The Integrated Care Evaluation Framework (ICE-F):

A Realistic Evaluation of Integrated Health and Social Care Services in Wales
The Integrated Care Evaluation Framework (ICE-F): A Realistic Evaluation of Integrated Health and Social Care Services in Wales

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Views expressed in this report are those of the researcher and not necessarily those of the Welsh Government

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Welsh Government Social Research, 14 May 2015

ISBN: 978-1-4734-3608-4

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Executive Summary

1. This report is Part III of the Welsh Government’s Realistic Evaluation of integrated health and social care for older people, undertaken by Swansea University’s Centre for Innovative Ageing during a 2-year Knowledge Transfer Partnership. Building on the 2013 interim report (Carnes-Chichlowska et al., 2013), it sets out the Integrated Care Evaluation Framework (ICE-F) developed to assist service providers in designing and undertaking evaluations of integrated services.

2. There are several clear benefits of developing an evaluation framework and guidance to assess the outcomes of integrated health and social care for older people using the ICE-F. The interim findings of this study indicated that most local authority and health services in Wales have limited analytical capacity, especially where evaluation is concerned. This is potentially problematic, given the necessity for sophisticated evaluative approaches in assessing the effectiveness of integrated care provision.

3. The process of developing the ICE-F has demonstrated just how culturally challenging, time-consuming and complicated meaningful evaluation of integrated services can be. The pilots of the ICE-F, however, have greatly enriched our understanding of the challenges and benefits of evaluating integrated care in a comprehensive way. This strengthens the case both for implementing and maintaining the ICE-F, and for some form of ongoing mentoring and support for service providers around evaluation.

4. Regarding the assessment of costs of delivering integrated care, most services are still developing methods for accurately costing and comparing interventions. It is not yet possible, therefore, to produce meaningful estimates of cost effectiveness and return on investment for the different forms of integrated care. The ICE-F includes a separate health economic cost effectiveness assessment (CEA) tool, which can be tailored to evaluate the cost effectiveness of different types of integrated care provision.
5. The interim report suggested that integrating services will not necessarily lead to cost savings compared to other ways of delivering care. The ICE-F espouses a variety of ways of thinking about costs, shifting the focus from pure economic costs to service user benefits and wellbeing. Integrated services that have strong beneficial effects on personal outcomes and wellbeing may or may not cost less than non-integrated forms of service delivery.

6. Regarding the assessment of wellbeing and other personal outcomes, the services examined in this evaluation exhibited scope for development in their means of assessment. This was particularly true in health-led services, where personal outcomes tended to be conflated with clinical outcomes and do not always present a comprehensive view of the service users’ wellbeing. Again, the ICE-F and accompanying guidance will not in themselves address these challenges, especially if the necessary data and information are not being routinely collected and monitored. Guidance on how to measure personal outcomes are discussed within this report.

7. This evaluation has also highlighted the plethora of data being collected by health and social care services across Wales. It questions whether the data are used effectively to assess the personal outcomes of health and social care for older people and to configure services in ways that maximise the benefits of services. The ICE-F places considerable emphasis on the measurement of personal outcomes, which we hope will strengthen the case for streamlining and reducing data collection, improving the sharing of data between and within services and organisations, and using data and information to improve service delivery.

8. The report also includes a series of recommendations for the Welsh Government and providers of integrated health and social care to consider:

- to ensure the benefits of a consistent, robust approach are realised as widely as possible. We recommend both new and existing services are encouraged to adopt and embed the ICE-F as their principal evaluation framework;
we recommend that the Welsh Government benchmarks future evaluation proposals against the ICE-F, which will help to ensure that high standards of design are upheld and policy-makers and Ministers have a reliable, comprehensive evidence base to underpin their strategies and decisions;

- at the very least, we would recommend that services adopt a ‘realistic evaluation’ approach, which has particular benefits for a subject such as integration, where local context is clearly very important;

we recommend that improving methods for gathering, analysing and reporting on qualitative evidence to address service evaluation questions, is considered in the dissemination of the ICE-F; and

- the implementation of the ICE-F is a good opportunity in our view to ensure that the right incentives are in place for evaluation of integrated services, which may go some way to overcoming these cultural challenges. With this in mind, we recommend the following practical steps for both the Welsh Government and integrated service providers be considered:

  - where funding for service provision is being distributed, detailed evaluation proposals should accompany funding applications and these should be part of the overall assessment of whether funding is awarded (i.e. assessing the likelihood that the effectiveness of a service and its outcomes could be measured);
  
  - introducing some form of expert peer review to quality assure evaluation activity in funded projects and programmes;
  
  - incorporating evaluative questions into regular monitoring of projects and programmes, which will (a) encourage services to utilise their monitoring data and analysis to incrementally address questions of effectiveness, costs and service user outcomes; and (b) provide continuous feedback for the Welsh Government, enabling it to identify and be more responsive to emerging issues, identify areas of emerging good practice and so forth. The ICE-F would lend itself very well to this approach;
  
  - the establishment of benchmarks to standardise measurements across Wales, for example quality of life measures, a wellbeing measurement tool and a standard for costing services;
  
  - a forum for service providers to collaborate on matters relating to evaluation; and
allow for the provision and resources for independent or impartial evaluation or in-house training to design robust evaluations.
1. Introduction

The development and outline of the Integrated Health and Social Care Evaluation Framework (ICE-F)

This document describes the development and outline of the ICE-F and constitutes the final part (Part III) of a three-part realistic evaluation. Parts I and II are incorporated in the interim report (Carnes-Chichlowska et al., 2013).

The interim report acknowledged a lack of any reported outcome evaluations of integrated care services across Wales. The recommendations from the interim report were for further work to develop a robust and consistent approach to evaluation, whilst taking into account local differences in the context and mechanisms used to deliver integrated care. Subsequently, Part III of this project aimed to construct an evaluation framework (the ICE-F) to assess the impact of delivering care. The development of the framework is outlined in this report. The framework operates as a guide for practitioners and service providers to enable them to take into account the wide variety of measures used to evaluate services and incorporate qualitative responses to care.

Evaluation methods need to consider all aspects of delivering care and focus on the benefits of delivering care to the service user specifically. The interim report demonstrated that local health boards and local authorities experienced frustration when trying to evaluate services because: the plethora of available data was not always useful, there was a lack of access to data across services, a lack of standardised data and benchmarks to set norms or standards for comparative purposes, a lack of direction from Welsh Government regarding methodology to conduct evaluations, a lack of communication in general between service sectors, government and even inter and intra professionally and a general lack of available financial information and awareness of the cost of care. Organisational decisions about restructuring service delivery were often made in isolation from wider information. Bed days were often used as the evaluation currency, but did not reflect the impact of care delivery for the individual receiving the service. Government performance indicators were not necessarily considered the best or the most descriptive measures to assess or indicate the quality or efficiency of care for older people with chronic, complex and degenerative health and social care needs. Population projections indicate a rising number of the proportion of older people in our communities, thus quantity
measures are ineffectual as they will continue to rise proportionate to the population increase. Standardised ratio or percentage measures of service use, need to be considered for comparative measures. The Welsh Government also needs to establish guidelines and recommendations to measure wellbeing and adopt a standard tool such as the quality of life tool, EQ5D (EQ5D, 1990) with an additional wellbeing 'thermometer/scale' to compliment the health status 'thermometer/scale'. If the Welsh Government adopts ‘independence’ as a measure of successful care then this term also needs to be defined before it can be measured. Measuring independence is not specifically tied to geography or locality, people perceive independence differently and parameters to measure independence are elusive. More importantly, it is the right care delivered at the right time, in the right place, by the right person that needs to be measured. Both the interim report and this final report have been structured using a realistic methodology. The realistic evaluation research method (Pawson and Tilly, 2011; Wong et al., 2013; Pearson et al., 2013) is an appropriate methodology to explore the various ways in which integrated health and social care services are provided to older people in Wales to promote independence and wellbeing. Unlike conventional evaluations, realistic evaluation is broader than simply looking at cause and effect. The use of realism is appropriate for understanding and evaluating a complex health and social intervention such as integrated care. Realism considers the wider context of factors, such as funding and policy that are intended to combine and alter perception and behaviours in the delivery of social programmes. The development of the ICE-F is a direct result of the synthesis of evidence gathered from conducting a realistic evaluation that has been used to develop a practical and functional evaluation framework that can accurately assess the impact of delivering integrated care for older people. The framework is needed to establish what, when, how and why services can be assessed, measured and evaluated for the impact they have on the recipients of the integrated services.

Like all ‘realistic’ approaches, the evaluation was structured around the theory premise that integrating health and social care should bring about more favourable outcomes for services and the older people they serve. The interim report gave a critique of relevant literature which was used to build a testable theory - an idealised concept of integrated care - and this conceptual model was tested against existing and emerging service models in Wales. These models were described in the interim report as the ‘programme theories’ underlying the realistic evaluation. In line with realistic evaluation methodology, the
evaluation is structured around the context (C) of care, and the mechanisms (M) used to deliver care (in this case the integration of services). These in turn contribute to the outcome (O) of care. This is known as the CMO configuration. Thus the interim report and this report make up a three-part process of evaluation:

1. a scoping exercise to understand the policy context of integrated health and social care (interim report);

2. a formative evaluation, to understand the mechanisms that have been developed to deliver integrated health and social care (interim report); and

3. a summative evaluation culminating in the development of an evaluation framework to assess the impact and outcomes of integrated care delivery (final report).

The first part of the interim report, the scoping exercise, comprised of a targeted, limited review of the academic and government literature on the theories and working practices of delivering integrated health and social care in the UK. It explored ‘why’ care should be integrated and ‘for whom’ integrated care delivery models will work well. A basic, testable theory was developed that took into account the heterogeneity of services that are to be integrated (the mechanism) and delivered to older people in a wide range of cultural, social and economic circumstances (the context) to establish ‘what’ is considered ideal or best practice to achieve the desired outcomes of integrating health and social care, namely independent living and wellbeing (Carnes Chichlowska et al., 2013).

The second (formative) part of the interim report (Carnes Chichlowska et al., 2013) was an outcome analysis of the mechanisms of delivering integrated care in different Welsh contexts. This part of the interim report examined a number of integrated health and social care services developed for older people across Wales to establish ‘what’ is it about a particular service that works well, and ‘for whom’ the service proves most beneficial. Semi-structured interviews with service leads, managers and professionals delivering services and data audits were used to gather service information on where, how and why services are delivered and to whom.

The underlying hypothesis/assumption was that:
1. integrated models of health and social care services are thought to be more conducive to preserving older people’s independence than separate services;

2. living independently is better for older people’s wellbeing; and

3. integrating services can improve both the effectiveness and efficiency of service delivery, thus producing the same or better outcomes at a lower cost than delivering separate services.

More specifically, the context and mechanisms in which services are delivered to older people vary across Wales and the expected outcome of any new intervention with an older person is to promote independent living and wellbeing as far as possible. The second outcome is to deliver a good service cost effectively, and by implication enable that service to be offered to more people.

The third (summative) part of the evaluation which forms the basis of this final report, brings together the theory and the practice to provide a framework (the ICE-F) to evaluate the impact of delivering integrated health and social care against the pre-set, desired outcomes of cost efficiency, effectiveness and the personal benefit of independence and wellbeing. This ICE-F works to the following hypothesis that there is a difference between the counterfactual (the absence of the integrated service model) and the outcomes of a new model of integrated service delivery. The evaluation takes into account the actual outcomes of delivering a service or intervention, compared to the expected and unexpected outcomes for both the service user and the service deliverer. The concluding section of the final report of the realistic evaluation provides a refined theory of integrated care, explaining why and how some aspects of the different contexts, mechanisms and outcomes work together in Wales.
1.1 Evaluation using Realism

Realism is a form of logical enquiry about the ‘real’ world interpreted by the individual experience of ‘reality’. This knowledge accrual of reality over time forms the basis of realist philosophy, and this process is used in the context of this research to inform our knowledge of integrated care systems. The evaluation of integrated care can provide an evidence base to inform policy decisions as to the way integrated care will evolve within the future development and reconstruction of health and social care services across Wales.

In realistic terms, the integration of services acts as the mechanism to test the theory that integration of services improves service efficiency and effectiveness. Service delivery is the physical activity of delivering care. However, the realistic mechanisms to deliver care are how the services are integrated and how this is affected by the context and the service user. In order to use the evaluation to inform policy and practice, the assessment of the impact of delivering integrated care needs to be considered at three levels, national, local and individual (see Table 1).

1. The national impact is measured using existing performance indicators collected locally and disseminated nationally through the Wales Audit Office. This process of evaluation is well established both within the health services and the local authorities. Including this data within an evaluation of integrated care, will help to determine any potential impact of the services (if any) at a national level. The validity of national performance indicators related to integrated care, needs to be considered. For example, integrated care aims to reduce contact hours by increasing independence. However, the national performance indicators use an increase of contact hours as a determinant of the success of delivering care.
2. The impact of the local delivery of services is currently measured using performance or process output data that measures the efficiency of service delivery. These measures are readily available and used by the health services and local authorities to determine service efficiency and effectiveness. These figures need to be related to the cost of delivering new services compared to the costs of delivering traditional services. Standardising how this is done is important for comparison between regions.

3. The effectiveness of service delivery for the individual and household (which includes the extended support network) receiving care, should be evaluated on the impact the service provision has on personal outcomes. Presently, only a few regions in Wales capture this data. There is an argument to suggest that personal outcome measures used to assess the impact of service delivery, need to be standardised across Wales for comparative purposes. Types of data could include measures of wellbeing, independence, personal achievements and care achievements (such as pain management) and assessments of carer support.

**Table 1:** A summary of levels of evaluation

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<th>Categories</th>
<th>Levels</th>
<th>Data</th>
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<td>Individual</td>
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<td>Outcome measures</td>
<td>Social Cost benefit</td>
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Traditionally, health and social services have been evaluated based on service structure, organisation and the process outputs of delivering care. In the health sector, successful outcomes have been largely measured using a medical model which assesses outcomes based on care = cure followed by discharge from services. In social care personal outcomes have been evaluated, based on care = need followed by the implementation of an appropriate care package. These are technically output measures and are not necessarily related to the personal outcome of care. For example a person may become mobile again which is a successful medical output, but they may not be able to go shopping which is the desired personal outcome. The measures used to determine the impact or success of care delivery, have in the past considered numbers discharged from health services and number of care packages delivered by social services. This type of evaluation accounts for the context of care, either medical or social, and the outcome which is either cure or care, based on the type of services delivered. Personal outcomes from receiving integrated care are hard to evaluate within such a wide context, as cause and effect are hard to attribute to a single event.

In order to understand the complex relationship between the context and the outcome of integrated care, it is necessary to understand the mechanisms used to achieve the outcome. In the case of integrated care, the mechanisms can be separated into programme and realistic mechanisms used to deliver the required interventions for the service user.

**Mechanisms used to deliver care**

*Programme Mechanisms*

Programme mechanisms are those related to the context of care which is how the care is physically delivered to achieve the physical or practical mechanisms used to deliver care. Wong *et al* (2013), suggests that the practical aspects of delivering care are NOT considered as ‘realistic’ mechanisms as described by Pawson and Tilley (2011). However, the vocabulary can be potentially misleading. For the purposes of this report, it is necessary to distinguish the practicalities of delivering integrated care, (i.e. the *programme mechanisms*), from the attitudes and beliefs surrounding the delivery of care, (the *realistic mechanisms*).
Realistic Mechanisms

Realistic mechanisms of care are associated with the way in which attitudes and beliefs shape the delivery of integrated care. For example, if the belief that care is equal to cure and meeting a need, then care will always be directed by the care professional: if the belief is that care is a process of understanding and working with the current condition of health or social circumstances, then the care is facilitated by the professional and carried out by the individual and/or the household and the extended support network in which they are residing. Integrated care endeavours to make care collaborative or co-productive with the individual and or the household and the extended support network. Multidisciplinary care is aimed at being co-productive, where the individual or household receiving care is involved in the decision making about the care they receive, as far as possible.

Thus, the focus of care is shifted from a ‘fix it’ model of care to a ‘facilitative’ process of delivering care that encourages ability and focuses on what matters to the individual and the household.

The attitude or realistic mechanism surrounding the delivery of integrated care is to remove dependency on services and promote independence and wellbeing. The integrated care intervention (also known in realistic terms as the programme model or theory) should change the way the resources are delivered to the end user by changing the attitudes and beliefs about how care is delivered. This approach should also change the opportunities available for different types of care and thus create a new context for care that is supported by the new programme mechanisms and realistic mechanisms to deliver the care. With a new context and new mechanisms, it would logically conclude that a new outcome should be considered i.e. a personal outcome that meets personal expectations. The care support model would then be based on the following formula:

\[ \text{Context} + \text{Mechanism} = \text{Outcome} \quad \text{to} \quad \text{New Mechanism} + \text{New Context} = \text{New Outcome} \]
The new mechanisms of integrated service delivery need to be understood in the light of the changes that they produce. Figure 1 represents the realist evaluation based on the concept of the mechanisms used in realist programme theory and how these mechanisms influence outcomes in the context of this study.

Figure 1: A representation of the Realistic Evaluation of Integrated Care

The conceptual model of the mechanisms that are put in place to deliver integrated care are understood in terms of the outcomes they produce. The outcomes are, to a large extent, dependent on how the service users react to the opportunities afforded by the new ways of delivering health and social care. This, in effect, will trigger changes. These changes, both intended and unintended, need to be evaluated in order to assess the outcomes of integrated care.
The realistic conceptual model (Part I, Figure 2a) and programme theory models (Part II, Figure 2b) were developed in the interim report of the realist evaluation of integrated services in Wales (Carnes Chichlowska, et al., 2013). Figure 3 represents the development of theory throughout Part III of the realistic evaluation, and is a synthesis of the evidence to produce a refined model of integrated care. The conceptual model of ‘ideal’ integrated care (Figure 2a) assumed that integrating health and social care at the National and Executive (Macro) level, management and professional care delivery (Meso level) to the individual service user experience (Micro level) would integrate health and social services. The delivery of integrated care across Wales was tested against this conceptual model of ideal integration. Different integrated care services were asked which aspects of their services were integrated across health, social, third and private sector care, the synthesis of this information forms the basis of the programme theories. The intersecting ovals on Figures 2a and 2b represent where the services were integrated and at which level, Figure 2a represents ideal integration where services are working together at all levels and in all departments. Figure 2b represents the reality of integration and demonstrates that only certain areas were working together across sectors to deliver care. Figure 3 is a representation of a refined model of integrated care that attempts to visualise the complexity and inter and intra connection of integration services as a whole.
**Figure 2a. Conceptual Model of integrated care**

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**Figure 2b: Programme model of integrated care**

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Figure 3: Refined Model for the Realistic Evaluation of Integrated Care

The conceptual model of an ideal integrated care service was developed by assimilating and then synthesising a selected body of integrated care literature from the UK and the primary research conducted amongst integrated care providers in Wales (Carnes Chichlowska et al., 2013). The synthesis of this information was used to develop a theory of integrated care that would drive the evaluation of services (Pawson and Tilley 1997). The above conceptual model (Figure 2a) represented the ideal of three levels of integration:

- government policy and strategic level (Macro level);
- service, executive and managerial level, aiming to build integrated care services for the specific purpose of delivering care into the community, preferably within service user’s homes (Meso level); and
- individual level, was based on the needs of the service user (Micro level).
In this theoretical model, decisions made at strategic (Macro and Meso) level shape health and social care interventions or programme delivery. But importantly, decisions around the way care is delivered may or may not affect service user outcomes, or may not affect outcomes in the ways intended.

Based on the feedback from the pilot studies involved in this evaluation, a refined model of integrated care was developed. Figure 3 is an attempt to illustrate the non-linear and complex make-up of integrated care services; it is a representation of the complexity and interactivity of integrated care across, between and within sectors.

The outcomes associated with the changes made to care delivery have been used to develop the evaluation framework. However, the outcomes of delivering care are likely to be understood only with reference to the particular context in which the project/service takes place (Palfrey et al., 2012. p48). Therefore, realistic evaluation using the concept of context, mechanism and outcome will contribute to the overall structure of the evaluation framework.

The next section considers a selected sample of peer reviewed literature and government publications that detail different ways of evaluating integrated health and social care services across Britain. The examples chosen include health economic evaluation methods, process output evaluations and impact evaluations using personal outcomes. The advantages and disadvantages of using these methods are discussed and the overall summary of this information was used to inform the development of the ICE-F.
1.2 Examples of evaluations conducted in Britain

To date, evaluations of health and social care services have used a variety of methods to understand the cost effectiveness and efficiency of delivering integrated care. Few have reported on the personal outcomes of delivering care. The ‘currency’ used to establish and justify these changes in care delivery have been focused on hospital emergency bed day saving, overnight hospital bed day savings, visit to and phone calls to GPs, visits to A&E, visits to practice nurses, reduction in physiotherapy/occupational therapy, reduction in clinic and outpatient visits, increase use of benefits, user improved Health Related Quality of Life (HRQoL), better relationships between agencies and increased referral rates (Windle et al., 2009). However, these selected parameters of measure were used to evaluate process and performance and any change in these statistics tell very little about the impact of service delivery for the end user. The ‘currency’ measures also only translate to health service activity with little regard to changes in activity in the delivery of social care. The National Evaluation of the Partnership for Older People Projects (POPPs) set the standard for evaluations in 2009 and used the Cost-Effectiveness Acceptability Curves (CEAC) and QALYs (Quality-Adjusted Life Year measure) to support commissioning decisions. Throughout the National Evaluation of the POPPs, new models of care, were compared to ‘usual or traditional care’. It was found that less than 20% of the projects were likely to fail or not prove cost effective. The most successful integrated care service provision, at almost 100% effectiveness across the parameters listed above, (Windle et al., 2009), was the provision of household aids and repairs.

The POPP studies suggested that positive changes to the ‘currency’ measures listed above equated to the success of service. Although these measures are painted as efficiency gains, they could be interpreted differently. For example, they may indicate that people were not accessing services, being abandoned or refused services. Thus, the evidence was unclear as to whether the services were having a beneficial impact on the person receiving support.

The service level output data used in the POPP studies lacked evidence to suggest ‘what else’ was happening. Furthermore, savings incurred by the health boards through social service investment were not remunerated to the local authorities, nor was there financial remuneration between primary care trusts and secondary care organisations.
Fifteen different data collection methods were used to capture the diversity and the complexity of the integrated services involved in the POPP studies. Data were collected at two time points at baseline (before integrated care delivery) and after the delivery of care from interviews, focus groups and five case studies. Evaluations were tailored to meet the requirements of individual POPPs, therefore it was difficult to do cross comparisons of service effectiveness and efficiency. In order to overcome some of these issues, the Personal Social Science Research Unit (PSSRU) brought about some consistency in measurement by developing the Adult Social Care Outcomes Toolkit (ASCOT) to aid evaluation of social care outcomes for Quality of Life (QoL) and economic evaluations (Malley et al., 2012).

Other studies attempted to increase the robustness of POPP evaluations by using large data sets available through the Hospital Episodic Statistics (HES). The Nuffield Trust Evaluation (Steventon et al., 2011) of eight POPP community-based interventions, matched control groups using data linkage, existing data sources and predictive modelling. Steventon et al. used data linkage of records to HES, through the use of individual NHS numbers or dates of birth. The HES outcomes data set comprised 5,146 participant responses. The process data gave weight to the claims that developing integrated care had value, producing cost savings of up to £1.60 for every £1 spent on integrated or partnership care services (PSSRU, 2009). A systematic review of evaluations of POPPs and other services (Turning Points, 2010), used evidence from collated studies of economic evaluations. It claimed that early intervention, integrated service models can generate resource savings of between £1.20 and £2.65 for every £1 spent on integrating health and social care services. The evidence from the economic evaluations, however, gave limited information as to the impact of care for the individual. Moreover, little information was provided on the process efficiencies and effectiveness gains that may arise from formally integrating health and social care.
Health economic evaluations were found to be limited and the Department of Health (DoH, 2012) recommended that impact assessments of service reform should take into account four domains: (i) reform of the social care statute; (ii) independence choice and control; (iii) assessment eligibility and portability for care users and carers; and (iv) quality of care providers and the workforce. Thus, evaluation in England moved beyond service financial and high level organisational process data to emphasise wider considerations of delivering integrated care such as: What is it? How does it work? Who is it for? How is it delivered?

With so many ways to deliver integrated care, evaluations were then used to consider the best way to deliver care and what evidence base was available to consider what is ‘best practice’ for delivering integrated care. Goodman et al., (2012), studied the effectiveness of inter-professional working for community-dwelling older people with multiple health and social care problems who were perceived to be at high risk of emergency admission. The research considered models of long-term chronic disease management through inter-professional primary and community care working in the client’s own home. Goodman et al sought to understand which services benefit which people the best. Service delivery types were compared against each other by looking at process outputs, resources and outcomes. The outcomes were issues that were determined by the older people in the study as important to them. These were processes orientated around timeliness, completion of actions, expertise and quality of professional relationship, continuity of care, shared review, links between services, quality and speed of crisis response.

From the client perspective, effective care was assumed when there was continuity of care, a sense of security of being linked to a wider care network and effective treatment at the point of crisis. The outcomes considered important to the individual were identified as relational service delivery and joined up working, and the GP being recognised as a key figure of care especially important at times of crisis.

The key principles noted from Goodman et al’s research, focus on the importance of the views and outcomes of care, based on the recipient’s perspectives of care delivery. The evaluation was based on the older person’s perception of the process of care, the overall outcomes that were meaningful for them personally, and the facilitation of horizontal networking across service professions and professionals.
Although Goodman et al’s work does focus on some personal outcomes, the evidence is used mainly to inform best practice for types of integrated care working. Emphasis has consistently been placed on the premise that delivering integrated care improves outcomes for service users. The evidence in support of this premise, however, is neither plentiful nor unequivocal. In a summary of the last 10 years of jointly commissioning health and social care in England, Hudson (2011) suggests that there has been a shortage of policies in England to formally bring health and social care together. But, at the same time, integration is picking up momentum, albeit without the weight of a strong evidence base to guide its design and implementation. The shift in policy has been made towards joint commissioning of services that are more personal, maintain independence and dignity and promote health and wellbeing. The policy imperatives are to bring about efficiency and value for money and promote the ‘place’ agenda around the geographies of care provision, personalisation, prevention and care closer to home and overlap of clientele between services. With most evaluations focusing on process measures rather than outcomes measures, and methodologies focusing mainly on economic evaluation, the arguments to promote the value of assessing personal outcomes is comparably weaker (Ramsay and Fulop, 2008).

Evidence from Syson and Bond’s (2010) research in Salford begins to address this issue. They conducted a pilot evaluation to identify success factors and challenges, capturing staff experiences and discussing organisational and staff requirements through qualitative interviews and focus groups with pilot project staff. They then related this to information on patient experience from a survey of service users. Administrative data from organisational and service (Meso) level performance measures such as hospital admissions for long-term chronic conditions was also used together with GPs’ views from a short questionnaire. This information was compared with Micro level indicators of care such as appropriateness of care, identification of need, access to information and client involvement in decision making. The findings were then used to help develop effective ways of working that are simpler and quicker to access.

This type of evaluation starts to consider the impact of the care on the individual in relation to the type of service delivered. Thus, the impact of care delivery can start to be assessed at a personal level and an attempt can be made to establish and describe the relationship between services and outcomes.
National policy and local partnerships appear to base the assumption or premise that joint working is essentially a ‘good thing’. But there is little specificity as to what the ‘good thing’ is. Research and evaluation of services must establish categorically what existing data tell us about services and outcomes; what the implications of existing research for policy and practice of integrated health and social care are; and what data should be collected for a more holistic assessment of the impact of delivering integrated care (Dickinson et al., 2013).

As Dickinson et al. suggest, it is not enough for integrated care to be seen as a vehicle to accelerate collaborative team-working to deliver better care. It is important to define better care - for the end user, service deliver and national strategy and policy. This can be done through effective evaluation at all three levels of service delivery - Micro (end user), Meso (service) and Macro (national).

The selection of examples above detail the use of economic, national and service level evaluations of integrated care. There is, however, a gap in the literature regarding the process of evaluating personal outcomes. It is this area of evaluation that will be addressed in the next section.
1.2.1 Measuring the outcomes of delivering integrated care

Measuring people’s experience is at the heart of evaluating the impact of integrated care services. The NHS Outcomes Framework in England (2013) considers evaluating the impact of medical care beyond the notion of cure. The framework suggests that outcomes should consider quality of life for those with long-term chronic conditions and the impact these conditions have on the household, as well as the individual with the condition, their recovery from episodes of ill health and how this is managed. These outcomes highlight the importance of the patient experience as an outcome of NHS care in addition to the mortality statistics. The English government have put forward that these health indicators should be considered together with social care indicators as described by the Adult Social Care Outcomes Framework 2014-15 (ASCOF) (2013) and the Public Health Outcomes Framework, 2013-16 (2013) to create a picture of the outcomes that can assess the impact of delivering both health and social care.

The English outcome frameworks are recommended as tools to support local improvements in care and support. They also recommend data sources that could be used to produce measures suitable for inclusion in the Health, Public Health and Adult Social Care Outcomes Frameworks (Graham et al., 2013). As of June 2014, there does not appear to be any published, standardised way to evaluate people’s experiences of integrated care in Britain. The ICE-F will guide services in establishing criteria for assessing care delivery and advise on potential data sources for measuring outcomes. Most importantly, it will provide an evaluation framework within which these outcome measures can be used to address relevant questions. Graham et al., suggest that this approach is the obvious route to overcome the issue of ‘which data should be used’ (by combining existing data and additional data from the Personal Social Services Adult Social Care Survey (ASCS) + carers, GP patient survey, NHS inpatient survey, Friends and Family Test, Hospital Episodic Statistics (HES) and social care data, to name a few examples). Graham et al., also recognise the need to bring together various data that could inform services of the impact they are having on the individual and the household and wider support network. They point out the plethora of data available to measure service performance in terms of efficiency, but highlight the scarcity of evidence on the effectiveness service delivery for the end user and their household.
Some evidence was sourced from the end user in Dickinson et al., (2013), but was focused mainly on the process of delivering care such as punctuality. The important aspect of the research was the approach of using the older person to gain further information regarding the individual impact of care and how this needs to have a person-centred element. The importance of this message has been taken up by the charity National Voices and Think Local Act Personal (TLAP) (2013) which set out indicators that could inform how people perceive ‘person-centred co-ordinated care’ using a series of ‘I’ statements (King et al.,2013). A person-centred approach to the definition of integrated care, described the care as having the following overall aims:

- clear and explicit contact mechanisms;
- all staff working as a team around the individual;
- care plans and treatment that respect people’s preferences ;
- shared decisions with staff, family and carers for as much control and independence as possible;
- info shared effectively between staff services and service users;
- transitions between care and emergencies are anticipated and planned for.
This description and definition of care from the service user’s perspective, is process-orientated and focuses on how people would like their care delivered. Data acquired from ‘I’ statements fitted into six domains: a. Goals/outcomes; b. Care planning; c. Information; d. Communication; e. Decision-making/budgets; and f. Transitions. Yet this information, similar to Dickenson et al.’s. (2013) research, still does not tell a story about the individual impact that the care delivered has on the person’s life (King, et al., 2013). To add to the picture of reporting on outcomes, Cook and Miller (2012) describe the importance of personal outcomes in service evaluations. The Talking Points Personal outcomes approach (Cook and Miller, 2012), attempts to look at the process outcomes as well as individual outcomes related to quality of life and the change outcomes associated with the integrated care. The focus of the talking points approach has been to put the outcomes that are important to the person at the heart of the service being delivered. It is the achievement or maintenance of personal important outcomes that are deemed as a successful delivery of care. Measuring and evaluating this approach is proving complex. A personal outcomes approach to care is about having a conversation to work out, listen and record outcomes and develop a support plan which is shared by everyone, professionals, family and carers. Examples of outcomes that can be measured include:

- did we achieve what we hoped for?;
- what is working well in our service and what needs to change?;
- do you feel safe?;
- do you have things to do?;
- seeing people;
- being as well as you can;
- living where you want and as you want; and
- dealing with stigma and discrimination.

These outcomes can be considered as relevant for both the service user and carer. Cook, Miller and Whoriskey (2007) developed a User Defined Service Evaluation Toolkit (UDSET) to measure whether health and social care partnerships deliver good outcomes to service users and carers. The toolkit sets out the evaluation over three levels; national performance indicators, process indicators and individual indicators that could be equated to the Scottish performance framework. The UDSET evaluation questionnaires were also structured to compliment the Scottish national outcomes framework for community care.
The above studies have highlighted the importance of measuring outcomes to assess the impact of delivering integrated care and will form the basis of the Micro level of evaluation in the ICE-F.

In summary from the selected studies above, the overall indications for a successful evaluation involves several steps. The first steps to evaluating integrated care are to define integrated working and look at the barriers and drivers to this model of delivering care, and what roles and resources need to be in place to deliver support. Secondly, the evaluation has to be purposeful to help managers understand the purpose of delivering integrating care to promote personal outcomes, as well as medical and social care-based outcomes which challenges traditional ways of working. An evaluation should identify and measure how the service is working at the three different levels; national, organisational and individual. According to the Institute for Research In Social Sciences (2013), individual outcomes can be separated into quality of life outcomes (outcomes that support daily living and support an acceptable life), process outcomes (the way in which individuals experience the delivery of the support) and change outcomes (relating to improvements in physical, mental or emotional functioning and perceived wellbeing).

Stratifying types of outcomes, outputs and indicators helps to identify which outcomes are important to the individual, the organisation or the policy context. Individual outcomes that can assess the impact of care are only available if the right research questions are asked, such as:

“What is important to you in your life and has the service support helped you achieve this?”

The concept of the ICE-F is to guide the process of quantifying, measuring or evaluating the value of an answer to such a question and equating this to service delivery and national policy and strategy.

Section 1.3 will consider how indicators, outputs and outcomes can be measured in such a way that is applicable to integrated care, and meaningful in terms of providing evidence to improve services and assess the impact of national policy to promote the integration of care and support services.
1.3 Evaluation techniques for measuring the outcomes of integrated care

The examples given above of some of the different ways integrated services have been evaluated in Britain over the last 10 years, have demonstrated the importance of using different evaluation techniques to ‘tell the story’ of the success or otherwise of integrated care provision. The examples summarise different aspects of evaluations on integrated care services from health economic evaluations, the use of high level performance indicators, process monitoring and the use of personal outcomes. All of these methods have been used to assess the impact of delivering integrated care and have been considered alongside the stakeholder feedback from the interim report (Carnes Chichlowska et al., 2013) to inform the development of the ICE-F.

A variety of evaluation techniques were considered when devising the ICE-F, a mixed methods approach to an overall evaluation of integrated care services was considered the most appropriate and flexible. It was important that the ICE-F combined both formative and summative evaluations and that it assessed both process and change outcomes at three levels: national, organisational and individual. The approach to the development of the ICE-F was to include evaluations that could incorporate a cost effectiveness analysis, a social return on investment, a theory of change and a logic model and be robust enough to cater for quantitative, qualitative and ethnographic data.

The realistic evaluation as a social science methodology was used as an umbrella method to incorporate quantitative, qualitative and ethnographic approaches to understanding the workings of public services. Using a variety of methodologies within an umbrella methodology, requires the evaluator to have knowledge of a broad spectrum of analytical skills. The stakeholder interviews in the interim report (Carnes Chichlowska et al., 2013) indicated that these skills are not always available within the health and social care services and may be affected by capacity issues. Qualitative data analysis is time consuming and resource-intensive. Many data managers lack the training required to work with vast quantities of qualitative information. The tendency, therefore, is to work with quantitative data. However, the ICE-F encourages the use of mixed methodologies to ensure that pertinent data is collected to capture personal, organisational and national impacts of care.
Generally speaking, public health and social care services in Wales have been encouraged to evaluate services for government purposes using a variety of methodologies, largely in line with Magenta Book (Open Government, 2011) and, more recently, through Results Based Accountability (RBA) (Friedman, 2005) and its variants. Third sector organisations have been encouraged to research the Social Return on Investments (SROI) (Cabinet Office, 2009) and, even more recently, to use a personal outcomes approach to service delivery (Cook and Miller, 2012). Regardless of the methodology, evaluations usually are designed to be formative or summative. Formative evaluations are those that use information to improve a programme, and summative evaluations are those that use information to form a summary judgement of programme operation (Purdon et al., 2001). The methods used for either formative or summative evaluations are selected based on whether you want to know about policy or programme operation through a process evaluation, or whether you want to know the impact of a policy or a programme on desired outcomes through an impact evaluation. Thus, the type of methodology used is usually either process or impact evaluations that use output or outcome measures. Typically a process evaluation is defined as programme monitoring. For example, is the service being delivered as intended and an impact evaluation can be described as the impact of policy on defined outcome measures. The outcomes are factors the programme is meant to affect, for example, independence and wellbeing. The types of outcomes are defined in advance of an evaluation or at assessment in order to measure the extent of the change noted.

Whenever an evaluation is undertaken, it is necessary to take into account the following considerations.

- The deadweight – the portion of the population that would have had positive outcomes without the programme in place (McEldowney, 1997).
- Additionality or the programme effect – the number of positive outcomes the programme creates over and above the deadweight in order to measure impact.
- Displacement or substitution – the change in positive outcomes for the non-eligible population, for example, carers (who are now assessed independently).
- Continuous outcome measures to monitor change over time.
- Criteria for the eligible populations to be considered for evaluation.
The counterfactual – this measure always compares data to a base case. The base is the number of positive outcomes that would occur if the programme was not in place compared to number of other outcomes. Usually this is carried out using a matched control group who are not in receipt of the programme.

The underlying principles for the design of the ICE-F was to use a variety of evaluation methods and for each method to compare the data between or within services or in the absence of services, at all three levels - Macro, Meso and Micro. The ICE-F is designed to evaluate Macro level government policy, strategy and context using a realistic evaluation plus national performance indicators. The Meso or organisational level of evaluation of the ICE-F uses a process evaluation structure to monitor and record service use, service delivery, service resources, service organisation, service cost, service user experience and follow-up behaviour.

The Micro ICE-F evaluation focuses on outcomes using an impact evaluation. At Micro level, the ICE-F assesses the impact of delivering integrated care on personal outcomes. The impact evaluations are based on assumptions of what would happen without the service in place, or if a similar service were being delivered. Impact measures need to be carefully assessed using a variety of administrative data; comparison/control groups; a Randomised Control Trial; a before and after; or difference-in-differences (a two group intervention and control from the same population that compares the outcome differences between the two groups) methods. These methods of measuring impact estimate the added benefit or additionality to inform cost benefit analyses.

Further beneficial evaluation approaches have also been included in the ICE-F. These were considered necessary to determine the wider cost of care. A cost-benefit analysis method, such as Social Return on Investment (SROI), can identify some (but not all) of the costs and benefits arising from a programme for an overall assessment of impact. The question can then be asked: do the benefits of integration outweigh the costs compared to other programmes? The benefits are often the outcomes for the individual service user. The outcome of a cost benefit analysis is typically written as a value. However, it is problematic to put a value on personal outcomes, therefore this can only form part of the ICE-F evaluation process.
Evaluation of Integrated Care using the ICE-F has considered a variety of methods to answer specific questions. The SROI can be used to capture values for personal outcomes, and to understand and manage the impacts of a project and organisation or policy on the individual receiving care. In order to evaluate the impact, stakeholders need to identify what social value means to the individual being cared for by the organisation, how that value is created through a set of activities, find appropriate indicators or ways of knowing that change has taken place, find financial proxies on the indicators and compare the financial value of the social change created by the service to the financial cost of producing the change. An SROI is a ratio between value generated and the investment required to produce it, and this is equal to the impact of delivering the care.

A cost effectiveness analysis (CEA) is also included in the ICE-F as this method can also contribute to the overall understanding of integrated care provision. A CEA can be used alongside a cost benefit analysis such as an SROI to appraise whether the benefits and cost effectiveness of a policy such as integrating care, will outweigh the initial investment of setting up a new way of delivering health and social care to older people specifically. A CEA could compare integrated care to other forms of care delivery (traditional and innovative) in terms of the cost and the outcome. The outcome for a CEA is based on a health-related quality of life measure that measures the duration of life against the quality of life, to give a score of Quality Adjusted Life Years (QALY) against the cost of delivering care. An incremental cost effectiveness ratio (ICER) calculates the difference in the expected costs of two or more interventions divided by the difference in the expected QALYs produced by the interventions being compared (McCabe et al., 2008). As with a cost benefit analysis, a cost effectiveness analysis has limitations as it does not capture a range of information that can be evaluated within the wider context of delivering integrated care.

Therefore, the ICE-F is an attempt to bring together the most meaningful evaluation techniques that can answer specific questions posed by the aims and objectives of delivering a specific integrated care service. The ICE-F is designed as a flexible tool to be used as a structure to consider how to evaluate a service effectively. The framework is constructed to ensure that the right questions and evaluation techniques are used to bring forth meaningful answers that can be used to improve service delivery and provision.
1.4 A Summary of integrated care evaluations and evaluation methods and the implications for the development of the ICE-F

Integrated health and social care is based on the holistic principles of meeting the needs of the whole person within the context of the home acting as the care hub – as far as possible. The development of any evaluation framework needs to provide a means to assess the impact of a wide range of services delivered to older people within their own home or community.

The critique and synthesis of the various evaluation methods discussed in Section 1.2, gave direction for the structure and development of the ICE-F. The multiplicity and diversity of integrated care provision indicated that the evaluation framework had to be flexible and robust enough to work with a variety of evaluation methods that can assess service provision in terms of national and strategic aims, service organisation and structure and individual impact of care. The ICE-F therefore has to work at three levels: Macro (national), Meso (local) and Micro (individual) and be able to evaluate cost efficiency (financial implications of delivering integrated care), cost effectiveness (service and organisational implications of delivery integrated care) and individual cost benefit (personal outcomes). The realistic concept of evaluating the context + mechanisms = outcomes was also considered as relevant and an essential way to understand the processes of working in an integrative manner.

The Macro and Meso measures of evaluating service delivery are readily available using social care and NHS data records. Micro measures of personal outcomes outside of a medical model and a social care ability assessment remain elusive. The Micro measures are important as they report the affect the care delivery has on personal outcomes, which may or may not affect service effectiveness and efficiency from a process and/or a financial evaluation.
1.5 Recommendations for an outcome evaluation method using a framework approach

Standard evaluation models such as the theory of change and a logic model were used to construct and produce the guidance for an outline of an outcome evaluation. A combined evaluation based on five approaches:

a theory of change (ROAMEF);
a logic model;
a realistic evaluation CMO configuration (used at three levels Micro, Meso and Macro);
a simplified health economic cost effectiveness analysis; and
a cost benefit analysis
contributed to the ICE-F.

Quantitative Data

The ICE-F guidance recommends collection of data (in the same format) at a minimum of three time points: T1 assessment, T2 review and T3 discharge. Useful information could also be gained at six and 12 month follow-ups or at any re-admission. Patient/client surveys have been used to provide valuable follow-up information.

Gathering repeated data from service users can be useful to quantify outcomes for the service user. Repeated measures data can provide information about individual outcomes, but not on how this information compares with other types of service delivery or how the service can be compared to a benchmark or a set standard of care. However, norms, standards or benchmarks are difficult to use with older people who may have a variety of chronic and complex care needs and medical issues.
The challenge for the evaluation of older people’s integrated care is to set a unique personal benchmark which the person receiving care can attain. The outcomes of the care are thus measured against how well the individual has achieved their personal care outcomes, given their unique set of circumstances. The person receiving care would then be measured above, below or equal to the expectation of achievement of their personal outcome using a Likert Scale. For example, a Likert Scale of strongly agree, agree, neither agree nor disagree, disagree to strongly disagree which assumes the mid point as no change or a norm. Alternatively, a continuum scale could be used to measure personal achievement where the highest score is achievement. It is important to consider older people’s sense of achievement against their own pre-set reasonable expectations, and not against a population norm or benchmark.

Measurement of people’s care and support expectations when they have chronic, complex and possibly declining health conditions cannot be considered against normal expectations for functioning, re-ablement, rehabilitation or health maintenance. To measure someone with failing health against a general population norm would not indicate any success of care delivery, measuring someone with failing health against their own ‘norm’ based on their current condition would be a better indicator of success of care. An example of using this concept in reality/practice would be to use three data points at assessment: realistic aspirational targets against what has been achieved in reality at review and discharge.

Another example of measuring personal outcomes is with retrospective satisfaction surveys using reflective methods of assessment. For example: When considering your condition, how would you rate your wellbeing, your social contact, your health-related quality of life on a scale of 1-10, at the beginning of the intervention and after the intervention? Where would you rate your condition if you had not received the service (counterfactual)?

(See Appendix II for an example of retrospective service satisfaction survey.)
Questions that incorporate the counterfactual measure are contentious, but could theoretically give an impact value. Hypothetically measuring subjective personal outcomes based on ‘what could be’ without the service provision, could produce statistical anomalies. For example, if death was a possible personal outcome for someone if they had not received an intervention, in economic terms this outcome would be considered advantageous as there is no cost for provision of services and no cost beyond the point of death. The social and personal outcome becomes the important measure of the success of the intervention and the outcome is then given ‘currency’ from a human perspective, if not a financial one. Thus, personal outcomes have ‘value.’ The ICE-F proposes extending the use of measuring personal outcomes to also looking at the social return on the investment of delivering the service.

**Qualitative Data**

The process of handling qualitative data is resource and time intense, but the yield of useful information about the process of service provision and the outcomes for the individual can often be invaluable. A considerable amount of training in how to handle qualitative data is needed, alongside a better understanding of the potential uses of verbal feedback. The interim report (Carnes Chichlowska *et al.*, 2013) indicated from the stakeholder feedback that the majority of qualitative reports based on service user feedback, presented quotations chosen simply to promote the benefits of an intervention as if they were testimonials. Qualitative evaluation requires attention to validity and reliability in data collection, as well as rigorous analysis. There should be a mechanism for independent evaluation and the use of a transparent or analytical framework (Ritchie and Lewis, 2003), or specific analytical method such as a thematic analysis (Braun and Clarke, 2006) before any qualitative data is used.
2. Evaluation Observations and Implications

Introduction to the practicalities of conducting an evaluation in situ

Six sites were chosen to pilot the integrated health and social care evaluation framework (ICE-F) (see Section 3). Three of these had secured funding from the Welsh Government’s Invest to Save Fund. The six sites encompassed five health boards and 12 local authorities in Monmouthshire, Cardiff and Vale, Rhondda Cynon Taff and Merthyr, Swansea Bay Area and Hywel Dda. All were setting up integrated care services, each of the new models of delivering care were at different stages of development, and ranged from the provision of equipment, community and acute response teams, hospital at home services and preventative services. The ICE-F was used to prompt discussion and guide service evaluations in the organisations. The extent of the evaluations ranged from three almost complete evaluations to three partially set up to complete an evaluation. The findings generated from these evaluations are not presented in this report. However, the learning from the process and implications of setting up the evaluations are presented in the observation boxes below.

The ICE-F was specifically developed to consider the wider aspects of evaluating several services at a time, that are used to support older people with complex and chronic conditions living in the community. The ICE-F design allows for the assessment of the outcomes for on the person, their family and carers connected with the care delivery (jointly termed the ‘household and the extended care and support network’). As such, the evaluations focused on the outcomes of the support given to the recipients of care, with the home acting as the health and social care evaluation hub. Focusing on the individual allows for service variation and it is this aspect of the ICE-F that gives it the flexibility to work across different organisations, institutions and services.

Fully integrated health and social care should be a seamless provision of services that meets the wide ranging needs of the individual and those connected with the care recipient’s home. Care packages are often multi-disciplinary and any evaluation of the outcomes of care provision is impossible to attribute to a single service.
By taking an integrated view of care, it is the holistic care package received within the home that is evaluated, rather than a single element of care provision. The aim is to assess the outcomes the integrated care package brings to the household.

Figures 4a and 4b show the difference in the integrated care evaluation compared to traditional evaluation approaches.

Traditionally, each service is evaluated using data collected from the service user and from monitoring organisational processes (Figure 3a). Data is collated and usually expressed as percentages, averages or quantities to demonstrate the value or impact of the service delivered. This quantitative approach to service evaluation is usually limited to organisational process information and causality cannot be assumed. Patient/client surveys and interviews provide richer detail regarding the experience of using a service, but rarely indicate how the service impacted upon the person in terms of wellbeing and life altering circumstances. However, several services can be evaluated by focusing on the personal outcomes of the individual and/or their household (Figure 3b).
Figure 4a: A traditional service evaluation based on process output data

Figure 4b: Evaluation of integrated care based on service user outcomes
Having established that personal outcomes could be used as a vehicle to measure the impact of care, it was necessary to attribute measures of impact of care delivery. As mentioned previously, older people can rarely be assessed positively based on a care = cure model or indeed by a care = number of services provided, therefore any assessment measure based on these models are unlikely to measure the true impact of care. Figure 4 summarises the traditional way of evaluating services based on care = cure and number of services delivered. The impact of care being the difference between the benchmark and the expected decline in health and ability of someone with chronic, complex and possibly terminal conditions, and the increasing number of services provided. Success of care has typically been measured by dependency on increasing numbers of services in proportion to declining health and ability and this is shown by the broken line on Figure 5. Figure 34b thus represents an evaluation method that can account for the impact of service provision on the individual by measuring personal outcomes.

**Figure 5:** A stereotypical care pathway for a person with chronic and complex conditions on a declining health and ability trajectory
Traditional ways of measuring the success of service delivery rarely take into account outcomes that make a difference to a person’s wellbeing, independence or ability to achieve or do what is important to them. When working with the pilot sites to trial the ICE-F, rethinking outcome measures that were more appropriate to the new ways of working with integrated care was a major barrier to evaluation, as existing data was collected using the traditional principles outlined in Figure 3a and Figure 4. Within the selected pilot sites, it was first necessary to establish and understand:

1. What data is collected?
2. Why is the data collected?
3. When is the data collected?
4. What happens with the data?
5. How is data handled (where does it go and who processes data)?
6. How does it become useful information?
7. What does the data explain?
8. How is the data used for feedback to develop services?

In relation to understanding how data becomes useful information, it was necessary to establish what comparisons were made. Comparison would establish change or differences in routine output data, performance and/or strategic indicators compared to historic data.

Conducting an integrated care service evaluation within the pilot sites, produced some key findings concerning the impact of integrated care and recommendations on how to approach and conduct such a broad ranging and complex evaluation, working across institutional and professional boundaries. The main obstacles to evaluating integrated care are listed below:

1. service diversity;
2. data sharing;
3. data collection;
4. assessment/review/discharge;
5. costing; and
6. reporting and using evaluations.
Each theme will be discussed in sections 2.1 to 2.6, using observations to highlight the
difficulties and successes of aspects of conducting evaluations on integrated care
services. The observations and feedback illustrate the nuances of working with
organisations across Wales when conducting an integrated care service evaluation using
the ICE-F as a guide.

2.1 Theme 1: Service Diversity
There was no one-size-fits-all approach to evaluation, because there was a great diversity
of services. The services involved in delivering integrated care ranged from delivering
medical care to providing adaptations in the home for enablement.

### Observation 1

Services providing integrated care across Wales are diverse and wide ranging. The
services sit within different public, private and third sector organisations and, furthermore,
come from different sections within these organisations. Each service traditionally has its
own method of collecting, handling and using data that suits the need of the individual
service. For example, a typical community response team has a social worker who will
assess for social care needs and buy in services from the private sector to deliver care.
The social worker will collect one set of information and the private sector care service
another. The client may have health care needs and have home visits from a district
nurse, occupational therapist and community physiotherapist. Each one of these
professionals will be collecting data from the individual and their household. The client
may have been discharged from hospital and is in the care of the GP, adding another two
sources of recorded data (hospital and GP surgery). Social care services record data on
one of their systems, the health services record data on hospital systems and GP’s record
data on a separate system. Whilst community occupational therapists, physiotherapists,
district nurses, speech and language therapists and dieticians generally keep paper
records. At a point of crisis, the Welsh Ambulance Service may struggle to collect up-to-
date information on a client using the 999 service. Some regions use an Integrated Health
Record (IHR) for unscheduled and emergency responses but these records are only
updated at between 11pm and midnight from electronic GP and hospital records, therefore
the information contained on the IHR may not be up-to-date. This is a problem for health
and social care professionals who cannot make accurate assessments and responses. It
is also a problem for collating information to evaluate service provision, as there are no
central records.

Data are unique to the service provided. It may be associated with anything connected to
the delivery of care, and could range from enablement aids to the grade of a pressure
sore.
Implications of Service Diversity
To understand the impact of a range of services delivered in the home, it is necessary to look at the service provision data, but also to focus on the impact that the range of services provided have had on the individual receiving the care. Assessing the impact of a single service embedded in a multiple service package on an individual receiving multiple care provision, is too complex to consider. Therefore, the whole of the integrated care provision has to be assessed for impact on the individual. The evaluation of multiple services is then not centred around the impact of individual services, but the impact of the contribution that the multiple service provision has had on the individual and their household. The home acts as the evaluation hub.

2.2 Theme 2: Data sharing

Observation 2
The All Wales Data Sharing Agreement has been used to share information between health and social care. In a region in Wales, it was necessary to implement a data sharing agreement whereby patient records that appeared on the health IT system and data that appeared on the social services IT system in two separate local authorities, could be used by either party to evaluate the data collected through services provided via integrated care. Both the health and social care systems operate using different personal identifying codes, health use the NHS number and social services use a personal identifier (PID). In order to cross reference people between the two systems, it was necessary for health to have access to the person’s PID and social care to access to the person’s NHS number if they were going to allow access into each other’s systems for nominated staff. Complete sets of information were generally not available which meant that individuals’ personal information would have had to have been transferred electronically such as name, address and date of birth. This level of personal data transmission potentially from unsecure sites in the community was not acceptable.

It was also not acceptable for all those involved in someone’s care to have complete access to either set of records. There was an issue of ‘needs to know’ information, which meant that some information was not necessary to share, for example a practitioner selecting re-ablement aids would not need to know whether the person was taking medication for an unrelated condition, but they would need to know the level of the individual’s mobility. Similarly, the health care worker would not necessarily need to know if someone had a minor criminal record in order to treat a bed sore.
Implications for Data Sharing

In order to overcome issues of data sharing the National Welsh Informatics Service (NWIS) have suggested creating a data sharing cloud where care professionals can access data on different systems with different levels of access. Some regions have developed a separate integrated care IT system whilst others have installed both health and social service IT systems in administration hubs. National governance for data sharing agreements and personal consent for data sharing is seen as a prerequisite for successful integrated health and social care.

2.3 Theme 3: Data and data collection

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<td>Some of the more rural regions in Wales largely operate a paper-based service in the community. Patient notes are updated by inserting handwritten hard copy notes into patient files during and just after a consultation with the client and stored in filing cabinets. Patient notes are generally focused on the outcome of health care and rarely indicate the impact the health care has had on the individual. While most data are collected in a hard format, some GPs use an electronic community records system. In these instances, GPs make house calls and update patient records on an electronic tablet. When the GP returns to the surgery, the tablet is then docked to interface with the IT system and updates GP electronic patient records automatically. However, there has been resistance to using this form of data recording from some community practitioners who are unsure about recording patient notes electronically. Furthermore, there is a lack of resources to implement a technological overhaul of the records system.</td>
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Social Services have also struggled with data and data collection in rural areas due to the limitation of available technology. An example of this was with the use of the Unified Assessment Process (UAP). This form of data collection was designed as an electronic system to capture information, but was introduced in rural areas as a paper-based system. This was made problematic by the sheer volume of paperwork. This issue has been rectified with the new core data set for Social Services.

Implications for Data and data collection

Internet connectivity across rural Wales is limited and any electronic data capture would have to be on hard drive and then downloaded. There is limited opportunity to update records instantly using cloud technology largely due to connectivity black spots in rural areas. Carrying electronic data safely would require the use of encrypted and password protected storage devices to allow electronic recording of data from one community visit to another before centrally uploading information at the GP surgery or point of service location. The solution has been to develop another separate service network to store and recall data on a separate system used for integrated care patients only. This confounds data sharing even more.
The collection of social service data has changed significantly. In December 2013, the UAP was abandoned and the core dataset introduced. This has given Social Services an opportunity to design bespoke assessment forms suitable to the services they deliver. The assessment process can now ask what the individual can do and what they will be able to do with support. The assessment has moved from ‘can’t do’ or ‘will do it for you’ to ‘what can you do?’ or ‘what would you like to be able to do?’ and ‘we will help you to do it’.

The underlying mechanism for the development of a new core dataset and bespoke service assessments has enabled a possible shift in attitudes and beliefs to delivering care.

2.4 Theme 4: Assessment/Review/Discharge

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Integrating health and social care has been instrumental in changing the way care is delivered in the community. One such region in Wales has been described as having a new purpose: “helping people to live their own lives”. They are beginning to change service provision from ‘fixer’ to ‘facilitator’ to develop a new approach or mechanism to delivering an integrated health and social care service. In the first instance, vulnerable people are identified and put into contact with community co-ordinators who aim to prevent people needing health and social care services. For example, the volunteer community co-ordinator may signpost the vulnerable person to contact a third sector organisation for support or link the individual to a community facility. People who require support contact one of three multi-disciplinary integrated hubs to arrange an appropriate person for an immediate community visit. If further investigation is required they receive a visit from the most appropriate professional. The assessment has discarded the deficit-focused, form-based process in favour of conversations with people about what matters to them. This is the cornerstone of the new approach and involves active listening to establish what matters most to an individual, and using their strengths and community resources to achieve a better life.
All practitioners use a single holistic, integrated assessment form and a single management system for integrated health and social care. A new assessment process supports the sharing of knowledge and personal information, with the focus of all the care working towards the achievement of a clear set of personal outcomes. Appendix I contains suggestions for a sample assessment form which focuses the assessment process on achieving what matters to the individual and household involved in the receipt of care. The final section of the form is designed to capture and measure the extent to which the desired individual goals have been achieved by delivering support, using an outcome star, Likert scales or a continuum. The data collection is repeated at review and discharge for a repeated within design quantitative evaluation. Presently the outcome star is used to assess the impact of the personal outcomes that have been co-produced with the integrated care worker. The personal outcomes can also be flexible and change with the course and direction of care. The personal outcomes are categorised into themes and the measured outcomes can be upscaled and generalised according to theme to measure impact of the services delivered at a service and an individual level.

Implications of Assessment

The review of this method may reveal shortcomings in the potential statistical analysis of the data. Although the data could be presented as generalised information for the service user cohort that has been assessed, the results would need to be compared to another model, a standard or benchmark to determine the additionality of integrated care. The ICE-F may need to incorporate a standardised set of data for core measures such as wellbeing, health related quality of life and independence for cross-Wales comparisons.

2.4.2 Theme 4b: Review

Observation 5 - Review

The region mentioned in Observation 4 uses the same forms for assessment, review and discharge capturing repeated outcome measures. Although the personal outcomes are individualised, the scores are standardised enabling comparison of data both within subjects and between subjects. Attainment of personal outcomes is measured on an outcome star on a scale of 1-5 (see Appendix I). Presently, the ability to complete the desired outcome is assessed and recorded at assessment and then at each review and eventually at discharge. To overcome difficulties associated with declining health and ability (see section 2) it was necessary to set individual care goals according to the level of health and ability at the time of assessment. This ensures goals are both realistic and achievable.
Implications for Review

The co-production of personal outcomes between the person delivering care and the person receiving care sets the standard of what is possible and achievable for the individual at their level of health and capability. If the individual achieves or over-achieves this pre-set standard, then the care would be considered to have obtained maximum impact. If the individual outcomes fall below the standard, then it would provide a marker to review how achievable the personal outcomes are for that individual or how the services are supporting the individual to achieve their outcomes.

2.4.4 Theme 4c: Discharge

Observation 6 - Discharge

Most regions across Wales have developed a patient or client satisfaction survey that is designed to measure the perceived impact of the care given (after having received a care package). Appendix II contains an example of a service satisfaction form. The survey includes retrospective reports of health, ability and wellbeing. The retrospective perceptions are recorded against current reflections on health, ability and wellbeing to ascertain the impact of the care delivered.

Implications for Discharge

Patient or service user satisfaction surveys are useful tools to measure the impact of care if the right questions are asked. Appendix II has some examples of questions that can measure the perceived personal impact of care through reflective questioning. This type of survey is a quick and relatively simple way to measure service impact. The data can be readily up scaled to measure the impact of service delivery at an individual and organisational level. These types of generic surveys can be applied across different service sectors and can give a snapshot of the general impact of service delivery on individual users. However, it is important to separate the recorded data between health and wellbeing. Someone can have very fragile health and ability but their wellbeing may be good because they know they are being cared for appropriately. It is important to capture this personal outcome of care to give an indication of what matters or is important to the individual. It is also important to consider appropriate place of care and levels of independence. Older people can feel very independent if they are in control of their care and not a burden to their families. It is important to define independence as a personal outcome rather than a geographical location. The same principle applies to older people.
in sheltered accommodation, extra care housing and residential care, as they may be independent of family care and financially independent of family and state support.

### 2.5 Theme 5: Costing services

**Observation 7**

All six ICE-F pilot sites found difficulties in accurately costing the delivery of integrated care. The regions reflected the complications of costing services that are delivered across organisations. Services working across local authorities, health, public, third and private sectors inevitably found it difficult to co-ordinate financial information, therefore the actual or real costs of delivering integrated care were difficult to ascertain and compare.

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<th>Implications for Costing Services</th>
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<td>Understanding the combined financial economic costs of delivering several services into a single household is complex. Socio-economic benefits of service delivery are even more complex and varied and the social return on the investment may be broad and wide. Actual costs are often elusive as different regions cost services in different ways. Traditionally cost savings have been calculated against bed days saved and a reduction in emergency admissions and unscheduled care. These cash savings are only associated with health and translating these savings across integrated health and social care services is inadequate. Also, the importance of considering the unintended consequences of delivery integrated care cannot be underestimated.</td>
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The impact of delivering a new service will undoubtedly affect the delivery of other services outside of the integrated care remit. Certain sections of other services may become redundant, and other support services may become over-burdened. The introduction of integrated care services are designed to reduce the impact on A&E services, lengths of stay in acute care and unscheduled care, this in turn will affect recruitment of staff, the attitudes of staff and people receiving services. An example of a conflict in care provision is often based on the principle that acute care is better than community care. Costing care delivered in the community compared to in a hospital, residential or nursing home setting will provide evidence as to the relative cost efficiency and effectiveness. In order to do this accurately, there would need to be a standardised costing protocol across Wales that would include the wider social consequences, positive and negative, of delivering care in the community.
The ICE-F has used a cost effectiveness analysis to look at an integrated care evaluation across several services depending on the care delivered. See step 9 of the ICE-F.

2.6 Theme 6: Reporting on and using an evaluation

Observation 8

An example of a qualitative evaluation.

A qualitative evaluation was conducted on an integrated care service using a thematic analysis (Braun and Clarke, 2006) of five telephone interviews. The following is a sketch of an example of how to analyse, present and use service user interviews as informative data. Prior to this case study evaluation of the services, qualitative data had been purposively chosen and presented as a long list of quotes that supported the successful delivery of the service with a few chosen negative quotes positioned at the end of the list. The following is an example of how the results of the first two themes were analysed, written up and used for feedback to improve service delivery.

Interview responses were read through and general themes extracted from the overall context of how the individuals perceived their service experience.

General Themes

1. Praise
2. Criticism
3. Confusion
4. Sense of security

1. Praise

Three out of the five interviewees were very pleased with the service they had received, and expressed this with comments such as:

*Couldn't fault it (the service).* (Interviewee 4)

*I was surprised to have an appointment, amazed, I didn't know what for, but it was nice to know they knew I was here.* (Interviewee 1)

*They were great compared to A&E, he was so much better off being at home, the staff have been lovely, I didn't feel like we were being a burden.* (Interviewee 2)

These three interviewees were prompted to consider what made the service exceptional. The general consensus across the three interviews were,

1. The staff were nice.
2. Staff gave you time.
3. They felt listened to.
4. The service could make direct referrals to the specialist services.
5. The service was efficient and the referrals happened quickly.

All three comments above imply that the service they were given went beyond expectation and alluded to a sense of efficiency or seamless care. The people receiving the service seemed unaware of the organisational aspects of delivering the service and were happy to see the arrangement of their care happen efficiently and effectively.

Interviewee 1 was pleased that she had featured on a system and was being checked upon. Although she was coping well and had been discharged without a care package, she was pleased she was being monitored. This gave her a sense of security and confidence in the system and within herself to carry on living independently in her own home.

2. Criticism

Two interviewees expressed their experience of the service as,

    Bloody useless. (Interview 5)

    They have just done nothing, just asked loads of questions. (Interview 3)

Both interviewee 3 and 5 had received care that they did not want and did not receive the support they would have liked. Both parties felt they had not been listened to and the perception of the care they had received as a result was poor. The conversation with both interviewees revealed that the actual service delivery was thorough and efficient in terms of installing enablement aids, however because the support was not what was requested the perception of the service was poor. The example given was the installation of grab rails in a shower, which the person could not envisage using because this would not allow any hands free to wash. Ideally they would have liked a chair or a standing support in the shower to enable freedom of arm movement in order to wash independently.

A second example was the removal of the downstairs doors off their hinges to allow less restricted movement throughout the house. The person then became extremely cold and uncomfortable because they could no longer heat the rooms adequately. The two examples of the results of a qualitative evaluation given above were used to improve service delivery. The first theme of praise emphasised the importance of follow-up appointments for people in the community who have been flagged as potentially vulnerable. The knowledge that care was available to interviewee 1 enabled her to carry on living independently, thus meeting one of the core aims of delivering integrated care into the community. The second example given was the report on the theme of criticism. These results showed the level of organisational efficiency was good, but emphasised the importance of staff listening to clients and responding appropriately to the personal desired outcomes of care. In this case, using a personal outcomes approach would have produced financial savings through better and more appropriate use of resources. Further use of this qualitative feedback could prompt staff training in person-centred care.
Qualitative Evaluations - Implications

The limitations of the qualitative findings from this small cohort of people are that results can only represent the individual views of service provision that they personally received and is useful only for feedback. The small dataset is neither a reliable nor a valid measure of service provision overall.

Other limitations of interviewing service users, are that those with advanced dementia who are considered unable to participate in a coherent interview. In these incidences, carers were engaged to sign the consent form and participate on behalf of the person receiving the care. Some participants can be very lucid but also confused and vulnerable and unsure about the services they have received. Interviewing older people with chronic and complex conditions with short-term memory deficits raises questions as to the quality and accuracy of the data. Nonetheless, the information supplied is a reflection of how they personally perceive and remember the service they have received. The feedback given about the service delivery was remembered as significant, whether it was positive or a cause for concern may provide useful knowledge regarding how care may be perceived by the wider cohort of older patients.

Qualitative data reporting based on interviews with service users and staff are generally anecdotal. Dealing with volumes of qualitative data is resource and time intense. In times of austerity, intense use of human resources and the training required to complete a thorough and robust qualitative analysis of data is not prioritised. However, the rich detail of information that can be extracted from qualitative feedback can be invaluable. The above observation is a typical example of the richness of detail that interviews can provide that can influence and improve the way services are delivered, such as, ensuring that undesired services are not put in place. It is important that qualitative data is used to inform service delivery and analysis and is best conducted by an impartial third party in a robust and valid manner.
Observation 9

Quantitative Evaluations

Many of the new integrated services across Wales have embarked on new ways of collecting and analysing data taken at assessment, review and discharge. Bespoke data collection methods that are unique to the service can provide specific and useful information about the services being delivered. Presently, standardised measures are not currently used across Wales and comparative data is not available. Within service measurement tools are used for data collection and are generally analysed and presented using averages or percentages, and are compared to the previous quarter or annual figures. The argument presented by integrated care services is the need to collect personal outcomes data, as well as process data to ascertain the impact of care delivery at a personal level. Likert scales are the generally preferred method to measure individualised personal outcomes (see Appendix I) that have been negotiated with the client. A Likert scale based on a scale of potential personal achievement of a pre-negotiated personal outcome, is likely to be appropriate if the middle of the scale indicates achievement or maintenance of the aim, above the middle point over-achievement and below the middle point, under-achievement. These measures will give some evidence as to the impact of integrated care. Other solutions that may be employed are professional judgements of potential attainment of personal outcomes, compared to actual attainment or the use of continuums and not categories to assess achievement and impact of care.

Quantitative Evaluations - Implications

Observation 9 demonstrated some good and innovative practice in developing new ways of evaluating integrated care using personal outcome measures to assess the personal impact of care delivery. More generally, in-house evaluations are often purposively selected statistics that reflect good care to promote the performance of the services delivering care. Reported and published evaluations are often biased to reflect good service provision, and poor performance at service level is often left unreported. Wales Audit Office information is often the only published indicators that could suggest inadequate efficiency of service delivery, and typically performance indicators at national level generally do not reflect the personal outcomes of services delivered to the individual to assess the impact of care.
To summarise, more independent and impartial service evaluations should be conducted across Wales. Standardised tools for measuring generic indicators of care delivery need to be recommended and employed across Wales. Examples of these would be a wellbeing measure, a health related quality of life measure, a social care outcomes measure, a measure of independence, a support network indicator and a personal outcomes measure to name a few. The case studies detailed above give an indication as to the complexity of evaluating integrated care services and the different ability levels of the regions to conduct robust and valid evaluations. Section 3 of this report is an introduction to the structure of the ICE-F that is designed to act as a guide to streamline the complexity of undertaking an integrated service evaluation.
3. The Integrated Care Evaluation Framework (ICE-F)

Understanding and measuring the impact of delivering integrated care to older people with the specific aim to improve wellbeing and independence

This guide to evaluating integrated services has been designed to assist service providers in conceptualising, designing and executing evaluations. It attempts to focus evaluation activity on a) understanding and measuring the wellbeing and personal outcomes of service users (older people); and b) understanding how the services people receive, and the way those services are delivered, affects their wellbeing and personal outcomes. The ICE-F, in this sense, attempts to address the deficit identified in the literature around the impacts of care provision on individuals and households.

The framework is not intended to be prescriptive and should not be thought of as a blueprint for conducting an evaluation. Rather, it provides guidance on the core elements of a sound evaluation and describes the thought process involved in designing one. Moreover, it describes the thought process for a particular type of evaluation, namely a theory-based evaluation, where evidence about a service and its users is gathered to test a logical theory of how the service should work. The variant of theory-based evaluation employed in the ICE-F also incorporates elements of Realistic Evaluation (context, mechanisms, outcomes), the benefits of which have been discussed elsewhere in the report. The main strength of the ICE-F, therefore, lies in its ability to accommodate variation and tailoring to suit different organisations’ needs and different types of integrated services.

It is important to emphasise that use of the framework in itself will not automatically equip organisations to conduct good quality evaluations or solve issues of analytical capacity. It is likely that expert advice, be it in-house or externally commissioned, will still be required at certain key stages of evaluations. It is also unlikely that a framework alone will overcome the cultural and behavioural challenges around evaluation and the use of evidence to guide policy and practice. That said, the ICE-F offers for the first time a strong, replicable and consistent framework for evaluation of integrated care. Its adoption by service providers will significantly enhance the quality of evidence on which decisions are made, services are configured, effectiveness judged and accountability demonstrated.
The rapid development of health and social care partnerships between health boards, local authorities and the independent sector - public, private and voluntary - has created a complex web of service provision that needs to be evaluated for cost efficiency, effectiveness and service user benefit. Multi-agency working has always been integral to service delivery for people with complex needs who require multi-professional support. Formally integrating this level of care under a single service structure has been a strategic aim of integrating public health and social care. Evaluating the impact of reorganising service delivery is important in understanding whether the investment in integration is making a difference to end users, and the ways in which professionals deliver care.

If, for example, professionals delivering care at the front line are largely unaffected by organisational integration, they may continue to deliver their services in the ways they had before integration took place. The support they provide would achieve the same level of personal outcomes for the individual they are caring for, regardless of the changes that happen through the structural integration of health and social care. This scenario would indicate a fundamental rift between the management and delivery of services, as there would be little regard for how changes in service structure could affect the outcomes of care for the service user. This guide is designed, therefore, to assess the personal outcomes of those receiving the service alongside the service/organisation outcomes involved in the logistics of delivering care. This will be done by placing the service user, and not the service organisation, at the heart of the evaluation design (see Figure 6).
Figure 6: Service User Evaluation

Service User

Service 1 → effect → Service User → effect → Service 2

Service User → effect → Service 3

Service User → effect → Service 4

Service User → effect → Service 5

IMPACT

Evaluation

Assessment → Review → Discharge

Readmission Follow-up
Furthermore, evaluation of the impact of integrated care services should take into account the needs of the family and informal carers involved in giving support to an individual. Individuals’ or household outcomes can be ascertained through the referral, assessment, review, discharge, follow-up or readmission information associated with the services being delivered. For integrated care, this is likely to be a single, multi-purpose document used across care disciplines that measures personal and professional perceptions of the outcomes of care. This way of evaluating care is based on a personal outcomes focused approach (e.g. IRISS, 2012, Talking points: Personal Outcomes Approach) which explores what is important to the individual and their carers and the outcomes they would like to achieve through integrated service support. Outcomes for integrated care are centred on the impact services have on a person’s life, rather than output measures that describe and explain the mechanisms of service provision. The Social Policy Research Unit (Glendinning et al., 2006) helpfully split outcomes into four separate categories:

- Quality of life outcomes/personal outcomes – daily living and acceptable quality of life.
- Process outcomes – individual experience of support.
- Change outcomes – improvements to physical, mental or emotional functioning.
- Maintenance outcomes – no change in condition.

In order to evaluate and understand a service, it is necessary to measure performance indicators, service outputs and personal outcomes achieved by the individual using the service. Figure 7 represents a summary of an evaluation process looking at the three aspects of service delivery in terms of context, mechanisms (realistic and programme) and the outcomes they produce at three different levels national (using outputs and indicators), organisational (using output data) and individual (using personal outcome data). It also demonstrates the importance of using evaluation data as a source of information to feed back to improve service delivery. Evaluations should be purposeful and indicate how service delivery can be adjusted to produce better outcomes at all three levels. This may mean that a new context and/or new mechanisms need to be enlisted to produce better outcomes.
The structure of the ICE-F comprises a series of stages and steps. There are four stages of the evaluation process. Stage 1 comprises three steps and is designed to clearly lay out an overview of what the service provision hopes to achieve and how. Stage 2 comprises a single step 4 that asks the evaluator to consider the context, aims and objectives and mechanisms the service is going to use to know whether the service will achieve the overall organisational aims. Stage 3 comprises four steps and is designed to build a template for the service evaluation. Stage 4 comprises the health economic evaluation of cost effectiveness, followed by a cost benefit analysis on the social return of investment.
STAGE 1 (Steps 1-3)

The first stage of an evaluation of integrated care is to outline clearly what the service has set out to achieve (its intended outcomes and objectives), in terms of the national policy context, local commitments to service provision for older people and, most importantly, service users themselves. Stage 1 would clearly benefit from a wide range of perspectives and views, to ensure the conceptual ‘model’ of the service is recognised and acknowledged by its main stakeholders. This, in turn, will improve the validity and acceptability of the evaluation’s findings, particularly if it generates challenging or counterintuitive findings.

Step 1
Will involve producing a basic visual summary of the project or service model and a diagram of the planned care pathways involved in the service provision. In many cases, this may already exist as part of the design, planning and setup of a service.

Step 2
Should consider some fundamental questions about the service, to ensure there is consistent understanding of what it is, how it works and what it aims to achieve. Again, as the evidence in the earlier part of the report demonstrated, it is important to approach this exercise from the service users’ perspective, as well as the service provider perspective, to ensure the focus remains on personal outcomes and wellbeing.

- What is the service?
- Who is it for?
- How does the service work?
- When are the services delivered?
- Where is the service delivered?
- Why is the service delivered?

Step 3
Brings together the thinking from steps 1 and 2 to form a basic logic model/programme theory that sets out in how the service is intended to work (on a fairly high level at this stage). There are many ways to approach the construction of a logic model, but it would be particularly useful to consider:
the rationale and objectives of delivering the service and pose questions to reflect and help understand if the service delivery is delivering what it set out to achieve;
understanding of the way the service has been planned and developed and how the inputs, activities and outputs of the service produce the described outcomes;
why and how these particular activities are best placed to deliver on the objectives;
what outputs and outcomes are required to achieve the objectives in both the short and long-term?

This process is summarised in Figure 8, which is a basic template for a logic model.

**Figure 8:** Project Model Using the Theory of Change Model and a Logic Model

**Summary of Integrated Care Service:**
**A Combined Theory of Change and Logic Model.**

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<tr>
<th>Rationale</th>
<th>Objectives</th>
<th>Inputs &amp; Activities</th>
<th>Outputs Immediate Effects</th>
<th>Outcomes Long Term Effects</th>
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<tbody>
<tr>
<td>National</td>
<td>National</td>
<td>National</td>
<td>National</td>
<td>National</td>
</tr>
<tr>
<td>Organisational</td>
<td>Organisational</td>
<td>Organisational</td>
<td>Organisational</td>
<td>Organisational</td>
</tr>
<tr>
<td>Personal/individual</td>
<td>Personal/individual</td>
<td>Personal/individual</td>
<td>Personal/individual</td>
<td>Personal/individual</td>
</tr>
</tbody>
</table>

**STAGE 2 (Step 4)**

Stage 2 aims to develop the logic model further, by populating its sections with information at the Macro, Meso and Micro levels (or what might also be termed national, organisational and personal/individual levels). Step 4 is a practical example of how to develop the types of questions required for an evaluation, exploring the macro, meso and micro levels of integration set out earlier and the contexts, mechanisms and outcomes (CMO) of integrated care.
### Step 4

Considering the following questions at the design stage of the evaluation (at the very least) will provide the basis for a rounded assessment and aid the understanding of the rationale, aims and objectives of the service provision. In essence, Step 4 is the process of populating the first four stages of the logic model, as far as the ‘immediate effects - outputs and outcomes’.

Describe the context the service is operating in: national, local and individual (rationale).

<table>
<thead>
<tr>
<th>National</th>
<th>For example, Welsh Government policy and strategy geared towards integrating health and social care services as a response to growing demand and costs and the need for greater effectiveness.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local</td>
<td>For example, extending the remit of re-ablement services or community response teams to offer the full complement of services required to deliver intermediate care</td>
</tr>
<tr>
<td>Individual</td>
<td>For example, the population older people living in the community with chronic and complex conditions and requiring various types and degrees of health and social care.</td>
</tr>
</tbody>
</table>

Describe the aims and objectives of the service at national, local and individual levels.

<table>
<thead>
<tr>
<th>National</th>
<th>For example, provision of funds to increase service provision in the community to promote independence and wellbeing through cost effective service delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local</td>
<td>For example, cost efficiencies promoted by streamlining services through intermediate care provision. Co-location and joint management of health and social care reducing management structure and duplication of administration and service provision.</td>
</tr>
<tr>
<td>Individual</td>
<td>For example, the older person, their informal carer and family have a single professional person to contact to manage and discuss service provision that is centred on the individual needs of the client.</td>
</tr>
</tbody>
</table>
Describe the mechanisms that will be used to achieve these aims and objectives at all three levels (inputs, activities and outputs).

<table>
<thead>
<tr>
<th>National</th>
<th>For example, Intermediate Care Funding to help meet the additional costs of restructuring services to meet the national requirements</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Local</th>
<th>For example, the intermediate care service will act as the umbrella body for all the integrated care services and teams. Efficiencies will be gained by introducing a new integrated care IT platform that will enable the sharing of relevant information about a service user.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Individual</th>
<th>For example, there will be a team around the service user that is accessible through a key worker. Assessments and reviews will be designed to understand what is important to the individual and tailor care accordingly.</th>
</tr>
</thead>
</table>

How will you know if the service is working well to achieve (outputs and outcomes)?:

<table>
<thead>
<tr>
<th>National Objectives</th>
<th>For example, performance indicators will show an increase percentage in the number of over 65s residing in the community. The number of over 65s length of stays in hospital will be reduced. A reduction in A&amp;E call outs and emergency admissions for over 65s.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Local, service or organisational objectives</th>
<th>For example, output measures concerned with service efficiency and performance could monitor avoidable admissions, unnecessary length of stays, number of planned care admissions against emergency admissions for over 65s. Costs can be calculated according to service use.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Individual or personal objectives for the individual for the service user</th>
<th>For example, individuals and their carers can maintain contact with a key health or social care professional with whom they can discuss their care needs and can plan and refer care as necessary. The individual’s wellbeing, independence and capability can be measured against their desired outcomes from receiving the service delivered.</th>
</tr>
</thead>
</table>
STAGE 3 (steps 5-8)

In order to understand the impact the service provision has had at a personal, professional and organisational level, the next stage of the ICE-F seeks to establish differences in outcomes between the integrated service and delivering services in the pre-existing way. At this stage of the evaluation process, it is necessary to build up a bespoke template for the evaluation, to incorporate the features of the particular service being evaluated.

Step 5

By considering the series of questions outlines below, this Step will identify the longer term effects (outcomes) intended for the service and complete the logic model. While it is clearly important to consider impacts at all levels, it is perfectly feasible that an individual service will focus mainly on impacts at the personal/individual and organisational levels.

<table>
<thead>
<tr>
<th>What do you need to know to understand whether your service is working well?</th>
</tr>
</thead>
<tbody>
<tr>
<td>For example, service users are getting better, maintaining function, have learnt to live and adapt to their present level of ability</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What mechanisms have enabled these outcomes?</th>
</tr>
</thead>
<tbody>
<tr>
<td>For example, re-ablement services, community OT services, home help and meal delivery</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How do you capture the information that would indicate the extent of these outcomes?</th>
</tr>
</thead>
<tbody>
<tr>
<td>For example, personal outcome scores captured on assessment and review form etc. Can this information be translated to inform meso level outputs such as number of services delivered to individuals in the community and can these statistics be used to inform the higher level indicators. For example, the number of people cared for in the community</td>
</tr>
</tbody>
</table>

Step 6

Step 6 is a checkpoint in the evaluation process, a means of summarising steps 1-5 will clarify what evidence will need to be collected and analysed in order to address the questions at Step 5. As described earlier in the report, it is important to consider the evidence needs at the macro, meso and micro levels, as illustrated in Figure 9.
Figure 8 is a further visual representation of how data can be used to describe the impact of a service at the three working levels of service delivery. The impact assessment becomes apparent only after considering the rationale, objectives and inputs (part 1 of the evaluation) then assess the service costs against the outputs and outcomes to give some measure of the impact of service delivery.

Figure 9: A logic model flow diagram leading to an impact assessment at three levels of working.

Step 7

Each integrated care service will be unique in the variety of data that is collected at all three levels according to the type of services that are delivered. The unique set of outcomes, outputs and indicators will let you know whether the service is working well for the individual; delivering what is required for the organisation(s) involved; and contributing to the national strategic aims. The further assist with this, Figure 10 illustrates how data and information can be grouped into domains, listing the type of evidence required at each level to understand what ‘story’ the data will reveal.
As discussed under ‘Observation 8’ earlier in the report, the value of qualitative evidence should not be underestimated in deriving explanations and identifying causal mechanisms that affect outcomes at all levels. This is particularly true for personal outcomes and wellbeing, where a subjective account of an older person’s experience of integrated care could put a different complexion on the objectively assessed outcomes (e.g. an older person judged to be living independently and rehabilitated may be experiencing personal anxiety or isolation).
Figure 10: Integrated Care Evaluation Framework - ICE-F Diagram

**EVALUATION FRAMEWORK**

<table>
<thead>
<tr>
<th>Domain 1 MICRO Independent Living</th>
<th>Domain 2 Meso Health and Social Care Delivered in the Community and service management</th>
<th>Domain 3 MACRO Integrated Service National policy and strategy</th>
<th>Domain 4 Unintended Outcomes of Integrated Service</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Definition:</strong> Living happily or successfully independent in your own home or within the community</td>
<td><strong>Definition:</strong> The process of delivering integrated care in the community across health, social care, third sector, informal care and private sector. Joint management structures, information sharing, joint budgets and co-location of management and services. Joint vision and integrated care outcome framework.</td>
<td><strong>Definition:</strong> Integrated care can be measured by the context of National performance indicators and Benchmarks</td>
<td><strong>Definition:</strong> New ways of working will impact both the service user, the service deliverer, the management and institutional organisational structures.</td>
</tr>
<tr>
<td><strong>Examples:</strong></td>
<td><strong>Meso Data Management Output Indicators</strong></td>
<td><strong>Macro National Standards Performance indicators</strong></td>
<td><strong>Performance indicators Outputs Outcomes</strong></td>
</tr>
<tr>
<td><strong>Micro Service User Outcomes Indicators</strong></td>
<td><strong>Domain 2 Meso Health and Social Care Delivered in the Community and service management</strong></td>
<td><strong>Domain 3 MACRO Integrated Service National policy and strategy</strong></td>
<td><strong>Domain 4 Unintended Outcomes of Integrated Service</strong></td>
</tr>
<tr>
<td><strong>Domain 4 Unintended Consequences</strong></td>
<td><strong>Domain 3 MACRO Integrated Service National policy and strategy</strong></td>
<td><strong>Domain 4 Unintended Outcomes of Integrated Service</strong></td>
<td><strong>Domain 4 Unintended Outcomes of Integrated Service</strong></td>
</tr>
</tbody>
</table>

**Step 8**

This step is about understanding what the evidence on outcomes is telling us about the effectiveness of the services. The data collected will of course be unique to the particular service(s) provided and should analysed accordingly (the ICE-F does not extend as far as recommending methods of analysis for data and information). What is important is that the service user outcomes are considered to evaluate the impact the service(s) have had on
the individual and their household. Broadening the evaluation to consider the data at all three levels reflects the nature of integrated care. Evaluation cannot only be considered on a service-by-service basis, as integrated care, by definition, indicates that it will be the combination of services delivered that will make a difference to a person’s independence, health, ability and wellbeing. Cause, effect and attribution become complex as the mix of services can no longer be attributed to a single care provision. Within the delivery of integrated care, it is also hard to ascertain which services have had a greater or lesser impact on the individual receiving the care. The case studies in section 2 give some examples of how data has been managed and interpreted to assess the impact of delivering integrated care services.

**Stage 4 (Steps 9-10)**

**Step 9**

**Health economic evaluation**

Evaluating the cost-effectiveness of services has the potential to be a very large, complicated undertaking and there are many ways such an analysis could be approached (e.g. attempting to assign values to social costs and benefits alongside purely economic costs and benefits). We would emphasise that some form of cost-benefit analysis is essential if the ‘value’ of integrated services is to be objectively assessed against alternative forms of care. A fairly simple cost-effectiveness evaluation tool has been designed by Swansea University’s Health Economics Evaluation Unit to assess and compare different means of providing care. Although it is but one example of how such analysis might be approached and one source of possible advice and technical assistance, some description of how the tool works is useful in the context of discussing the economic aspects of evaluation.

The evaluation tool is designed to assess the cost effectiveness (CEA) and budgetary impact of implementing an integrated care service, specific to the context of the care being delivered. The adaptation of the MS Excel-based model is used as follows: On the basis of a consultation with the main stakeholders of a service, a review of the priorities for evaluation is conducted and the model is adapted accordingly.

On the basis of feedback from the stakeholder group and validation from local experts, the model is finalised and a user-friendly interface is produced (see screenshots of Figures 11
and 12). The model considers four main analyses:

- a cost-effectiveness analysis based closely on the data collected locally through access to patient-level data;
- a cost-effectiveness analysis, extrapolating from the data to a longer-term or different setting (for example, a different case mix or an extended time horizon);
- a budget impact analysis (BIM) as an important part of any prioritisation and funding. The calculation is suitable for illustrating the likely and actual effect of implementation of the integrated care programme compared with a traditional or alternative form practice;
- the assessment of outcomes in the model includes a cost-utility analysis (cost per quality adjusted life year – QALY). This requires that the appropriate instrument (e.g. EQ-5D) is used with the service users. If this is not possible, then an analysis that delivers a cost per outcome can be used in discussion with the local stakeholders.

**Figure 11**: A screenshot of the front page of the economic evaluation model.
The cost effectiveness evaluation is designed to be flexible. The results sheet is set up to compare services based on basic cost assumptions of delivering care per hour. The costs are then reflected against a quality of life calculation which involves using a health-related quality of life measure, such as the EQ-5D or a similar weighted measure.

**Figure 12:** A screenshot of the results page of the health economic cost effectiveness evaluation.

### Cost-Effectiveness Evaluation of Integrated Care

<table>
<thead>
<tr>
<th>Select comparator for Step-down</th>
<th>Autolytic (hydrogel)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Horizon (years):</strong></td>
<td>1</td>
</tr>
</tbody>
</table>

**Step-up**

<table>
<thead>
<tr>
<th>Total cost / person</th>
<th>£1,305</th>
<th>£1,562</th>
<th>£-257</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total QALY / person</td>
<td>0.5930</td>
<td>0.5927</td>
<td>0.0003</td>
</tr>
</tbody>
</table>

ICER (Cost per QALY): £-902,786.59

| Willingness to pay threshold: | £20,000 |

### Step 10

Where feasible, undertake a cost-benefit analysis using a Social Return on Investment, or a similar approach that allows for the calculation of a time or social benefit value for the financial input (Cabinet Office for the Third Sector, 2009). We would argue this step is necessary to complete a full and robust evaluation of integrated health and social care. But we would also accept that cost-benefit analysis can be a major undertaking and it may take some time for organisations to develop the skills and capacity to oversee such analysis in-house.
4. Conclusion

This 2-year Knowledge Transfer Partnership has addressed some important considerations around evaluating the outcomes of integrated health and social care services. Judged against its original aims and objectives (which set out to improve understanding of the challenges and possibilities to develop a robust evaluation framework for use by integrated care service practitioners), it has made a very significant contribution developed through extensive primary research in the integrated care sector.

Firstly, the ICE-F offers service providers both a strong sense of direction on how to design and construct robust evaluations and a degree of consistency that will allow for comparison. As well as providing the basic structure for assessing effectiveness, ICE-F incorporates the service user perspective in a way that focuses on personal outcomes and wellbeing, rather than more abstract process measures that give us little understanding of how the service has met individual needs. To ensure the benefits of a consistent, robust approach are realised as widely as possible, we recommend both new and existing services are encouraged to adopt and embed the ICE-F as their principal evaluation framework. We also recommend that the Welsh Government benchmarks future evaluation proposals against the ICE-F, which will help to ensure that high standards of design are upheld and policy-makers and Ministers have a reliable, comprehensive evidence base to underpin their strategies and decisions.

At the very least, we would recommend that services adopt a realistic evaluation approach, which has particular benefits for a subject such as integration, where local context is clearly very important. The development of ICE-F took account of wide-ranging views and the growing academic evidence base around the evaluation of integrated care. Though some high quality research and evaluation has been conducted in the UK and elsewhere and there are some promising approaches to assessing cost effectiveness and efficiency, few approaches to date have centred on personal outcomes for service users to the extent ICE-F will allow. reover because it uses a realistic evaluation approach, ICE-F is flexible enough to allow for variation of local contexts and assesses what bearing they have on outcomes, i.e. how seemingly minor local variations in implementation and management of services can have significant bearing on the outcomes they achieve for the individual receiving the care. We have concluded that few other types of evaluation approaches are specifically designed to capture these all-important contextual variations, which are essential when the objectives are centred on service users’ wellbeing and independence.
This study has demonstrated the power and value of qualitative evidence in evaluating services, particularly when service users’ wellbeing and personal outcomes are being assessed. Qualitative evidence is very rich in context and, if gathered in a structured and quality-assured way, can do much to explain why and how outcomes have come about. But we would emphasise that routinely collected patient feedback on satisfaction surveys with services, does not constitute complete evaluative evidence that can be used analytically to address questions of effectiveness. We recommend, therefore, that improving methods for gathering, analysing and reporting on qualitative evidence to address service evaluation questions is considered in the dissemination of the ICE-F.

In our experience so far, service providers generally evaluate integrated services that are either being implemented already or are close to implementation.

Whilst this is undoubtedly the main function of evaluations, we would emphasise that evaluative thinking should be equally instrumental in scoping and designing the service itself (for example, synthesising evidence from existing evaluations to identify the basic features of the most effective practices). Taking an evaluative approach to service design also allows for more effective monitoring frameworks, geared towards specific evaluation questions. Considering evaluation later on in the service development cycle potentially limits ability to address such questions. This is because services are not always implemented in ways that are conducive to assessing their outcomes. Similarly, if evaluations are not able to adequately address the important questions - of effectiveness, context and outcomes - policy-makers are less able to assess what approaches are working and identify areas requiring government intervention and support.

Through this research, we have observed first hand the variation in awareness and understanding of evaluation concepts among integrated service practitioners. This does not reflect negatively on practitioners in any way, it merely suggests that a shift in emphasis to demonstrating the outcomes and accountability for services requires a very wide skills set and, where evaluation is concerned, a somewhat specialised one. To assist practitioners in developing their capacity around evaluation, we recommend the dissemination of ICE-F is accompanied by some form of training, to emphasise the importance of objectivity, convey the basic principles of evaluation, clarify terminology and outline some of the main approaches. The Welsh Government has a role in facilitating this, but it is also important that service providers recognise the need for building capacity around evaluation and offer a collective view on what form that capacity building should take and on what areas training could usefully focus.
In our view, there remain significant cultural challenges around how evaluation is perceived and treated within Welsh public services. This is an issue that extends well beyond health and social care integration. Currently, though not across the board, attitudes are not always conducive to asking fundamental and challenging questions about the way services are delivered and the outcomes they achieve. Evaluation, in some instances, is perceived as a backward-looking fault-finding process or simply a compliance activity. The reality is rather different and we would argue that evaluation, evaluative thinking and a culture of challenge and debate have a large part to play in driving service improvement and innovation. The implementation of the ICE-F is a good opportunity, in our view, to ensure the right incentives are in place for evaluation of integrated services, which may go some way to overcoming these cultural challenges. With this in mind, we recommend the following practical steps for both the Welsh Government and integrated service providers should be considered:

- Where funding for service provision is being distributed, detailed evaluation proposals should accompany funding applications and these should be part of the overall assessment of whether funding is awarded (i.e. assessing the likelihood that the effectiveness of a service and its outcomes could be measured).
- Introducing some form of expert peer review to quality assure evaluation activity in funded projects and programmes.
- Incorporating evaluative questions into regular monitoring of projects and programmes, which will (a) encourage services to utilise their monitoring data and analysis to incrementally address questions of effectiveness, costs and service user outcomes; and (b) provide continuous feedback for the Welsh Government, enabling it to identify and be more responsive to emerging issues, identify areas of emerging good practice and so forth. The ICE-F would lend itself very well to this approach.
- The establishment of benchmarks to standardise measurements across Wales, for example, quality of life measures, a wellbeing measurement tool and a standard for costing services.
- A forum for service providers to collaborate on matters relating to evaluation.
• Allow for the provision and resources for independent or impartial evaluation or in house training to design robust evaluations.

In final reflection, the complicated nature of evaluation of integrated care services reflects the complicated nature of delivering care in the community through a diverse range of services, where there can be no single attribution for cause and effect for good service delivery. Each evaluation of an integrated service, therefore, needs to be designed and implemented in its unique context and should be accommodating of its unique set of factors. The ICE-F simplifies the process of developing an evaluation strategy and provides a framework for synthesising evidence within the key domains. For the ICE-F to succeed and begin generating strong evaluation evidence for stakeholders of integrated care, it requires both endorsement and ongoing commitment from these stakeholders, along with some dedicated expert support in the early stages of its implementation. The key to both, we would argue, lies in the strategy for its dissemination, which needs to be mindful of our recommendations, suggestions and observations.
References


Friedman, M. (2005). Results Based Accountability™ and Outcomes Based Accountability™ guide. Adapted from: Trying hard is not good enough. Trafford.


Goodman C. Drennan V., Manthorpe V. et al. (2012), A Study of the effectiveness of interprofessional working for community dwelling older people. NIHR, Service Delivery and Organisation Programme. HMSO.


APPENDIX I

Integrated Assessment

Part 1 - Personal Details

<table>
<thead>
<tr>
<th>Name</th>
<th>Personal Identifying Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact details</td>
<td></td>
</tr>
<tr>
<td>GP</td>
<td></td>
</tr>
<tr>
<td>Next of Kin contact details</td>
<td></td>
</tr>
<tr>
<td>Referral Date:</td>
<td>Assessment date:</td>
</tr>
<tr>
<td>Assessor</td>
<td></td>
</tr>
</tbody>
</table>

Part 2 – Statutory core assessment information

Part 3 – Record of Assessment

1. Background information plus medical history, condition and experience of support services.
2. Person’s perspective: what is important to you, what matters most and how can we help you to achieve this?
3. Assessed needs, assessed abilities matched to eligibility criteria.
4. Suggested support structure based on eligibility.
5. Unmet needs that fall below eligibility threshold, alternative suggestions to meet needs.
6. Unmet needs that fall below eligibility threshold.

Part 4 – Professional Contributions

1. Co-ordinate other care specialisms.
2. Type of specialism: contact: Date:

Part 5 - Priorities, Outcomes and Actions

1. List priorities of support (negotiated with service user).
2. List desired outcomes of care (negotiated with the service user).
3. What will service user do to achieve outcomes, what will the service contribute to support the service user to achieve outcomes and who will do it?
4. When will the service user be able to achieve outcome?
5. Measure levels of achievement using a Likert scale, continuum or outcome star.

Part 6 – Risk

1. Identify risks involved to achieve outcomes. What support needs to be in place to
manage risk?

Part 7 – Plan and co-ordinate future support and involvement

1. Review arrangements.
2. Closure arrangements.
**Likert Scale** – a balanced scale with equal weighting of positive and negative scores, the midpoint is always neutral.

Strongly Disagree Disagree Neither Agree nor Disagree Agree Strongly Agree

**Categories** – categories are ascending and descending, for example, immobile to mobile, these results can be skewed as the central category is not necessarily the neutral point or the midpoint.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>I cannot walk</td>
<td>I can stand with an aid</td>
<td>I can stand without an aid</td>
<td>I can take a few steps</td>
<td>I can walk a short distance with an aid</td>
<td>I can walk a short distance unaided</td>
<td>I can walk a distance with an aid</td>
<td>I can walk a distance unaided</td>
<td></td>
</tr>
</tbody>
</table>

**An example of an outcome star**
Scale can be Likert or ascending category for personal outcomes for example: 1=not achieved, 5 achieved.

![Diagram of an outcome star with personal outcomes](image-url)
**Continuums** – measurement up a continuous scale, for example cold to hot.
APPENDIX I (continued)

CONSENT and AGREEMENTS

NHS No:      
LA No:       

NI No:      
Hospital No:       

Surname:      
Forename:       

Information recorded during this assessment may be shared with others involved in your care. This will help them understand your needs and avoid having to repeat some parts of the assessment.

Consent to Share Information: (tick as appropriate)

☐ I agree that the information contained in this form may be shared with other health & social care professionals in order to provide care for me.

☐ There is specific information I do not want to share (give details below).

☐ There are agencies / individuals I do not want information to be shared with (give details below).

☐ I agree that my GP can be contacted for further information about my health that is relevant to my needs assessment.

☐ Consent has not been given to share information (give details below).

☐ Person unable to give consent (give details below).

Details:

Do you want relatives informed of assessment / condition / treatment?  Y ☐  N ☐

If yes, person authorised to receive information:

Name:      Relationship:       
Name:      Relationship:       

For District Nurses:

☐ I agree that the District Nurse has explained the treatment procedure to me.

☐ I agree to the treatment procedure.

Any Details:

Signature:      Date:       

_________________________________________  ___________________________
Appendix II
An example of
Service User Satisfaction and Impact Survey

This is an anonymous survey and all information will be treated in the strictest confidence. The answers you give will help us to see where we can improve our service.

If you require this questionnaire in larger print or in Welsh, please contact …………… on Telephone……………

1. Please tell us who is completing the survey (please circle the appropriate wording)

   Patient       Carer       Relative       Other Person

2. Did the service meet your identified need?

   Yes, definitely       Your comments
   Yes, to some extent
   No

3. If English is not your first language, were you able to use the language of your choice during your assessment?

   Yes       Your comments
   Yes, to some extent
   No

4. Were your cultural needs taken into account?

   Yes       Your comments
   Yes, to some extent
   No
5. After the assessment was completed was the process of what was going to happen next fully explained?
   Yes
   
   Yes, to some extent
   
   No

6. How satisfied were you with the service provided?
   Yes, satisfied
   
   Yes, to some extent
   
   No

7. Has the service made a difference to you?
   On scale of 1-5, how did you feel at the beginning of the service intervention compared to how you felt at the end of the service intervention

   (Please put an appropriate number in each box according to how you felt).

   1 = not good, 2 = a bit better, 3 = back to normal, 4 = better than normal, 5 = much better

<table>
<thead>
<tr>
<th>Improving independence</th>
<th>Start</th>
<th>End</th>
<th>Confidence</th>
<th>Start</th>
<th>End</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety at home</td>
<td></td>
<td></td>
<td>Physical wellbeing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pursuing hobbies/interests</td>
<td></td>
<td></td>
<td>Social Isolation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improved mobility</td>
<td></td>
<td></td>
<td>Diet and Nutrition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td></td>
<td></td>
<td>Swallowing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
8. Do you think receiving the service at home was preferable to receiving the service in hospital?

Yes  your comments
No

9. If you had not received the service how do you think your health and wellbeing would be now? (Please circle)

1 = not good, 2 = a bit better, 3 = back to normal, 4 = better than normal, 5 = much better
Health  1 2 3 4 5
Wellbeing  1 2 3 4 5

10. Do you have any other suggestions as to how we can improve our service?

Please add any suggestions, comments or feedback about the service you received.

Your comments.

Thank you for taking the time to complete this questionnaire.

We operate a complaints and compliments procedure that applies to all aspects of our work and to all our staff. If you would like a copy of this procedure please telephone ..................