



An Economic Assessment of Community Services at St. Vincent's Hospice

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EXECUTIVE SUMMARY

Purpose:	<p>St. Vincent’s Hospice most recent strategy document, Our Future Plans 2014-19, defined the direction of service development at the Hospice during the last 4 years. In preparation for the next strategy, in acknowledgement of changes within the wider health and social care landscape, and against a background of increasing operational costs and decreased statutory funding, the Hospice Board of Trustees commissioned a review of the community services currently provided by the hospice. There was a recognition that future developments would need to be aligned to Scottish Government and Renfrewshire HSCP priorities.</p> <p>The first step in this process was the Community Review Project (CRP), the recommendations of which, in conjunction with the recommendations of a business review, were presented to the Board of Trustees in February 2019. Following this, Brona McGee (Director of Care) and Mairi-Clare McGowan (Consultant in Palliative Medicine), were instructed to carry out an economic evaluation of the community services, with the purpose of demonstrating how St. Vincent’s Hospice will continue to provide a service which meets the needs of its local community into the future in a sustainable manner.</p> <p>The Board of Trustees and Chief Executive Officer (CEO), Kate Lennon, supported an opportunity to participate in the RCN Demonstrating Value (Applying the principles of economic assessment in practice) programme. This report is the outcome of that process.</p>
Structure:	<p>The remit of this economic evaluation was to assess the “Community” services of St Vincent’s Hospice. The first step in this evaluation was to clearly define what the “community services” were, what sources (input) was required to provide them, what the activity and outputs of these services were, who was being targeted (groups targeted) by these services, and finally, what were the outcomes/benefits.</p> <p>In keeping with the findings of the CRP, it was agreed that the current structure would not fulfil the needs of the service going forward. After further discussion and refining of the scope of the project, two strands emerged:</p> <ul style="list-style-type: none">▪ Economic evaluation, using a cost-effectiveness approach of a Bereavement/Trauma Support Group compared with the current model of Bereavement/Counselling Support (CRP Recommendation 3).▪ Business case incorporating economic evaluation principles for a seven day CNS/Respite-Response(RR) Community Service (CRP Recommendations 1 and 4).

Summary:

Recommendations

- a) The Group Therapy pilot should be supported and, if positively evaluated, should be fully rolled out.
- b) The Group Therapy model should be extended to support the development of other Group-based Day Services. This could include Children's Bereavement Support, Carers Support, Wellbeing/Symptom Control and Therapeutic Groups such as Music and Art Therapy. There is potential for these groups to be developed in partnership with other local organisations (e.g. Renfrewshire Carers Centre). An economic assessment for each of these proposals would be recommended before proceeding.
- c) The development of the Community CNS/RR Service will be the preferred model moving forward. As it currently stands, the model does not appear to be financially viable within current resources. However, given the scope of the benefits described within this report, the authors believe it is imperative that the hospice exhausts all efforts to find a sustainable funding solution.

Following recommendation c, consideration should be given to the following options:

Option 1

St. Vincent's Hospice approaches statutory/trust funders with a proposal for the new service, looking to access sufficient funds to bridge the current gap and building increasing costs into the application for a minimum of three years.

Option 2

St. Vincent's Hospice approaches a partner organisation (e.g. a neighbouring hospice) with a view to developing a joint model, taking into account all of the potential benefits to patients and carers in our Community as previously detailed.

If St. Vincent's Hospice enters this partnership, the costs and benefits would be reassessed based on the combined resources of the organisation and the needs of the wider population encompassed by the services.

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1. INTRODUCTION

- 1.1. Health care services in Scotland, including hospices and other palliative care providers, are working in a changing environment, whether that be due to the changing demographics of the population or to a challenging economic climate.
- 1.2. The Scottish Government's 2020 vision¹ (published in 2011), recommended that everyone should be able to live longer, healthier lives at home, or in a homely setting. As far back as the Audit Scotland 2008² report into palliative and end of life care, there were recommendations that as a society we needed to address gaps in the provision of day care, respite care and home support, provide increased out of hours support (including access to specialist nurses), and help prepare carers more for their role in supporting their loved ones. They also commented on the fact that people's preferences for place of care were generally not being met.
- 1.3. These factors were again echoed in the 2014 Scottish Partnership for Palliative Care report "Are we living and dying well yet?"³ This stated that as a country, we still need to deliver care which is better aligned to what people want, build individual and community resilience, raise both public and professional knowledge and awareness of palliative and end of life care, and improve the identification of people with palliative care needs. In response, in 2016, the Scottish Government produced the Strategic Framework for Action on Palliative and End of Life care⁴, with the vision that "by 2021, everyone in Scotland who needs palliative care will have access to it". There were a series of aims, objectives and outcomes linked to this document, with the government making 10 commitments to support stakeholders in this endeavour.
- 1.4. In the meantime, however, the Scottish Government's paper "Strategic Commissioning of Palliative and End of Life Care by Integration Authorities"⁵ presented figures to the effect that 48% of all deaths in Scotland in 2018 happened in an acute hospital, with 52% in a "homely setting" (26% at home, 19% in a Care Home and 6% in a hospice). Furthermore, on average each year, about 15% of Partnership budgets are spent on people dying in that year. By far the largest contributor to this is unplanned hospitalisation, with 25% of unplanned bed days every year being used by those who go on to die and 29% of all acute bed days being used by people in their last year of life.

2. BACKGROUND

- 2.1. All of these issues mentioned above, come during a time when the demographics of Scotland show an ageing population. There are far more people living into their eighties, nineties and beyond than ever before. Along with this, there are many more people living with multiple co-morbidities, including dementia and frailty. In addition, at a time when resources are stretched, when government and the NHS tell us that hospitals are not the answer and that more care needs to be delivered in the community, the statistics still show that almost 50% of people are dying in hospital.
- 2.2. Against this background, St Vincent's Hospice serves the population of Renfrewshire. In 2018, this was 177,790 people, with 2,015 deaths during that time⁶. At a conservative estimate, it could be expected that up to 80% of these deaths were unavoidable (NRScotland) and therefore there could potentially have been palliative care needs. This would give an approximate number of patients who could benefit from palliative care input at 1,612
- 2.3. During this same time period, St Vincent's hospice accepted 165 referrals for our community nurse specialist team and looked after 114 patients in our inpatient unit (with a significant overlap between these two groups). Even accounting for the fact that there is a second hospice in Renfrewshire of a similar size to St. Vincent's Hospice who will have been referred a different group of patients, it is clear that there are a large number of patients in Renfrewshire who died during 2018 and who were never referred to specialist palliative care services.
- 2.4. St. Vincent's Hospice most recent strategy document, Our Future Plans 2014-19⁷, defined the direction of service development at the Hospice during the last 4 years. In preparation for the next strategy, in acknowledgement of the issues described above, and against a background of increasing operational costs and decreased statutory funding, the Hospice Board of Trustees commissioned a review of the community services currently provided by the hospice.
- 2.5. The Community Review Project (CRP) identified that St Vincent's Hospice needs to widen access to its services (e.g. patients still predominantly have a cancer diagnosis and there hasn't been any fundamental change in how community services are provided despite the changing demographics and changing patterns of illness as described above). The review actively engaged with members of the local community including health and social care professionals, service users and the general public. Information was gathered by tailored surveys which were analysed and used as evidence in formulating the recommendations (see Box 1).

Box 1 – Recommendations from the Community Review Project (CRP)

The following recommendations are proposed:

1. There is a clear sense from the survey results that there is a need for increased support at home in order to support patients and their families. This is supported by a previous project undertaken by the CNS team which highlighted that patients and families would benefit from a 7-day community service, but the support required need not be provided by a Specialist Nurse. It is recommended that a feasibility study is carried out, looking at the provision of a respite and response social model of palliative care.
2. It is recommended that there is further research carried out into methods of support the hospice could provide to carers. Again there was a clear sense that informal group support/drop in would be of benefit to the community. Uptake of the carers' practical skills group has not been high although the sessions have evaluated positively and research into potential barriers to this service is required.
3. It is recommended that a review of the provision of counselling and bereavement support is undertaken to understand the ways in which the development of these services can better support the needs of the local community.
4. It is recommended that a review of the Community Nurse Specialist Team is carried out in line with the future role of Clinical Nurse Specialists currently under review through the Scottish Government.
5. It is recommended, based on the positive impact for patients and carers, that the Complementary Therapy service, which is currently funded through Trust applications, becomes part of the future core services provided by St. Vincent's Hospice.
6. Research into the role of volunteering in the community is recommended. This will look at the feasibility of a befriending service, practical help and support.

2.6. The recommendations of this review, in conjunction with the recommendations of a business review, were presented to the Board of Trustees in February 2019. Following this, Brona McGee (Director of Care) and Mairi-Clare McGowan (Consultant in Palliative Medicine), were instructed to carry out an economic evaluation of the community services, with the purpose of demonstrating how St. Vincent's Hospice will continue to provide a service which meets the needs of its local community into the future in a sustainable manner.

2.7. The Board of Trustees and Chief Executive Officer (CEO), Kate Lennon, supported an opportunity to participate in the RCN Demonstrating Value (Applying the principles of economic assessment in practice) programme. The CEO and Senior Management Team attended an initial Masterclass designed to demonstrate the principles behind the programme and how they might be used by hospices. Brona McGee and Mairi-Clare McGowan then also attended three workshops and participated in one to one coaching sessions with one of the course facilitators. This report is the outcome of that process.

3. DEVELOPMENT OF THE ECONOMIC EVALUATION PROJECT

- 3.1. The remit of this economic evaluation was to assess the “Community” services of St Vincent’s Hospice. The first step in this evaluation was to clearly define what the “community services” were, what sources (input) was required to provide them, what the activity and outputs of these services were, who was being targeted (groups targeted) by these services, and finally, what were the outcomes/benefits.
- 3.2. This process covered all of the services and staff provided by the hospice which primarily focussed on patients (and their families) still living at home. This included the Community Clinical Nurse Specialists (CNSs), Day Hospice, Patient and Family Support Team (PFST), and other services (e.g. Outpatient Clinic, Allied Health Professional input, Complementary Therapies etc.). The results of this mapping process are displayed in Figure 1. However, once completed and following further reflection and discussion with the wider team, it became clear that the current structure would not fulfil the needs of the service going forward. In particular, the services were found to be disjointed, separate teams working in silos, focused mainly on one-to-one interventions and working on a 9am to 5pm, Monday to Friday basis (Community Review Project Report and personal communication from the ongoing CRP working group).
- 3.3. These findings were in keeping with the recommendations of the Community Review Project and initial discussions to plan a redesign of the services had already been held by the project team. With agreement from the CEO, the authors decided that a new approach to the economic evaluation was required. Rather than try to assess the value of the service as it is, it would be more useful to evaluate the re-designed services (or elements thereof).
- 3.4. The first attempt to map out the new services is shown in Figure 2. This essentially consisted of bringing all of the staff involved in providing community services together under one management structure, but not significantly changing the clinical approach, outputs or benefits. In addition, it was a very large and unwieldy project to tackle within the timeframe allocated by both the Board of Trustees and the Demonstrating Value facilitators.
- 3.5. After further discussion and refining of the scope of the project, two strands emerged:
 - Economic evaluation of a Bereavement/Trauma Support Group compared with the current model of Bereavement/Counselling Support (CRP Recommendation 3).
 - Business case incorporating economic evaluation principles for a seven day CNS/Respite-Response(RR) Community Service (CRP Recommendations 1 and 4).

Figure 1

Figure 1: St Vincent's Hospice Current Community Services (McGee/McGowan 2019)

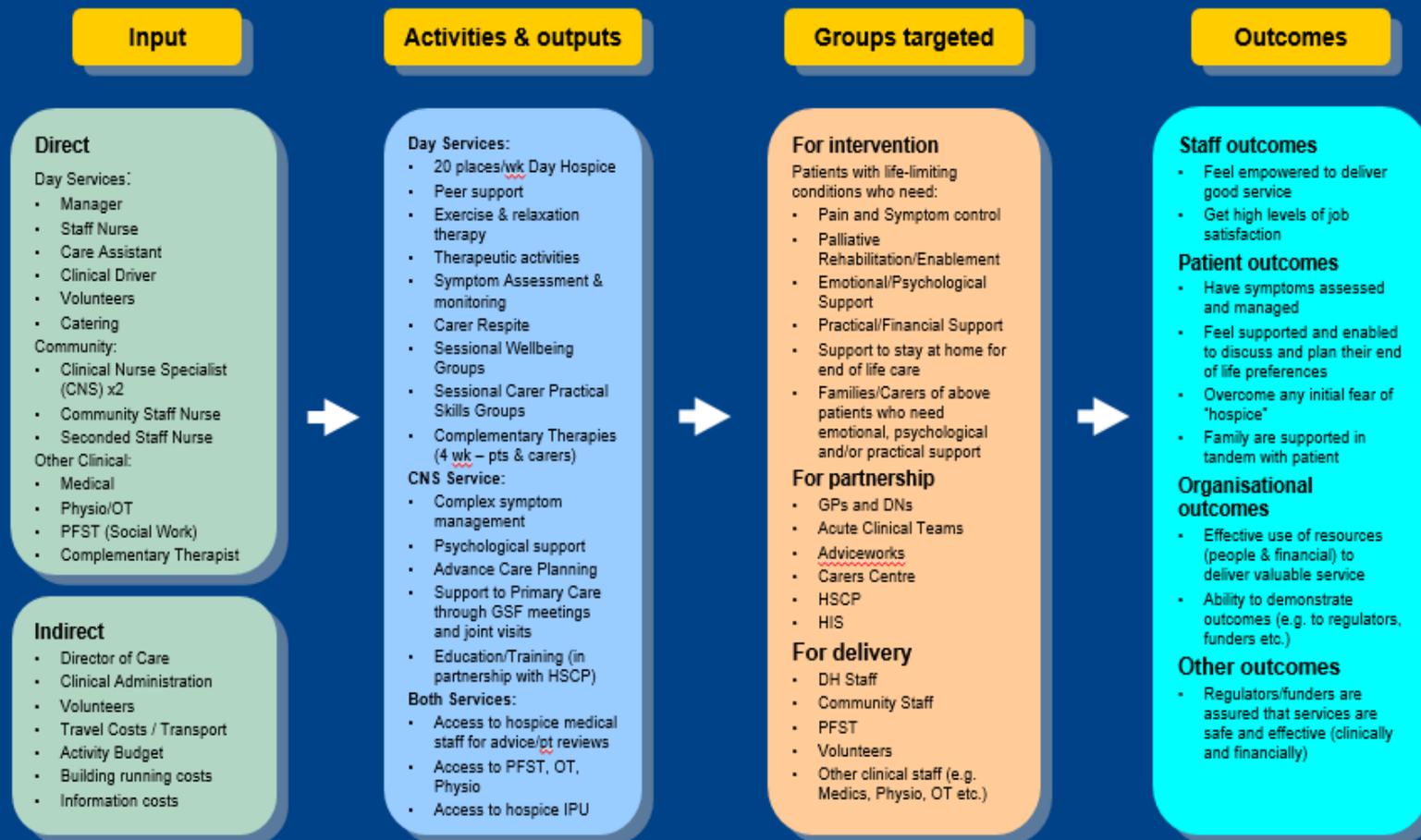


Figure 2

Figure 2: St Vincent's Hospice Combined Community Services (McGee/McGowan 2019)



4. BEREAVEMENT/COUNSELLING SERVICE EVALUATION

4.1. Background

- 4.1.1. In October 2018, Sue Ryder and Hospice UK published a report entitled Bereavement Support in Scotland⁸. They surveyed 2,341 adults who had been bereaved, 68% of whom had lost a close relative and 16% a friend.
- 4.1.2. Results showed that 31% of participants felt they had needed support beyond their family and friends to manage their bereavement. However, only 6% of all respondents accessed bereavement support with a further 23% indicating they would have liked support but didn't know how to access it, were uncomfortable asking about support, or unable to access the type of support they wished. Based on the estimate that around 230,000 people in Scotland are bereaved each year, an estimated 53,000 people could be missing out on support. The impact of not accessing support can manifest in low self-esteem and a sense of loss of role and purpose as well as feelings of anger, guilt, and a sense of failing their loved one. (Alison Penny, Care After Caring⁹). Health problems such as exhaustion, infections, cardiac problems and back problems are common after a period of caring and loss, as well as the effect of reduced social networks and financial problems.
- 4.1.3. One to one counselling is the most common type of support that people have accessed (63%). This can present challenges for provision and managing expectations given budgetary constraints and evidence that not everyone will benefit from this form of support. In addition to one to one counselling, 22% accessed a support group and 11% used online support forums. Recommendations from the report included encouraging a flexible service provider response offering a range of support types.
- 4.1.4. At St. Vincent's Hospice, counselling and bereavement support has, on the whole, been offered on a one to one basis. When a patient attached to any of the clinical services dies, a bereavement risk assessment form is completed for the next of kin or other close friends/relatives. This form acts both as a referral for further contact from the Patient and Family Support Team but also highlights potential triggers for complicated grief, such as multiple loss, dependency of relationship, length of illness and other factors. On receipt of the form, a condolence call is made offering support and, with permission from the person, a letter is sent at 3 months and 12 months offering further support if needed. Clients can self-refer at any time. From April 2018 to March 2019, a total of 60 people were referred for, and received, specific counselling or bereavement support. Clients to this service do not have a set number of sessions allotted to them and the length of access to the service varies greatly depending on client need and professional assessment.
- 4.1.5. For some time, the value of providing group support to people and their families affected by life limiting illness has been discussed within the Patient and Family Support Team. Due to a current recruitment freeze, a reduction from two to one counsellor currently working with the hospice gave the impetus to make the change. This Counsellor is skilled in using tools based on holistic wellness practices that are used internationally to help with experiences of trauma. By using these tools from Capacitar*, it is hoped that people struggling with loss and bereavement will find the resources within themselves to cope and heal.

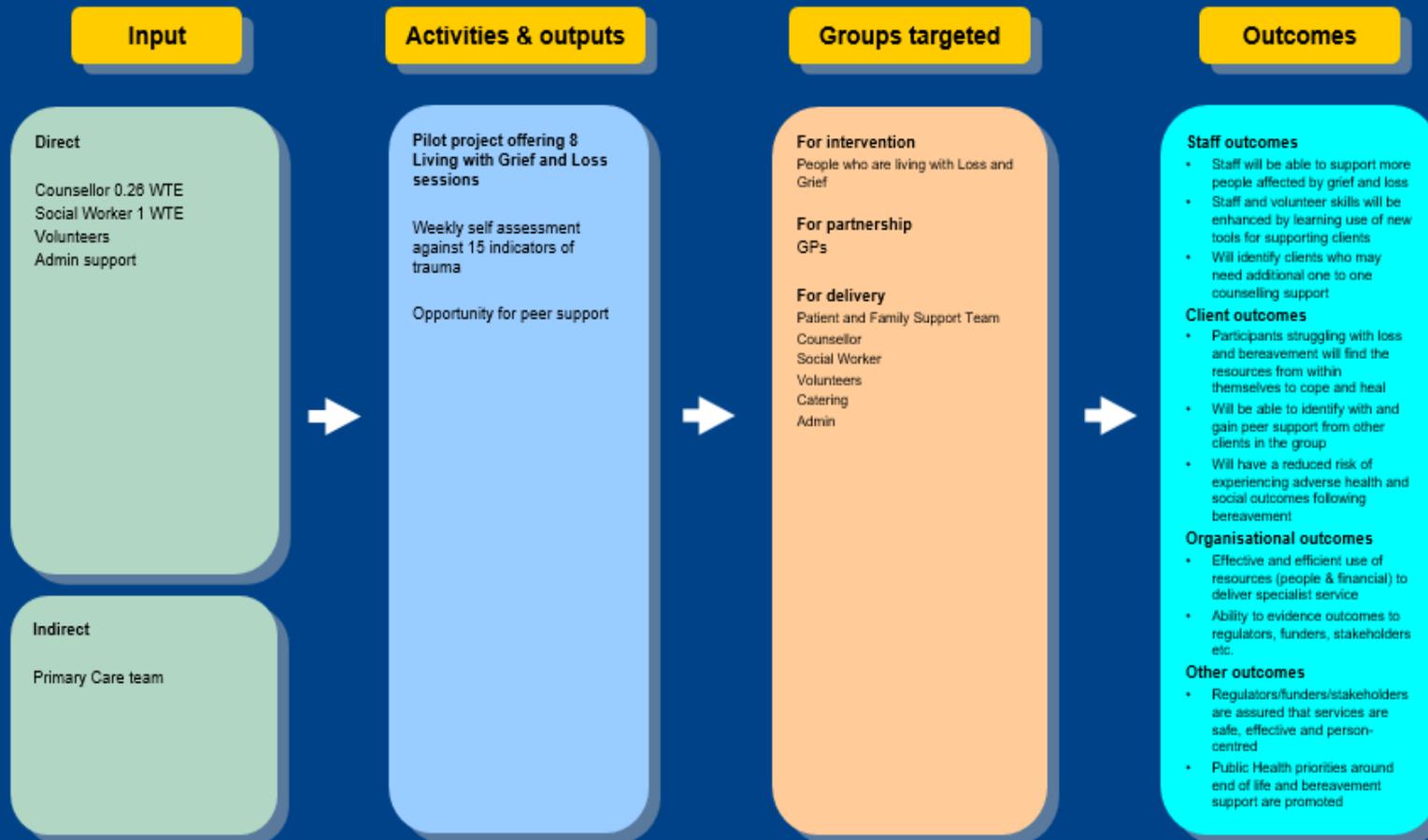
*Capacitar means "to empower" in Spanish. Capacitar's mission is to teach mind-body-spirit practices to empower healing, wholeness and peace¹⁰.

4.2. Pilot Study

- 4.2.1. This economic evaluation will take a cost effectiveness analysis approach to running a Living with Loss and Grief Group compared with one-to-one bereavement counselling. The assumption being made is that the benefit/outcome of seeing clients in a group setting will be equivalent to the one-to-one approach, but that access will be widened and more people will be able to benefit from the service. This new approach to bereavement support will also be in line with the SVH 2014-2019 Strategy and the recommendations of the Community Review.
- 4.2.2. The Living with Loss and Grief Group will run for an initial 8-week pilot. The Pathway to Outcome which maps this approach is shown in Figure 3. The sessions will offer exercises to be used at times when the participants are feeling drained, anxious and low. The tools are drawn both from ancient cultures and current research and include: Tai Chi exercises; Energy hold and finger holds to manage emotions; Emotional Freedom Technique; Head, neck and shoulder release; Acupuncture (without the needles) for pain and traumatic stress; and Visualisation.

Figure 3

Figure 3: St Vincent's Hospice Group Counselling Service (McGee/McGowan 2019)



4.2.3. The group will have 8-10 participants and will be led by the Hospice Counsellor. Support will be given by the Hospice Social Worker and 1 volunteer who has previously worked within the PFST. The impact of the sessions will be measured each week by participants scoring themselves against 15 symptoms of trauma, and by collecting comments both written and verbal. The Counsellor will continue to see additional clients on a one to one basis in the morning prior to the group session, and on their second working day. A comparison of the numbers of clients expected to be seen in the groups (plus the additional individual sessions) versus the figures for the most recent year of individual counselling, is shown in Box 2.

Box 2 – Capacity and Costs of Counselling Services

All salary costs are inclusive of Pension/NI as applicable based on SVH salary scales. Since 2018 there has been no pay rise within the organisation. NI is unchanged but there has been a 2% increase in pension costs

2018: 60 clients in total seen by 2 counsellors

Assume that:

- Counsellor 1 sees 4 client sessions per day (lasting 1 hour each)
- Counsellor 2 sees 5 client sessions per day (lasting 1 hour each)
- Counsellors each see clients 2 days/week
- Counsellors run sessions over 40 weeks of the year

Therefore:

- There are 720 client sessions/year
- For 60 clients they attend for an average of 12 sessions each

Cost of Counsellors:

- Counsellor 1 - £16.79 per hr
- Counsellor 2 - £20.29 per hr
- Counsellor 1 sees 40% of clients and Counsellor 2 sees 60%
- Counsellor 1 had 288 sessions x £16.79 = £4835.52
- Counsellor 2 had 432 sessions x £20.29 = £8765.28

Total cost for 60 clients receiving counselling at the Hospice in 2018 was £13,601

Pilot project: 8-10 clients to be seen in group setting over 8 weeks
 Set-up costs: Preparation 10 hrs (counsellor) = 10 x £17.14=£171.40
 Training 2hr (counsellor + social worker) = 2x£17.14+ 2x£21.57 = £77.42
Total set up costs = £248.42

Assume: 8 clients per group
 Roll out to 5 groups run per year
 Counsellor still sees 6 clients for one-to-one support (1.5 days)
 Each individual client has average of 12 sessions
 Running Costs Group: Counsellor 2.5hr/wk for 40 wks = £1714
 Social Worker 2.5hr/wk for 40 wks = £2157
 Catering £20/wk for 40 wks = £800
 Materials £10 per groups for 5 groups = £50

Total running costs = £4,721

Total cost for set-up and running of groups would be £4,970

Counselling Costs: 6 sessions per week available for 1-2-1 counselling
 Over 40 weeks = 240 sessions
 Assume: Average of 12 sessions per client
 20 clients in the year (assuming 40 wks of active sessions)
 Cost: **240 hours at £17.14 per hour = £4,114**

Total number of clients potentially seen using new system = 60

Combined cost for Group + Individual Counselling = £9,084

4.3. Cost Analysis

4.3.1. The figures given in Box 2 clearly demonstrate the following (taking the stated assumptions into consideration):

- 60 patients seen by 2 counsellors cost £13,601 (in 2018)
- 60 patients can be seen by 1 counsellor (with support from Social Worker and volunteers in the groups) at a cost of £9,084
- Cost saving of £4,766

4.3.2. The outcomes/benefits of the two services cannot be directly compared at this stage, since the groups will be introducing a 15-point scoring system which is not currently used with the individual clients. One benefit of the group approach is that counselling can feel like a formal approach to what may be a natural life event and often it is bereavement support rather than counselling that is required (Bereavement UK)¹¹ Potentially, other benefits may include a sense of peer support, an understanding that other people are going through similar experiences. However, as the group is based on the commonality of the trauma of grief and loss, not everyone will have experienced the

death of a loved one, but may still be in a caring situation or indeed themselves have a diagnosis of a life limiting illness. The evaluation of a “mixed” group will be important in the development of the group going forward.

5. COMMUNITY SERVICES REDESIGN

5.1. Drivers

- 5.1.1. As discussed above, the demographics of our population is changing. Despite efforts to shift the emphasis of care from hospital to the community so that people achieve their preferred place of care and death at home or a homely setting (includes hospice), around 48% are still dying in hospital, many without a good clinical reason for that to have been necessary.
- 5.1.2. Recognising that there is still a high level of unmet need in Renfrewshire, looking at the services we currently provide, and considering the financial pressures faced by the hospice, the Board of Trustees commissioned the Community Review Project (see Box 1 for Recommendations). Regarding our community nurse services specifically, our stakeholders told us that they want more access to specialist nurses 7 days a week, but in addition, they also need more practical and social support across the week.

5.2. Current Service

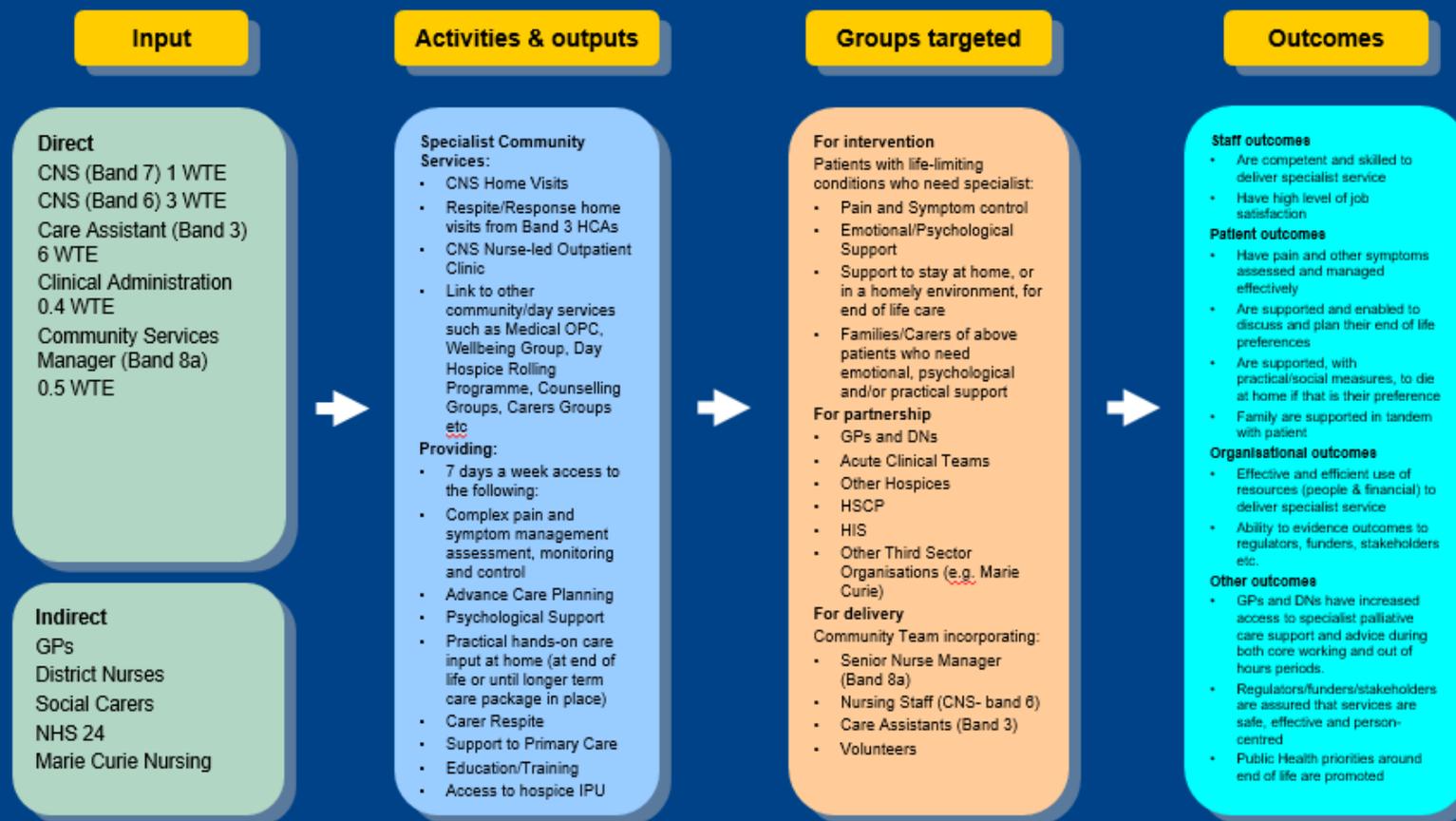
- 5.2.1. St Vincent's Community Clinical Nurse Specialist (CNS) Team currently provides a service Monday to Friday 9am to 5pm. It consists of one Band 7 CNS/Team Leader (1 WTE – this post is currently vacant; at the time the previous post-holder left, the clinical caseload of the team had fallen and it was decided to wait and observe referral patterns and workload before replacing like with like)), one Band 7 CNS (0.8 WTE), one Band 6 CNS (1 WTE) and one Band 5 Staff Nurse (1 WTE – currently vacant; recruitment process has started). The nurses mainly work across the western half of Renfrewshire and have links with specific GP Practices across that area (those that traditionally refer their palliative care patients to St Vincent's Hospice).
- 5.2.2. The CNS team provide specialist support and advice to patients and families affected by life-limiting conditions. They will assess and manage physical symptoms, assist patients with advanced care planning, and provide emotional support to the patients and their carers/families. They will liaise with GPs around medication changes, attend the GP Palliative Care Practice ("Gold Standard") Meetings, and liaise with other teams both within the hospice (e.g. referring patients to Day Hospice, Medical Outpatient Clinic, Patient/Family Support or Inpatient Unit) and without (e.g. District Nurses, Social Care Teams etc.). In addition, they play an active role within the clinical governance and educational activities of the Hospice.
- 5.2.3. The benefits of this service are demonstrated in the high levels of patient and family satisfaction (surveys are performed on an annual basis), positive feedback from external professionals and service users during the CRP, and in the high percentage of patients known to the service who die at home or in the hospice compared to the acute hospital (91% based on 6-month sample). The team is also preparing to introduce a national standardised outcomes based approach to managing symptom control (OACC Measures)¹² which it is anticipated will add to the evidence available for the outcomes/benefits of the service.

5.3. Service Redesign

- 5.3.1. In redesigning the service, the authors were aware of the need to maintain the specialist elements of assessment, symptom control, advanced care planning and complex emotional support for patients in order to maintain the benefits described in section 5.2. However, we also need to increase our reach to the many people in Renfrewshire not currently accessing specialist palliative care (see section 2), widen the demographic of patients accessing the service (currently >90% are cancer patients), and further develop the range of support available to include hands-on practical support and carer respite (see CRP Box 1). Combining these and extending to a 7-day service would need a change in not only the number of staff but also the skill-mix of those staff.
- 5.3.2. Using other hospices' (personal communications from Prince and Princess of Wales and St Columba's Hospices) examples of running a 7-day CNS service, it was clear that most of their workload would still be during core working hours. Therefore, there would still need to be a minimum of 2 (and ideally 3) on duty Monday to Friday. The weekends could be covered by 1 CNS working 9am-5pm Saturday and Sunday, but this would need to be an experienced nurse of Band 6 or above as they would be working independently during that time. In order to allow for annual leave, study leave and involvement in governance activities, our calculation is that a minimum of 4 WTE CNSs would be required, with 1x Band 7 and 3x Band 6 nurses to give the required experience and leadership within the team.
- 5.3.3. Practical support and carer respite would be provided by Health Care Assistants (HCAs) working at Band 3. As a starting point for the service, two per day would be required as most visits would need 2 staff for safe manual handling (based on Strathcarron Hospice@Home (H@H) Service Evaluation Report¹³), working 9am to 7pm in a shift pattern across 7 days. This would be composed of a minimum of 6x Band 3 WTE.
- 5.3.4. In addition, the current team are managed directly by the Director of Care, who also directly manages the PFST and AHPs (with Day Hospice Manager being one of the AHPs). However, with a larger team, working across 7 days and employing different types of staff, we agreed that the service would need a dedicated manager. A Community Services Manager Band 8a (0.5 WTE) would be required for the Community Service with the other 0.5 WTE dedicated to managing the other teams as noted above (which are also community focused). This would then allow the Director of Care to manage the Community Services Manager along with the Inpatient Manager, and would free her to devote additional time to her other commitments including clinical governance and strategic clinical support to the CEO.
- 5.3.5. The Pathway to Outcome mapping this new 7-Day Community Service is shown in Figure 4.

Figure 4

Figure 4: St Vincent's Hospice Redesigned Community Services (McGee/McGowan 2019)



5.4. Benefit Comparison of Community Services

- 5.4.1. In order to determine whether change in the community services at St Vincent's Hospice would be beneficial, it is necessary to look at current outputs and outcomes versus those anticipated for the new service.
- 5.4.2. In 2018/19, the CNS team accepted referrals for 165 patients. This was achieved via 478 home visits, 753 telephone consultations with patients, 338 support calls to relatives, and 420 liaison calls to other health or social care professionals. These figures were all collected as part of St Vincent's Hospice's routine data collection, which is used for monitoring and governance purposes.
- 5.4.3. The number of patients known to the CNS team who died in the same year was not fully recorded, but there are figures available for 6 of the 12 months from April 2018 to March 2019. During those 6 months, a total of 57 patients died, with 23 dying at home and 29 in the hospice. Only 5 died in an acute hospital, giving a percentage of patients dying either at home or in a homely setting of 91%. These figures are not complete and with such a small sample size they are unlikely to be fully representative of what could be expected on an ongoing basis. However, the overall picture painted by these statistics strongly supports the benefits of the CNS team service, even if, for example, the percentage dying in hospital was nearer to 20% rather than 9%, given that we know that in Scotland as a whole approximately 48% of people currently die in hospital.
- 5.4.4. Other outcomes which are assessed include feedback from patient/family re their satisfaction with services through patient/family questionnaires, comments gathered through the hospice-wide processes (including comment cards and feedback via the website and social media), and questionnaires from the CRP (external professionals and service users). Staff satisfaction is monitored through the appraisal process and one-to-one meetings with their line manager. OACC Measures (a nationally recognised suite of outcomes-based questionnaires for assessing physical and psychological symptoms in palliative care populations) have not yet been implemented within the current CNS service, but implementation is planned and these will add to the level of evidence currently collected about the benefits of this service.
- 5.4.5. The new service would be aiming to increase capacity to support patients and families (see below for estimates of the numbers for both CNS and Respite-Response Services). This would be done in several ways:
 - a. Increased total number of CNS hours, increasing overall capacity of the team to take on additional patients for specialist support and to provide first assessments for patients then referred on to the RR service.
 - b. Increased number of CNSs means more flexibility to provide services in a different way (e.g. providing clinics). This would provide an alternative to home visits for patients who are fit enough to travel to the hospice and enable the CNSs to see more patients in a day (by eliminating the travelling time involved in home visits).
 - c. Increased number of CNSs, working across seven days increases the visibility of the team, allowing more link working with GPs and District Nurses, both in and out of hours, increasing specialist support to the primary care team, complementing the current Consultant OOH support, and potentially increasing referral rates.

d. Provision of practical/social support and carer respite increases the percentage of patients with “palliative care needs” who might be considered for or would accept referral to the hospice. For example, a patient may require a RR service to support them at home while a social services care package is being arranged, but may not have any symptoms or psychological needs which would traditionally have been the trigger for the GP or hospital team to refer to the hospice CNSs.

5.4.6. As a conservative estimate, we have assumed an increase in 30% of referrals to the CNS service and a similar increase in activity. Outcome measurements would include all of those detailed above, and in addition, would have the OACC measures embedded from the start, enabling them to more clearly identify specific outcomes for patients including the effectiveness of measures to control pain and other symptoms.

5.4.7. The comparison of the current and projected data for the community services is summarised in Table 1 below:

Type of Data	Current Service (actual data 2018/19)	Redesigned Service (projected figures)
Referrals accepted	165	214
Home visits	478	621
Telephone Consultations (with patients)	753	979
Support calls (to relatives/carers)	338	439
Liaison calls (to professionals)	420	546
Number of deaths	57 (actual over 6 mths)	74 (over 6mths)
	114 (projected over 1 yr)	148 (over 1 yr)
Number dying at home	23 (actual over 6 mths)	(see combined annual figure below)
Number dying in hospice	29 (actual over 6 mths)	(see combined annual figure below)
Number dying in hospital	5 (actual over 6 mths)	30 (20% total deaths assumed) (cf 48% national hospital deaths)
Total number dying at home or in homely setting	52 (actual over 6 mths)	68 (over 6 mths)
% Dying at home or homely setting	91% (over 6 mths)	80% (assumed)
Projected annual figures for death at home or homely setting (assumption of 80% total)	91	118

- 5.4.8. Please note, as stated above, that the figure quoted in Table 1 of 91% of patients dying at home or in homely setting, is based on a small sample size over 6 months only and cannot be assumed to be replicable. There are many factors which contribute to a patient's ability to remain at home including level of family support, availability of social care packages, complexity of symptoms etc., and for some patients, even with the best supportive care available, admission to hospital is the only viable (and perhaps even preferable) option. For all these reasons, and given that the current annual rate of deaths at home/homely setting in Scotland is approximately 52%, the authors have estimated that an 80% rate is an achievable target for our service.
- 5.4.9. It should also be noted that the data above assumes that there will be a 30% increase in referrals accepted to the service and that the pattern of support remains constant for all those patients (that is, the proportion of home visits/telephone consultations etc.).
- 5.4.10. The HCA-provided Respite/Response (RR) Service will run alongside the CNS service. Both will be managed by the Band 8a Community Services Manager (CSM). It is envisaged that patients will initially be holistically assessed by a CNS, with specific attention to symptom-control, psychological needs and advanced care planning (ACP). Patients thought to be requiring and appropriate for the RR service would then be added to the HCA caseload, which will be managed by the CSM.
- 5.4.11. To try to provide an estimate of the potential numbers of patients who might be referred and the benefits they might receive, we took the example of the Strathcarron Hospice @ Home Service. It is not directly comparable as that service concentrated mainly on referrals for patients in the last two weeks of life, but their five-year evaluation recommended broadening this remit which would bring it closer to the RR model we are considering. In the first year of their service they were referred 243 patients (and the number increased year on year throughout the five years of the project). These patients were in addition to referrals to their CNS Team. If we consider that this service covered a population approximately twice the size of Renfrewshire, we could assume that our service could potentially receive referrals for up to 120 additional patients per year.
- 5.4.12. In the Strathcarron model, patients were seen by HCAs (80% by 2 staff members at a time) for an average of one hour per visit (range 0.5-2.5 hrs). They provided support to patients including personal care, psychological support and non-medical symptom management as well as general discussions/relaxation techniques etc, and they also provided psychological support, discussion around family issues as well as allowing time out for family/carers.
- 5.4.13. The results of the Strathcarron model showed that patients using H@H who were at home 15 days prior to their death had a much-reduced rate of acute hospital attendance during that time compared to those with no H@H input (11 vs 46%) with no significant differences in case mix between the two groups. They were also less likely to have NHS24 activity (0.25 vs 0.4 contacts). In addition, patients with H@H were also more likely to have District Nurse (DN) involvement (100% vs 63.4%) suggesting that H@H patients were better linked into this additional support.
- 5.4.14. Although as stated above, the two models are not exactly comparable, the benefits that our patients could achieve through the new RR service are potentially significant. Gathering the evidence of the outcomes (as shown in the Strathcarron report) would need to be an integral feature of the service from conception onwards.

5.5. Cost Comparison of Community Services

5.5.1. The current running costs of the CNS Service are detailed in Box 3. Please note that the salary costs for the Band 7 Team Lead are included although this post is being held vacant at present.

Box 3 – Running Costs of Current Community CNS Team Service

All costs are inclusive of pension/NI etc. as applicable and are provided for the current year (2019/20) based on SVH salary scales.

SVH salary scales are not directly equivalent to NHS Agenda for Change scales, therefore the incremental point within the bands has not been shown here.

The Band 7 Team Lead costs are included although this post is currently being held vacant.

The Band 5 RGN post is also currently vacant but only short-term, and plans for recruitment to this post are ongoing.

Travel costs are estimated based on submitted expenses for use of own cars plus fuel and maintenance of hospice cars (not exclusively used by CNS Team).

There is currently only ad-hoc administration support to this team (estimated at 0.1 WTE).

Running Costs Group:

Band 7 Team Lead:	1 WTE £47,225
Band 7 CNS:	0.8 WTE £31,684
Band 6 CNS:	1 WTE £37,684
Band 5 RGN:	1 WTE £30,684
Band 3 Admin:	0.1 WTE £2,517
Travel:	£6,000

Total running costs of current CNS Service are £155,753

5.5.2. The projected running costs for the Community CNS/Respite-Response Service are shown in Box 4.

Box 4 – Project Running Costs of Community CNS/Respite-Response Service

All salary costs are based on the mid-point of the appropriate NHS Agenda for Change (AfC) scales (2019/20) to give the most direct comparison with the current service costs. Please note it is recognised that this team is not currently active during this fiscal year, and further costs would be required in salary increases for 2020/21.

All salary costs included assumed 25% on-costs for pension/NI etc. and a 7% supplement for hours worked at weekends. Dedicated administration costs have also been built in to the service as this would help free up nursing time from administrative duties such as contact recording, would facilitate written communication with GPs and would provide support to the CSM with regard to the administrative functions of managing the team's caseload etc.

Costs for overheads such as heating/lighting etc. are indirect costs and are not included as these would be very similar to the current costs and are not easily separated out from the whole organisation costs (that is, there would be no additionally). The team would use existing office space and equipment within the hospice (travel expenses and additional computer for the Band 8a Manager are included).

Travel costs are estimated by scaling up to 10 people and then adding 15% to account for additional costs seeing the increased patient numbers both during the week and at the weekend.

Set-up costs:

Training in First Aid for HCAs:	£85 x 6 = £510
Training in Palliative Care for HCAs:	£21.70 x 30 = £651 (provided by SVH Quality Improvement Practitioner)
Mobile Phones:	no additional set-up costs as included in current contract
Desk computer for CSM:	£500
Laptops for CNS and HCAs (for off-site working):	10 x £500 = £5,000
Total set up costs =	£6,661

Running Costs Group:

Band 8a Community Service Manager:	0.5 WTE at Point 3 £28,404
Band 7 CNS:	1 WTE at Point 5 £49,688
Band 6 CNS:	1 WTE at Point 5 £41,690
Total Band 6 x 3 WTE:	£125,070
Band 3 Admin:	0.4 WTE at Point 4 £10,067
Travel:	£17,250
Care Inspectorate Fees:	£3,000
Mobile Phone running costs:	£10pcm x 12 x 11phones = £1320

Total running costs = £385,879

Total projected costs of new Community Service are £392,540

Projected shortfall: £236,787

5.5.3. It can be seen from the data in Boxes 3 and 4, that there would be a projected shortfall in funding between the current service and the redesigned service. This would be in the region of **£236,787** and in all likelihood would be greater since the earliest such a service could feasibly start would be into the 2020/21 fiscal year. Costs for the current and future models would both increase, but since SVH salary scales do not match the NHS AfC scales, this would mean a bigger diversion in the costs, with a bigger projected shortfall next year.

5.5.4. However, it is important to see these additional costs against the benefits of the service (see section 5.4) including increased referral rates, increased numbers of patients accessing the combined CNS/RR Service, reduced hospital use in the last few weeks of life and increased likelihood of achieving a preferred place of death at home or in a homely setting. These benefits would also likely include a cost-saving in acute hospital usage although this should be considered against potential increased costs in the community (e.g. social carers, DN and GP involvement) as noted in the Strathcarron H@H report.

5.5.5. As a feasibility study, the authors also looked at other costs incurred by the hospice in its community/day services. Excluding the PFST who are the team involved in the counselling model (section 4 above), we looked at whether there would be enough current budget available for the new Community/RR service if the hospice stopped providing, for example, Day Hospice, Community OT, Physiotherapy etc.

5.5.6. The calculations were based on the following staff:

▪ RGN Band 5	0.48 WTE	£16,028
▪ HCA Band 3	0.44 WTE	£10,970
▪ Physio Band 7	0.16 WTE	£7,899
▪ OT Band 7	0.36 WTE	£17,773
▪ Manager Band 7	0.32 WTE	£15,798
▪ Total costs:		£68,468

5.5.7. Please note that the costs for the Physio (who is also the Day Services Manager) and OT are not their whole salary costs as they also have a role within the inpatient unit.

5.5.8. Even if it were possible to use all of the salary costs above towards the Community/RR Service, there would still be a shortfall of **£168,318**. In addition, this would also mean that the hospice could no longer offer community patients any AHP services (physio/OT) or attendance at Day Hospice (or other model of Day Services).

6. DISCUSSION

- 6.1. The authors have attempted to evaluate two separate aspects of community services at St. Vincent's Hospice using sound treasury-based economic principles.
- 6.2. The first was an evaluation of a pilot project being developed to provide group-based psychological support, with a view to scaling it up to a rolling programme throughout the year. Evidence informed an assumption that the benefits to clients of the group therapy would, in most cases, not be less than those receiving one-to-one counselling (with the proviso that group clients could be referred on to individual counselling if clinically indicated).
- 6.3. On this basis, a cost effectiveness analysis comparing group therapy, run alongside individual therapy by a single counsellor, versus individual therapy alone run by two counsellors, demonstrates that the combined group/individual service is a more cost-effective way to deliver this service, with the assumption that the quality of the service will not be affected.
- 6.4. The second aspect to this project was to compare the current Community CNS Service at the hospice with a re-designed Community CNS/Respite-Response (RR) Service. The purpose of this evaluation was not to demonstrate that one version would be more cost-effective, but to examine the true costs of providing a service which would be fit-for-purpose.
- 6.5. An assessment of the reach, outputs, outcomes and overall benefits of the current service (as detailed in section 5.4) had led us to the conclusion that it would not be the most effective model for the future. We, therefore, designed a new, extended service around the benefits and outcomes we wanted to achieve, incorporating a broad skill-mix of staff in sufficient numbers to fulfil the clinical requirements. Note that the number of staff quoted are believed to be the absolute minimum required to run this service. A review of the service at set points after implementation will be required to monitor the appropriateness of the staffing levels and determine whether any future developments would require additional resource.
- 6.6. Once this future model was designed, we were then able to take a cost-consequence approach to evaluating both services. This clearly demonstrated that the new model would require significantly more financial resources than the current one (shortfall £236,787). However, looking at the benefits of the new service with its focus on increasing reach, widening the demographic of patients accessing the service, increasing the flexibility and visibility of the service, improving relationships with other health and social care professionals, reducing potential admissions to hospital and facilitating more patients to die at home or in a homely setting, the conclusion we have drawn from this analysis is not that we should simply continue with the current model because it is cheaper, but that St Vincent's Hospice should absolutely be aspiring to develop and implement this new service. The question that needs to be asked is how can we afford it given the hospice's current financial situation?
- 6.7. The situation has, therefore, become a matter of assessing the options available to generate the funding required to bridge the gap, or potentially looking to develop the service in partnership, e.g. a joint venture with another hospice. There are many elements to this approach which would be appealing; for example, by bringing two teams together, the starting number of staff would be higher. There would be an opportunity to save on shared costs, such as management, overheads etc. but, more

importantly, there would be an ability to look at how the service could be run across a wider area serving more potential patients.

- 6.8. Although on the surface there may not be any cost savings here, in reality, it might be possible to run the service 7 days a week across a wider area with less than double the number of staff (remembering that our model was based on the minimum number required to cover all the shifts rather than the optimum number to provide the service to the population). In addition, even if it was decided that 2 CNSs needed to be on duty each weekend to cover the wider area, it may be possible to diversify the skill-mix, perhaps by having a Band 5 working the weekends supported by a Band 6/7. This approach deserves further consideration. Monitoring and evaluation of the service would include assessing the complexity of service-user needs through dependency scoring and monitoring the number of calls and visits required during weekend periods.

7. RECOMMENDATIONS

- 7.1. The authors put forward the following recommendations for consideration:
- a. The Group Therapy pilot should be supported, and if positively evaluated, should be fully rolled out.
 - b. The Group Therapy model should be extended to support the development of other Group-based Day Services. These could include Children's Bereavement Support, Carers Support, Wellbeing/Symptom Control, and Therapeutic Groups such as Music or Art Therapy, and could potentially be developed in partnership with other local organisations (e.g. Renfrewshire Carers Centre). An economic assessment of each of these proposals would be recommended before proceeding.
 - c. The development of the Community CNS/RR Service will be the preferred model moving forward. As it currently stands, it does not appear to be financially viable within current resources. However, given the scope of the benefits described within this report, the authors believe it is imperative that the hospice exhausts all efforts to find a sustainable funding solution.
 - d. Following recommendation C consideration should be given to the following options:

Option 1
St. Vincent's Hospice approaches statutory/trust funders with a proposal for the new service, looking to access sufficient funds to bridge the current gap and building increasing costs into the application for a minimum of three years.

Option 2
St. Vincent's Hospice approaches a partner organisation (e.g. a neighbouring hospice) with a view to developing a joint model, taking into account all of the potential benefits to patients and carers in our Community as previously detailed.

If St. Vincent's Hospice enters this partnership, the costs and benefits would be reassessed based on the combined resources of the organisation and the needs of the wider population encompassed by the services.

This case study was completed by Brona McGee, Director of Care and Mairi-Clare McGowan, Consultant in Palliative Medicine, St Vincent's Hospice, Howwood in 2019. Brona and Mairi-Clare successfully completed an RCN leadership development programme commissioned by a consortia of four hospices in Scotland. The programme was designed to empower professionals to understand the principles of economic assessment and apply them in their practice in order to demonstrate the value of, and continuously transform, their services.

The programme is endorsed by the Institute of Leadership and Management.

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