

What is the impact and effectiveness of the 7 Day CNS service on palliative care patients and their families?

Review Methods

Search Strategy: A systematic search was conducted across a wide-ranging set of databases: ProQuest British Nursing Index, Ovid Medline, including In-Process & Other Non-Indexed Citations, Ovid Embase, Ovid Healthcare Management Information Consortium, Ebsco CINAHL and Cochrane Library.

The preliminary search strategy was developed on Ovid Medline using both text words and Medical subject headings from inception of the databases to February 2018, restricted to English language. The search strategy was modified to capture indexing systems of the other databases. (Search strategies available upon request).

To identify additional papers, electronic tables of content for the last two years were scanned for the following journals:

- BMJ Supportive Palliative Care Journal
- Cancer Nursing Practice Palliative Medicine
- European Journal of Palliative care
- International Journal of Palliative Nursing
- Palliative Medicine

Furthermore Google and Google Scholar was searched for any papers relating to CNS 7 day service models. Figure 1 represents the flow of information through the different phases of the review.

Inclusion:

7 day working CNS services in palliative care – National UK and other countries with similar Health Systems.

Exclusion: Studies set in a non-Organization for Economic Cooperation and Development (OECD) countries; Case series studies consisting of less than 25 patients; non-english language studies

Study selection/Quality Assessment/Data

Extraction: Study selection was based upon review of the abstract by two independent reviewers. The full text was then assessed independently using a pre-designed eligibility form according to inclusion criteria.

Data extraction of the eligible studies was carried out by one reviewer and checked by another. Due to the nature of the included studies formal quality assessment could not be carried out on all the papers as quality assessment checklists are not available for service evaluations or service delivery reports.

Context

Palliative care clinical nurse specialists (CNSs) across care settings work within a multi-professional specialist palliative care service to offer support and symptom control to patients with life-threatening illness, and their families. Traditionally this CNS service had been available during working hours 5 days a week. In 2004, NICE Guidance on supportive and palliative care in cancer recommended the extension of this service to 7 days a week, acknowledging the likely need for ongoing face to face patient reviews across weekends. However, the extent of that need was not defined, nor did it take account of the increasing non-cancer workload of these services. In subsequent years specialist teams across the UK have responded to the guidance by introducing 7 day - 09.00-17.00 - CNS working, acknowledging the significant challenges of addressing uncertain need, scarcity of resource and potential impact on other parts of service delivery.

The purpose of this rapid review is to examine how these challenges have been met, and whether there is evidence that particular models of 7 day CNS working best address the specific needs of patients and families within the context of overall care provision at weekends. The review has been requested as part of a local service evaluation to support and inform 7 day CNS working within Wales.

Key Findings

The majority of papers identified describe service evaluations. There is very limited evidence of prior assessment of need, nor of modelling around differences between weekday and weekend general health and social care provision, which might underpin service design. In essence most are a description of a modified extension of weekday services. There was evidence within the evaluations of significant changes to management of patients in the last 48 hours of life (Birks 2015, Halls 2013). Although none described the level of unmet need prior to service implementation, two papers described sequential evaluations demonstrating increased activity over time as services became embedded (Birks 2015, Rowlands 2012). One paper (Gallagher 2013) describes qualitative interviews with local district nurses prior to the set up of a community 7 day service. Key themes emerged relating to clarity of communication between DNs, GPs and CNS teams, clarity on role descriptions and defined criteria for new referrals, which were incorporated into the CNS role description at weekends. One other paper highlights the potential benefit of nurse independent prescribing in a community setting (Webb 2011), describing 65 prescribing episodes over a 6 month period. No papers were found which interrogated the differences in hospital and community general care provision which would impact on their weekend service model, nor on the opportunity costs to other parts of the weekday service. None of the papers addressed patient / carer perception of need. No papers identified specific service components which were seen as core, and service models were too similar to seek differences in provision and outcomes.

A. Reliability of evidence

The majority of studies were retrospective evaluations. There were no prospective studies. Although services were broadly similar, the duration of service provision, data collection and the nature of the data collected, varied. There was no prior recording of the degree of unmet need. A significant proportion of reported activity related to pre-planned evaluations by the new service rather than new referrals. This inherent bias makes any extrapolation of unmet need unreliable and needs to be interpreted with caution. The study by Gallagher describes an appropriate methodological approach to DN interviews and appropriate analysis. Webb's description of the role of nurse independent prescribing is of interest but is very limited in its description of impact, with no direct evidence of improvement in symptom control or service efficiency.

B. Consistency of evidence

All of the evaluations report a positive effect of 7 day CNS services but need to be interpreted with caution given their retrospective nature and the variability of data capture, as described above. There were no robust prospective studies to assess.

C. Relevance of evidence

All of the evaluations were undertaken in UK settings and both community and hospital settings were addressed.

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Evidence Implications:

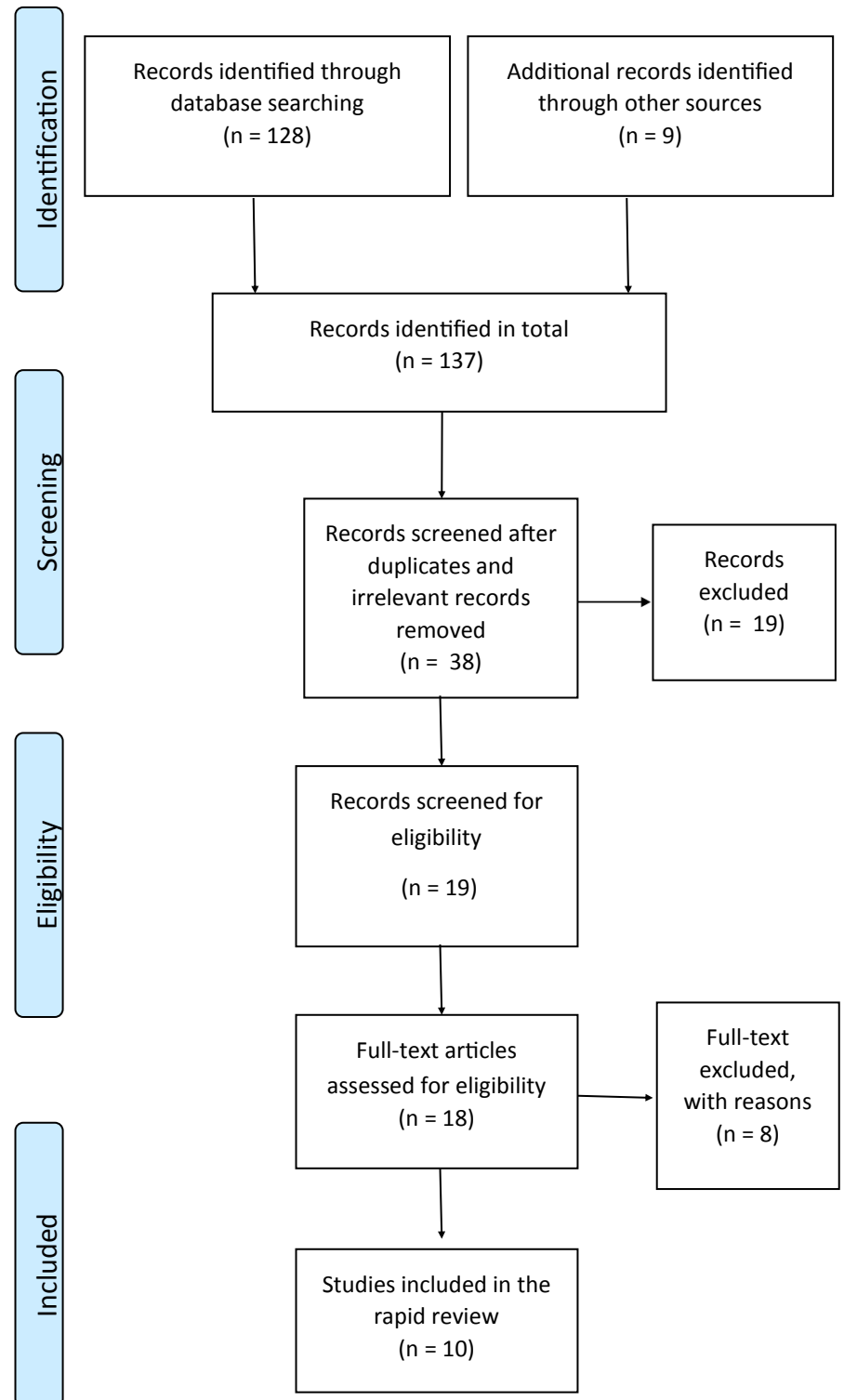
Clinical:

Robust evidence for effective models of CNS weekend working is lacking. The papers identified suggest that most services have responded to guidance on seven day working by modified extension of the existing 5 day service model, rather than in response to the unique care environment at weekends both in hospital and the community. Although there is evidence of increasing activity over time, there is a lack of published evidence on service evolution in response to ongoing service challenges and the components which work best. There is a need to better understand the experiences of CNS teams in order to inform service development; for studies to identify ongoing gaps in care provision which are particular to weekend working and which address key areas such as prescribing, access to equipment and robust strategies for communication/ accessing clinical information. There is also a need to better understand the opportunity costs of providing weekend CNS access to other parts of service delivery during the normal working week.

Policy:

Although seven day CNS working is established in large parts of the UK, there is a need to better understand the nature and extent of ongoing unmet need at weekends and to identify the core components of palliative care service provision which most efficiently meet those needs. This should take account of the differences in overall health and social care provision at weekends and aim to future proof models in the context of proposed changes to how health and social care is provided at weekends and out of hours across care settings. There is an imperative to explore innovative ways of working across generalist and specialist services to ensure consistent and equitable access to care and reliable, timely access to clinical information.

Flow Diagram:



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Table 1: Characteristics of Included papers

Attwood 2015	Study Setting & Design – Hospice, Bristol England. Service development (Conference abstract)
Objectives	To promote preferred place of care/death, avoid inappropriate hospital admission, promote appropriate hospice admission and provide continuity of care for hospice community patients.
Service aimed at	Hospice community patients.
CNS model	One CNS working 9-5 on bank holidays and weekends from a hospice community.
Types of activities provided	Handling urgent referrals from the hospice advice line for interventions associated with uncontrolled symptoms, rapid deterioration, emotional distress, and requests for hospice admission.
Proposed Outcomes	<ol style="list-style-type: none"> 1. Promote preferred place of care (PPC) or Promote preferred place of death (PPD) 2. Avoid inappropriate hospital admission 3. Promote appropriate hospice admission 4. Provide continuity of care for hospice community patients
Summary of findings	<p>52 urgent referrals were received for interventions associated with uncontrolled symptoms, rapid deterioration, emotional distress, and requests for hospital admission. 47/52 received the service of which 36/47 were visited at home.</p> <ol style="list-style-type: none"> 1. Most patients with complex needs attained preferred place of care, 27/32 (84%). 2. Hospital admission was appropriate for 5/5 (100%) who were assessed as requiring treatment from secondary care. 3. Hospice admission was achieved by 10/12 patients but two were not admitted due to lack of beds. Inappropriate hospice admission was avoided for a further seven patients where 5/7 were supported by this service to stay at home and 2/7 were assessed as requiring hospital admission. 4. Continuity of care for hospice community patients: CNSs agreed the aims of the referral were met for 43/44 (98%) of patients and families who received this service.
Summary/ conclusions	The results prove positive outcomes of this service in the management of complex symptoms, distress, deterioration and the promotion of PPC.

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Table 1: Characteristics of Included papers

Birks et al 2015	Study Setting & Design – Acute hospital, London, England; Service evaluation
Objectives	To evaluate a new ‘routine’ Saturday face to face palliative care service and determine whether it is being utilized appropriately .
Service aimed at	Palliative care patients: new referrals; patients requiring immediate changes in management; patients within the last 48 hours of life.
CNS model	The Saturday service was staffed by one on-site clinical nurse specialist with telephone support from a training grade doctor and a consultant.
Types of activities provided	<ol style="list-style-type: none"> 1. Face-to-face visit with patient 2. Family meeting 3. Discussion with HCP 4. Telephone call
Proposed Outcomes	<ol style="list-style-type: none"> 1. Recommendations to change medication 2. Recommendations to start/stop the LCP 3. Other recommendations such as hospice referral, discharge planning 4. Survival beyond 48 hours—to identify whether the patient would have died before review by the “routine” service
Summary of findings	<p>Most assessments resulted in a change of clinical management [Saturdays 190/336 (57%) vs weekdays 61/93 (66%)].</p> <p>There were significantly fewer assessments that resulted in a non-drug management recommendation on a Saturday (11% vs 34%, $p < 0.0001$). Since this category largely related to discharge planning or referral to other members of the MDT it is likely that this is because many of these other specialties were unavailable at the weekend.</p> <p>There were significantly fewer first assessments on Saturdays (12%) compared to weekdays (22%), suggesting some clinicians were still ‘saving’ referrals for Monday mornings, and maybe were unaware of the new out-of-hours arrangements.</p> <p>23/32 (72%) patients who were assessed on a Saturday and who died within 48 hours required a significant change in clinical management.</p> <p>Telephone advice, whether on a Saturday or a weekday, rarely resulted in a change in medication or other management.</p>
Summary/ conclusions	There were very few differences in the characteristics of the assessments undertaken at the weekend with those undertaken during the normal working week. The out of hours face to face visiting service appeared to have been used appropriately. 61% of assessments were either for new patients, patients requiring immediate changes in management or for patients within the last 48 hours of life. If these patients had not been assessed at the weekend then they would either have received sub-optimal symptom management until resumption of the weekly service or they would have died without ever receiving an SPC review.

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Table 1: Characteristics of Included papers

Carlebach et al 2010	Study Setting & Design – Community Primary Care Trust in North East England; Service evaluation
Objectives	To discover what impact an out-of-hours telephone service had on the perceived quality of care of palliative care patients and their carers.
Service aimed at	Palliative care patients in their own homes.
CNS model	An out of hours telephone contact service, with reactive and proactive facets, which backed up home visits by specialist palliative care nurses.
Types of activities provided	<ul style="list-style-type: none"> Reactive phone calls are from patients/carers/health professionals in need of attention (home visit) or advice. Callers can request a home visit from a specialist nurse to deliver treatment, change drug dosage, deliver pain relief etc. The proactive phone calls from the out-of-hours service to the patient occur at an agreed period such as every day, week or month.
Proposed Outcomes	<ul style="list-style-type: none"> To gain the views and opinions of service users, carers and health professionals.
Summary of findings	<ul style="list-style-type: none"> The study found that the service was well used by health professionals and by patients and carers. The largest number of telephone calls to the service was made by relatives, followed by patients and district nurses. The number of phone calls increased over time and this was mirrored by the increase in the number of referrals made to the service.
Summary/ conclusions	Both patients and carers valued and appreciated both proactive and reactive telephone calls. The use of a proactive telephone service model (as opposed to a reactive service) is strongly advocated.

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Gallagher 2013	Study Setting & Design – Community Primary Care Trust, Central Lancashire, England; Service evaluation.
Objectives	To alleviate pressures on carers of patients receiving palliative care in the community.
Service aimed at	Patients receiving palliative care in the community.
CNS model	One Clinical Nurse Specialist working weekends and bank holidays.
Types of activities provided	CNS to be on duty to provide advice and support, with the option of a face-to-face visit, if appropriate.
Proposed Outcomes	To alleviate strain and distress for patients and their carers. <ul style="list-style-type: none"> To reduce crisis interventions in the community To reduce inappropriate hospital admissions and delays in discharges from hospital To improve equity of access to quality end-of-life care
Summary of findings	CNS viewed this extension as: <ul style="list-style-type: none"> a positive and effective change in practice an improvement in the continuity of care an improvement in the communication between the wider multidisciplinary team, including hospital and hospice staff an improved effort in providing much needed support for generalist community service an option to support patients to be cared for in a place of their choice. preventing unnecessary hospital admissions
Summary/ conclusions	The use of the service has been reviewed and it has been found to be very beneficial in clinical practice, both with empirical and anecdotal evidence. Feedback indicates that extending the current service provision has provided continuity of care for patients and carers and reduced inappropriate hospital admissions and delays in discharges from hospital.

Groves et al 2015	Study Setting & Design – Hospital, community and care home settings. Southport England; Service evaluation (Conference abstract)
Objectives	To provide a team that works 7 days a week across hospital, community and care home settings to educate and support staff in caring for those patients recognised to be in the last year of life, especially those without specialist palliative care needs, and to proactively seek out and support their families.
Service aimed at	Staff caring for patients recognised to be in the last year of life.
CNS model	TRANSFORM team was created, which consisted of Clinical Lead, End of Life Facilitator, Six Steps Care Home Facilitators and new posts to embed AMBER care bundle and Advance Care Planning.
Types of activities provided	Consistent education was delivered by the team across all areas with provision of practical support Patients likely to be in the last year of life are identified on admission to hospital and support given to ensure a co-ordinated approach to care and smooth transition between settings, whilst respecting wishes and preferences.
Proposed Outcomes	To educate and support staff in caring for those patients recognised to be in the last year of life.
Summary of findings	<ul style="list-style-type: none"> An increase in numbers of staff receiving palliative and end of life care education A 30% increase in numbers of dying patients whose wishes to be at home are respected and met
Summary/ conclusions	A corporate team approach has enabled the development of a trusted and reliable service. The TRANSFORM team empowers and supports all health care professionals to confidently deliver high quality end of life care.

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Table 1: Characteristics of Included papers

Hall et al 2013	Study Setting & Design – Cancer Centre, Surrey, England; Service evaluation.																								
Objectives	To undertake an evaluation of the first year of activity of their own 7-day-per-week, nurse-led, face-to-face specialist palliative care service.																								
Service aimed at	Patients in a hospital with an integral cancer centre.																								
CNS model	A Specialist Palliative Care Team including six clinical nurse specialists (CNSs) provides a comprehensive hospital-based service to the patients of both the general hospital and the cancer centre. In September 2011, the service was extended to a 9-to-5, 7-days-a-week resident provision. On the weekends one CNS is present within the hospital, with telephone support from a consultant.																								
Types of activities provided	Face-to-face consultations and telephone support.																								
Proposed Outcomes	<ul style="list-style-type: none"> • Identification of patients needing to be triaged for weekend review • Identifying the number of new first assessments at weekends for significant symptom control issues • Identifying the number of new patients identified at weekends with malignant spinal cord compression (MSCC) • Identifying the number of patients being assessed at weekends on the Liverpool Care Pathway for the Dying Patient 																								
Summary of findings	<p>80% patients reviewed on weekends had an underlying cancer diagnosis and 20% had a non-malignant diagnosis or general frailty. Reasons for consultations are as follows:</p> <table border="1"> <thead> <tr> <th></th> <th>Patients</th> <th>New Patients</th> </tr> </thead> <tbody> <tr> <td>• pain</td> <td>46%</td> <td>31%</td> </tr> <tr> <td>• other symptoms</td> <td>27.5%</td> <td>26%</td> </tr> <tr> <td>• patient on the LCP</td> <td>17%</td> <td>17%</td> </tr> <tr> <td>• discharge planning</td> <td>4%</td> <td>2%</td> </tr> <tr> <td>• deterioration in condition</td> <td>3%</td> <td>6%</td> </tr> <tr> <td>• psychological support</td> <td>2%</td> <td>5%</td> </tr> <tr> <td>• MSCC</td> <td>0.5%</td> <td>3%</td> </tr> </tbody> </table> <ul style="list-style-type: none"> • In 60% of patient cases the CNSs identified another problem during the consultation, e.g. uncontrolled pain (8% of consultations) or uncontrolled other symptom (37%). • 23% of new patients died over the weekend or in the early hours of the Monday morning before the start of the normal working week. 		Patients	New Patients	• pain	46%	31%	• other symptoms	27.5%	26%	• patient on the LCP	17%	17%	• discharge planning	4%	2%	• deterioration in condition	3%	6%	• psychological support	2%	5%	• MSCC	0.5%	3%
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Summary/ conclusions	<p>SPCT weekend working:</p> <ul style="list-style-type: none"> • Ensures continuity of care • Leads to more rapid control of symptoms • Leads to more rapid discharge of patients (and more patients achieving their preferred place of care/death) • Reduces the workload on Mondays and Fridays • Several patients might not have survived if they were not reviewed on the weekend 																								

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Table 1: Characteristics of Included papers

Miller et al 2015	Study Setting & Design – Hospice settings, Leeds, England; Service evaluation (Conference abstract)
Objectives	To develop a model where specialist palliative care clinical nurse specialists provide 7 days of care in community and
Service aimed at	Patients in community and hospice settings.
CNS model	A CNS model where specialist palliative care CNSs provide 7 days of care in community and hospital settings. Two Hospices in the city worked in partnership with the acute Hospital to set up the community service.
Types of activities provided	Not reported apart from to provide support to patients, families and professionals.
Proposed Outcomes	<ul style="list-style-type: none"> To allow patients to be cared for in their preferred place of care To avoid hospital admission
Summary of findings	59 people used the service between Oct–Dec 2014 and 98% respondents said the service was useful in providing: <ul style="list-style-type: none"> Emotional support Family/carer support Pain management/medical advice Choice and involvement Gateway to other services
Summary/ conclusions	Following on from the success of the service, a CNS will provide a 7 day service within the Hospital and all three CNSs will continue to work together with primary care to provide comprehensive EoLC to the people of the city.

Milton et al 2012	Study Setting & Design – Urban Hospice, Scotland. Service development.
Objectives	To examine the need for, and use of, an enhanced 7-day community CNS service.
Service aimed at	Patients with palliative care needs in an urban community.
CNS model	One member on duty at weekends and public holidays, from 9am to 5pm to provide telephone support and where necessary a home visit.
Types of activities provided	<ul style="list-style-type: none"> Planned urgent care for those patients with anticipated need Unplanned urgent care on a reactive basis for a patient or family member who contacted the team themselves. Routine work e.g. first assessment visits or follow-up contacts with patients on the nurse's existing caseload. First assessment visit could be undertaken for any new patient whose referral was identified as being urgent
Proposed Outcomes	<ul style="list-style-type: none"> Provide support and advice during the OOH period To reduce unwanted hospital admissions To arrange an admission to the hospice
Summary of findings	<ul style="list-style-type: none"> Over the 6-month period there were total of 132 telephone contacts. Of these 47 (36%) were unplanned and majority of the calls (32, 68%) were made by a family member. A total of 35 home visits were made following telephone contact. Two emergency admissions were organised: 1 to the hospice; 1 to the local acute hospital. Following the weekend contact, a further five admissions to the hospice were arranged. The most common reasons for unplanned contact with the CNS at the weekend were (i) need for symptom management support and advice, and (ii) need for help when the patient's condition changed unexpectedly.
Summary/ conclusions	The pilot proved the feasibility and value of the 7-day CNS service and supported the continuation of the intervention.

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Rowlands et al 2012	Study Setting & Design – Cancer Centre with 48 beds, South East Wales; Service evaluation (Conference abstract)
Objectives	To describe the background, impetus, implementation, challenges and initial evaluation of introducing seven-day CNS working.
Service aimed at	In-patients at a Cancer Centre (3 inpatient wards with a total of 48 beds), and out-patients at a day treatment unit (closed on Sundays).
CNS model	Four part-time CNSs (two whole-time equivalent (WTE)), allowing a one in four 9-5 out of hours rota. For out of hours, where only one CNS would be available, a system of prioritisation was introduced to ensure patients with the most urgent or complex needs were reviewed.
Types of activities provided	Symptom control, pain control and psychological support. Chemotherapy advice calls are made via a pager; and radiotherapy treatment is provided for urgent cases.
Proposed Outcomes	Evaluation and comparison of the out of hours service during the initial 12 month period of operation (Jan 2010-Jan2011) and most recent 12 month period (Apr 2011-Apr 2012), in terms of: <ul style="list-style-type: none"> • Specialist assessment of patients receiving palliative care • Timely symptom control • Prevention of side effects and toxicity
Summary of findings	<ul style="list-style-type: none"> • During the first 12 months of the 7 day service the number of weekend contacts fluctuated monthly, with increased use after the first three months. This was possibly due to greater awareness of the service. During the most recent 12 months there was consistent use of the out of hours service. • Most contacts were planned, suggesting that the team recognised the benefit of weekend review. An average of 17 % contacts a month were unplanned. Over the initial 12-month period, 26% of the unplanned contacts were new patient referrals received at the weekend; these patients would previously have waited until Monday to be assessed by a specialist palliative care team member. Most patients were either existing inpatients with an exacerbation of symptoms or emergency admissions. • 10% (n=4) of new patients were in phase four (terminal) of their illness and died before Monday. • There were 3 main reasons for contact: symptom control; pain control; psychological support. • CNSs were not asked to undertake any “ward nursing” tasks that they felt were inappropriate. • There was a significant increase in new referrals/first assessments at weekends: 96 of 938 patients received a first assessment at the weekend (10.2 %) in the most recent 12 months, compared with 39 of 852 contacts in the initial 12 months (4.6 %).
Summary/ conclusions	Evaluation of two sets of data has allowed the team to measure the success of implementation and the ongoing use of the seven-day service, and demonstrates that it has been successfully introduced. The steady numbers of contacts suggest a valuable addition to the weekday ‘in hours’ service without compromising the pre-existing five day service. Despite concerns at the outset and challenges in implementation, this small team of CNSs has demonstrated that it is possible to meet the guidance for seven-day working. Positive feedback from staff and patients and steady use of the service have confirmed the NICE (2004) guidance is warranted and should be implemented throughout the UK.

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Table 1: Characteristics of Included papers

Webb et al 2011	Study Setting & Design – St Richards Hospice, South Worcestershire, UK; Service evaluation
Objectives	To evaluate the impact of a Nurse Independent Prescribing (NIP) initiative in a weekend clinical nurse specialist (CNS) service.
Service aimed at	Palliative care patients in the community.
CNS model	A single out of hours NIP practitioner working from the hospice who can make urgent home visits for face to face assessments. This supplements a well-established 24/7 on-call telephone advice service, which has been in operation for several years.
Types of activities provided	Urgent home visits and prescribing medication.
Proposed Outcomes	Determination of: <ul style="list-style-type: none"> GP level of satisfaction of weekend CNS prescribing service (although survey only captured satisfaction regarding weekend CNS service in general) Number and type of prescriptions made by weekend CNS
Summary of findings	<ul style="list-style-type: none"> GP survey results showed a positive response to the weekend CNS service A total of 130 items were prescribed by the NIP in initial 6-month period, which took place over 65 episodes Prescribing of medications is not a burdensome addition to the CNS. The service is neither over-used nor abused, with an average of only 2-3 prescribing episodes over any given weekend. It is likely to be preventing inappropriate admission to inpatient establishments and thereby facilitating enhanced patient choice in respect of preferred place of care
Summary/ conclusions	<p>The authors claim that GP feedback supports the argument that the NIP qualification can be a very valuable tool for the palliative care CNS to possess and that it can help to secure more effective and timely symptom control in the OOH period for those patients with complex and rapidly-changing conditions who choose to remain at home for end-of-life care. However, there were some limitations to the study:</p> <ul style="list-style-type: none"> Small number of GPs participated and feedback was based on a service provided by just one NIP. To be eligible for participation in the survey the CNS must have prescribed medication in the OOH period. However, the wording of the survey questions was ambiguous in terms of which aspect of the service feedback was being sought for. Therefore, neither the general weekend CNS service nor the NIP were well evaluated.

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Included Studies:

1. Attwood E. P-193 Hospice cns seven-day service: 6/12 pilot review. *BMJ Supportive & Palliative Care* 2017;7 (Suppl 2):A79-A79. doi: 10.1136/bmjspcare-2017-hospice.218
2. Birks T, Krikos D, McGowan C, Stone P. Is there a need for weekend face-to-face inpatient assessments by hospital specialist palliative care services? Evaluation of an out-of-hours service. *Palliat Med* 2011;25(3):278-83
3. Carlebach S, Shucksmith J. A review of an out-of-hours telephone support service for palliative care patients and their families. *Int J Palliat Nurs* 2010;16(9):445-50.
4. Gallagher J. The development of a 7-day community specialist palliative care service. *International Journal of Palliative Nursing* 2013;19(12):612-18.
5. Groves K, Godfrey C, Owen H, et al. P-152 Any time, any place, anywhere: a 7 day a week responsive palliative care transform. *BMJ Supportive & Palliative Care* 2015;5(Suppl 3):A54-A54. doi: 10.1136/bmjspcare-2015-001026.152
6. Hall S, Davies A. An evaluation of the activity of a 7-day, nurse-led specialist palliative care service in an acute district general hospital. *International journal of palliative nursing* 2013;19(3):148-50. doi: 10.12968/ijpn.2013.19.3.148
7. Miller C, Shaw V, Pallister JM. P-29 Introducing and evaluating a community 7 day a week clinical nurse specialist service across a large city. *BMJ Supportive & Palliative Care* 2015;5(Suppl 3):A10-A10. doi: 10.1136/bmjspcare-2015-001026.29
8. Milton L, Grady A, Cook A. Experiences implementing a 6-month pilot of a 7-day community CNS service in an urban hospice in Scotland. *International Journal of Palliative Nursing* 2012;18(8):407-12.
9. Rowlands J, Pease N, Finlay I, et al. How an extended palliative care service has benefited patients. *Cancer Nursing Practice* 2012;11(7):24-29.
10. Webb WA, Gibson V. Evaluating the impact of nurse independent prescribing in a weekend clinical nurse specialist service. *Int J Palliat Nurs* 2011;17(11):537-43.

Excluded Studies:

A number of studies have been excluded due to various reasons including the following:
Lack of data to address the question

Additional materials available upon request:

- Critical appraisal / data extraction forms
- Search strategies
- List of excluded studies
- Logic model

This report should be cited as follows:

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