerging issues described in this and the first workshop report. In particular they reflected:

- The range of options open to someone with an intermediate care need and yet, at present, the often narrow response determined more by what was available than by what was needed;
• Discussion also served to highlight the potential contribution that registers and single assessment would make in the smooth management of someone’s intermediate care pathway;
• Finally, there was consideration in a number of cases of alternatives both to an acute hospital admission and to intermediate care – i.e. with improved access to falls clinics, out of hours responses, walk-in centres etc intermediate care may not be necessary.

These considerations emphasise the importance of modelling intermediate care services in the context of mainstream services. This means we may need to recognise the possibility that if these are working well the need for intermediate care may be moderated and/or that the mix of intermediate care services needs to change.

3.5 Next steps

Prior to the third workshop in this series the issues and opportunities identified in these two reports, together with data that will have been gathered reflecting current throughput and activity for intermediate care, will be combined to provide a simulation of an ‘ideal/model’ of intermediate care based on local need. Assumptions underlying this model will be tested at the third workshop to arrive at an indication of the future shape and scale of services needed.

Vignettes used in the workshop

SCENARIO ONE

History
Annie Apple is an 85yr old lady referred to LINC team by G.P.
Diagnosed urinary tract infection, on antibiotic therapy. Feels generally unwell with reduced diet and fluid intake, frequency of micturition. ERT assessment required for possible provision of social care.

Assessment
1. Annie agreeable to nursing assessment
2. Full assessment undertaken with regard to holistic assessment of Annie’s needs.
3. Annie lives alone and is normally fully independent and self-caring with all activities of daily living.
4. Annie can communicate her needs in a clear and articulate manner, states is able to manage and declines social support.

Plan
1. Annie agrees to 72 hr nurse visits to monitor general well-being and health status.
2. Communicate with G.P. outcome of assessment
3. Liaise with coordinator outcome of assessment and plan of intervention required.

Evaluation
1. Daily for 72 hrs nurse to visit to undertake observations of vital signs, and to reassess needs with Annie and adjust plan accordingly.
2. Ensure Annie is aware of 2417 nature of ERT support, within the 72 hr period of crisis intervention.
**SCENARIO TWO**

**History**
Bobby Ball is a 72 yr old frail gentleman admitted to the acute sector via G.P. He tripped over a paving stone whilst out shopping and has sustained a fractured right wrist. ERT assessment requested by medical staff within the medical assessment unit. To identify suitability for admission to an intermediate care unit for a period of re-enablement.

**Assessment**
1. Bobby agreeable to assessment.
2. Full assessment undertaken with regard to Bobby’s needs.
3. Hospital patient notes reviewed to ensure appropriate investigations have been undertaken, and that Bobby is medically fit for discharge.
4. Bobby has agreed to go to an intermediate care unit, which is local to his home address.

**Plan**
1. Communicate with nurse advisor to discuss and identify appropriate intermediate care unit.
2. Discuss with acute staff to arrange transport to promote a safe and timely discharge process.
4. Fax ERT assessment to the identified intermediate care unit.

**Evaluation**
Complete discharge database form when Bobby has arrived safely at the intermediate care unit.

**SCENARIO THREE**

**History**
Cathy Cotton is a 95yr old. lady with a palliative care diagnosis. Her health has deteriorated rapidly requiring ERT assessment for social care. Referral made by DN within the community.

**Assessment**
1. G.P. visited, prognosis poor - nil ordered, stated end stage of life.
2. For assessment for possible provision of personal care.
3. Relatives present during assessment process.
4. District nurse present during assessment also and has ordered appropriate equipment that will enable Cathy to remain in her own home.

**Plan**
1. Discuss care capacity with ERT coordinator.
2. Assessment requires four care calls per day of two carers plus two pop-in calls throughout the night to provide individual holistic care.
3. Family advised to contact ERT at anytime if they have any concerns with regard to Cathy’s health status.
4. Communicate outcome of assessment with G.P.

**Evaluation**
1. Daily and ongoing.
2. Communicate with family as appropriate.
3. Sharing of information with District Nurses who are providing nursing care for Cathy.
SCENARIO FOUR

History
David. Duffy is an 81yr old gentleman referred to ERT by ambulance control, he was found by his neighbour on the bedroom floor. His length of time there is unknown. Ambulance crew feel David does not require transfer to the acute sector, requesting ERT assessment for possible social care provision.

Assessment
1. Ambulance crew present on arrival to hand over history with regard to David who was now sitting in a chair.
2. David appears disorientate& neighbour reports. that he is normally
3. Unsteady on his feet, but is able to communicate in a clear and articulate way
4. David's vital signs appear unstable -, his pallor is poor, and he is clammy to the touch and confusion evident.

Plan
1. Following initial assessment concerns identified with regard to David’s health status.
2. Requested that the ambulance crew transfer David to the acute sector, for further medical assessment.
3. Liaise with coordinator and inform G.P of outcome

Evaluation
ERT nurse to liaise with acute staff as to David’s medical stability.
Appendix 2: Small group and one-to-one discussions

Liz Melia – Commissioning Lead Unplanned Care
Dr Dan McDowell – Community Geriatrician, Aintree Hospital
Colette Jones – Intermediate Care Co-ordinator, South Sefton PCT
Steve Callaghan – Commissioning Manager, COPD, North, Central & South Liverpool PCTs
Claire Heneghan – Project Lead, Long Term Conditions, North, Central & South Liverpool PCTs
Denise Lee – OT Manager (Aintree)
Kath Percival – IC Commissioning Team, North, Central & South Liverpool PCTs
Dave Jones – Nurse Consultant, Unplanned Care, North, Central & South Liverpool PCTs
Kathy Parker – IC Manager, South Sefton PCT
Paul Marr – Development Manager, Liverpool City Council
John Brownhill – Development Manager, Liverpool City Council
Jean Hobbs – Manager, Boaler Street & Leighton Dene, Liverpool City Council
Phil Wong – Manager, Assessment and Rehab Team, Liverpool City Council
Geoff Betteley – Manager, Intermediate Care Team, North, Central & South Liverpool PCTs
Lorraine Norfolk – Community Interface Manager, North, Central & South Liverpool PCTs
Alison Picton – PCT Lead for Practice Based Commissioning, North, Central & South Liverpool PCTs
Heather Tweedle – Head of Physio, North, Central & South Liverpool PCTs
Margaret Rosenfield – Extra Care/Supported Accommodation Development Manager, Liverpool City Council
Dr Ian Woods (GP) – Ennerdale input, North, Central & South Liverpool PCTs
Dr Nicki Mazey (GP) – Boaler Street support, North, Central & South Liverpool PCTs
Jane Dunn – Merseycare (Service Manager, Older People’s Mental Health Services)
Aintree hospital team