

## KEY MESSAGES



- 1 Rennie Grove provides a cost-effective delivery option compared to in-patient hospital care.
- 2 The cost of care by the Rennie Grove night service, per person/per night, is on average £739.55.
- 3 The national average for a bed per day for inpatient specialist palliative care is approximately £397<sup>1</sup>, per person.
- 4 Assessing cost effectiveness is complex, complicated by the range of cost analysis methods and measures used to determine hospital admissions costs.

## BACKGROUND INFORMATION

Rennie Grove Hospice Care is a charity providing care and support for patients diagnosed with cancer and other life limiting illnesses, and their families. Rennie Grove offers overnight access to nurses from 9.15pm-7.15am via a face-to-face visit or telephone contact. The University of Northampton were commissioned to undertake a research study into the Rennie Grove night service provision.

## WHAT WE DID

A mixed methods evaluation was conducted, with an overall aim to evaluate the quality and impact of the Rennie Grove Night Service. A specific objective was to compare costs of the Rennie Grove Night Service at home with hospital in-patient care. This was undertaken via:

- Diary of health care (n=30 – 17 completed during the study and 13 during an extended data collection phase)
  - Specifically designed diary to log health and social care visits (number and duration)
  - Completed by carers following a night visit by Rennie Grove
- Review of health and social care costs<sup>1</sup>

## FINDINGS: DIARY DATA

The diaries showed the range of services engaging with patients and informal carers included:

- Rennie Grove;
- General Practitioner;
- District Nurse;
- MacMillan/Marie Curie;
- Private carers;
- Social Services;
- Formal Carers;
- Specialist health providers;
- Ambulance service;
- Other health providers (podiatrist/physiotherapist);
- Rapid Response team;
- Carer assessment team;
- Hospital outpatients.

Table 1: Service Costs, Time and No. Visits

	Total Visits	% of all Visits	Total hrs	Total mins	Total £	% of all Cost
Rennie Grove	175	25%	165	44	£7,437.97	33%
General Practitioner	35	5%	14	37	£3,104.86	14%
District Nurse	117	17%	64	35	£4,429.09	20%
MacMillan/Marie Curie	12	2%	54	55	£2,776.66	12%
Private carers	6	1%	12	30	£219.38	1%
Social services/ Formal Carers	330	47%	225	50	£3,150.41	14%
Specialist	2	0.3%	1	0	£54.75	0.2%
Ambulance	1	0.1%		45	£180.00	0.8%
Other	21	3%	16	7	£594.65	3%
(podiatrist/physiotherapist)						
Rapid Response	7	1%	3	30	£276.50	1%
Carer assessment	1	0.1%	0	45	£27.00	0.1%
Hospital appointment*	1	0.1%	0	5	£3.79	0.0%
<b>Total</b>	<b>708</b>		<b>560</b>	<b>23</b>	<b>£22,255.06</b>	

### Cost of care in relation to duration of care

- Formal carers and social services provide 47% of the recorded contacts, Rennie Grove staff provide 25% and district nurses 17%.
- Together, these three services provide 89% of all the interactions recorded in the diaries.
- Contact time could be via face-to-face or by telephone.
- Rennie Grove accounted for 33% of the total cost of care – the highest proportion across all the services.
- The district nurse service accounted for 20% of the total cost of care.
- Formal carers and social services account for 14% of the total cost of care.
- GPs also accounted for 14% of the cost of care, but only 5% of the total number of contacts.
- Specialist care provided by MacMillan/Marie Curie nurses also accounts for a high proportion of cost, 12%, in comparison to overall number of contacts at only 2%.

## FINDINGS: COST COMPARISON

- Information provided by Rennie Grove provided the cost of the provision of the night service during the 145 day study period, where two team members were on duty (Band 6/7 and Band 6/3) for a 9.5 hour shift.
- For the 145 day period, the cost of the night service is estimated to be £107,234.20 (based on the salary averages across each of the three Bands).
- This is an average of £739.55 per night, with the service providing care for an average of 3.79 people per night (costing £195.13 per person).
- The average cost of a bed per day for inpatient specialist palliative care is between £289-£540, with a national average of £397<sup>1</sup>.

## CASE STUDY

Case studies were created from the diary data to exemplify the range of services engaging with patients, the following is an example of one case study:

**Gender:** Female  
**Age:** 88 (Deceased during data collection period)  
**Diary recorded for:** 18 days  
**Hospital admission:** No reported hospital/hospice admissions

This participant had been with Rennie Grove for less than six months. During the data collection period contact was made with Rennie Grove on 93 occasions for this participant.

This participant kept a diary of visits with the following services:

Rennie Grove	Marie Curie/MacMillan
General Practitioner	Complimentary Therapist (other service)
District Nurse	Formal Carers

The highest number of visits were made by a team of formal carers who visited 68 times over the course of 18 days. Support provided by Rennie Grove accounted for over 5 hours of contact over 22 visits, which often involved multiple contacts in one day.

The overall cost of care was £1,220.04, of which formal carers accounted for 25% of the total cost, Marie Curie/MacMillan staff accounted for 21% and Rennie Grove 18%.

This patient had a number of visits with their GP, over the 18 days this accounted for 7 telephone calls or appointments, usually lasting up to 5 mins but with two longer 10 min and 15 mins visits.

## CONCLUDING REMARKS

- Diaries provided a picture of the range of services engaging with patients.
- Care at end of life is a complex interaction of multiple services with formal carers providing the backbone of the care.
- Care provided by Rennie Grove and the district nurses were major contributors both in terms of time and cost of the service.
- Care is supported by other services, who interact on a less time heavy basis and provide access to specific services such as occupational health, physiotherapy, etc.
- Assessing cost effectiveness is complicated by the range of cost analysis and measures used to determine the cost of hospital admissions.
- Costs suggest Rennie Grove provides a cost-effective delivery option in comparison to hospital in-patient care – this does not include Rennie Grove day costs or take into consideration the patient condition and complexity.

### References

<sup>1</sup> Curtis, L. and Burns, A. (2016) Unit Costs of Health and Social Care 2016. University of Kent, Canterbury: Personal Social Services Research Unit.  
 \*The figures are estimated costs based on current data. It is not known if those going into hospital called 999 and had an ambulance and therefore a higher and lower cost is provided. The cost of beds in a hospital will fluctuate depending on the ward and level of care required, this is based on one night stay.  
<sup>1</sup> Based on costs from the PSSRU (Curtis, L. and Burns, A., 2016)  
 +Based on costs provided by Rennie Grove

Figure 1: Diary of Health Care

Diary of Health Care	ID No.						
Week 1	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
	If received care how long for?						
GP							
District Nurse							
Specialist Nurse e.g. Falls							
Rennie Grove Nurse							
Marie Curie/ MacMillan							
Physiotherapist							
Occupational Therapist							
Social Services/ Carers							
Anyone else? Please say who:							
<b>What changed? Tick or state all that apply - If there has been no change, please leave blank</b>							
Admitted to hospital							
Admitted to hospice							
GP appointment							
Out Patient appointment							
Change in medicines							
Extra equipment Please say what:							
Extra support Please say by whom:							