

Using time diaries to contribute to economic evaluation of criminal justice interventions

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Introduction

The Unit Costs in Criminal Justice (UCCJ) project was commissioned by the Ministry of Justice. The project aimed to generate new information on the cost of offender management activities that could be used, in combination with evidence on the impact of interventions on re-offending, to determine cost-effectiveness and value for money. This article describes a prospective method of collecting detailed information about professional input into the case management of young offenders as part of the UCCJ.

Why focus on staff activity

There are two approaches to estimating costs. The bottom-up approach identifies all the resources associated with an activity and adds them up, whilst the top-down approach uses aggregate often budgetary data and divides it by the number of units produced. The UCCJ adopted the bottom-up approach wherever possible and a key aspect of this is information about the time use of staff and accurate recording of the type of activity being measured. If time spent on a particular case or individual is monitored, unit cost estimates should reflect that time also needs to be spent on non-specific case activities such as team meetings and general administration. If face-to-contacts are recorded it is important to ensure that, in addition, allowance is made for other case-related activities such as liaison with other agencies and writing up case notes.

One of the Ministry of Justice offender cohort studies (the Juvenile Cohort Study) tracked a sample of young people subject to selected community sentences managed by local authority Youth Offending Teams (YOTs). The YOT identifies the needs of young offenders and investigates the specific problems that cause them to offend, to try to prevent them from committing crimes. Information on the activities of YOT staff became increasingly important as an initial investigation of working practices identified that the majority of interventions were delivered by YOT staff themselves. Therefore, principal research input and priority was given to costing YOT practitioner time. Information recorded on case management systems would only have provided a partial picture of activity and time not directly attributable to cases would not have been captured. This led to the development of a time diary data collection exercise for this group of staff.

The time diary

The aim of the time diary exercise was to collect information about the activity of staff working directly with young offenders. A time diary data collection sheet was devised using the *National Standards for Youth Justice Services* (Youth Justice Board, 2004) as a starting point. These standards identified areas of work including community sentences, the YOT member responsible for particular activities and also stipulated the frequency of contact required for young people within the youth justice system. A small pilot exercise was conducted using draft documentation and feedback requested from the staff who participated.

The final version of the time diary is shown at the end of this article. There were two A4 pages to collect information on: basic demographics; information about staff role and experience; and total hours spent on different activities over a one week period. There were seven areas of work identified and two additional questions about the number of assessments completed during the time diary week and involvement with group work.

For most areas of work the number of hours spent was recorded against five categories of activity:

- Contact with young people – office-based face-to-face meetings, home-based face-to-face meetings, telephone contact
- Contact with parents/carers without the young person – face-to-face meetings and telephone contact
- Liaison with others – referrals to other agencies, contacts with other agencies
- Administration – preparation of reports, letters, updating the case management system
- Travel

Participating staff were asked to record and submit their total hours (Monday to Sunday inclusive, 24 hours per day) worked on behalf of the YOT for one allocated week. The aim was to have all participating YOTs conduct the exercise during the same week but there was some flexibility if a valid reason was given for selecting an alternative. They were to include all hours worked even if officially on annual leave and record all work whether on or off site. Partially completed sheets due to sickness or annual leave were still returned but a note was made of this in the 'any activities not covered above' section of the time diary sheet. Staff were asked to round up or down to the nearest half an hour when reporting the weekly totals and were informed that there were likely to be categories of activity that did not apply to them.

A member of each participating YOT was identified as a local contact and invited to attend a briefing meeting about the time diary exercise (six meetings were arranged in five locations across England and Wales). If the YOT was a multi-site service it was recommended that a contact was nominated for each local office. A time diary pack was assembled for each staff member that included: a briefing note about the exercise with information on the benefits for individual staff of participating in the exercise; the time diary sheet; guidance notes for completion; an activity allocation aide (to assist where staff may be unsure how to categorise activities); and a postage paid envelope for return. Paper copies were sent to each YOT office for the local contact to distribute and electronic copies were available (return by email was offered but this meant relinquishing anonymity). The research team were available to answer any queries by telephone and email during the allocated week and posters were provided to remind staff about the exercise and who to contact.

Costing activities

The data from the time diary sheets were entered onto SPSS and ratio of direct to indirect time calculated for a Case Manager/YOT practitioner and other types of YOT worker (Specialist Support Worker and Project Worker). The final unit costs required for each category of worker were: cost per hour; cost per hour case-related work; and cost per hour face-to-face contact.

Annual costs of YOT practitioners were based on the *Local Government Earnings Survey, England and Wales 2008* (Local Government Association Analysis and Research, 2009) salary information including employers National Insurance and superannuation contributions and overheads. The cost per hour for a YOT staff member was estimated as follows:

Salary + on-costs + overheads/total hours working time per year (excluding annual leave, sickness and training/study leave)

To arrive at a multiplier to use with the basic hourly cost, total hours equal to 100 per cent were divided by the percentage of time spent on case-related work and on face-to-face contact by staff. Activity related to cases included: face-to-face contact with young people; contact with parents/carers; liaison with other agencies; administration; and travel.

The example below does not use actual data from the exercise but is for illustrative purposes only.

Case-related work $100/70 = 1.43$

$1.43 \times \text{cost per hour} = \text{cost per hour of case-related work}$

Face-to-face work $100/35 = 2.86$

$2.86 \times \text{cost per hour} = \text{cost per hour of face-to-face work}$

Lessons learned

There are limitations to the use of a time diary as it still relies on self-report by practitioners who may over or under estimate the time spent on different activities. However, it was considered the most appropriate method to collect prospective information, particularly as using contact information from the case management systems would only provide a partial picture. The data above suggests total costs would have been underestimated by quite a large margin. Other studies have used alternative methods but largely this has been to gather retrospective information through for example activity forms, interviews, meetings, workshops and structured questionnaires (see, for example, Ward et al, 2004). The main drawback to these methods is that they rely on recall and therefore may result in a reduction in accuracy.

It could be suggested that a one week period is not enough to capture all staff activity. The rationale for selecting one week was that if a large enough sample returned time diary sheets this should ensure that at a national level estimates were as representative as possible whilst at the same time not over-burdening staff. Keeping the amount of information requested to a minimum was of primary importance in encouraging participation.

Conclusion

Prospective recording of the activities of youth offending team staff was feasible even at a time of major change within the youth justice system (particularly the introduction of a new youth community sentencing structure). The level of detail obtained through the time diary would not have been achieved using case management systems alone. Although the time diary devised was specific to this particular group of professionals the approach could be adapted for other staff groups and provides another option for collecting activity information in a neglected and sensitive area of research.

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Youth Offending Team (YOT) Time Diary Sheet

Unit Costs in Criminal Justice

All information provided will be entirely confidential. No individual will be identified separately for any purpose during this project.

About you

Name of YOT					
Sex	male <input type="checkbox"/>	female <input type="checkbox"/>			
Age group	20-29 <input type="checkbox"/>	30-39 <input type="checkbox"/>	40-49 <input type="checkbox"/>	50-59 <input type="checkbox"/>	60-69 <input type="checkbox"/>

Your role and experience

Job title		
How long have you been in your current post?	years	months
How long have you worked in youth justice?	years	months
What are your contracted hours per week?	Hours	
Please indicate your contract type	permanent <input type="checkbox"/> fixed-term <input type="checkbox"/> seconded <input type="checkbox"/> agency <input type="checkbox"/>	
Please indicate your qualifications and experience (tick more than one if necessary)	Social work <input type="checkbox"/> Nursing <input type="checkbox"/> Teaching <input type="checkbox"/> Youth work <input type="checkbox"/> Probation <input type="checkbox"/> Professional Certificate in Effective Practice (Youth Justice) <input type="checkbox"/> Foundation Degree <input type="checkbox"/> Youth Justice Gateway Programme <input type="checkbox"/> Other relevant qualifications or experience (please specify) <input type="checkbox"/>	
How many young people are you the primary case manager for?		
Please indicate the number of these cases which fall into each category	Community orders	
	Final Warnings	
	Long-term sentences (in custody)	
	Detention & Training Order (in custody)	
	ISSP	
	Other (please specify):	

Activity		
Time diary period	From ___ / ___ / ___ to ___ / ___ / ___	
Court ordered intervention work	Contact with young people	
	Contact with parents/carers without young person	
	Liaison with others	
	Administration	
	Travel	
Final Warnings	Contact with young people	
	Contact with parents/carers without young person	
	Liaison with others	
Prevention work (not Final Warnings)	Contact with young people	
	Contact with parents/carers without young person	
	Liaison with others	
	Administration	
	Travel	
Remand management	Contact with young people	
	Contact with parents/carers without young person	
	Liaison with others	
	Administration	
	Travel	
Work in courts (pre-sentence)		
Restorative justice (not part of an order)	Contact with young people	
	Contact with parents/carers without young person	
	Liaison with others	
	Administration	
	Travel	
Other activity not related to specific cases	Contact with young people	
	Contact with parents/carers without young person	
	Liaison with others	
	Administration	
	Travel	
Supervision by line manager & YOT staff meetings		
Any activities not covered above (please specify):		
	TOTAL HOURS FOR THE WEEK	
How many ASSETS have you undertaken during the time diary period?		
Do you run group-based interventions (please circle correct answer)?		Yes/No