# Using Electronic Monitoring (GPS Tracking) to Increase Leave and Improve Leave Safety –potential for PICU and low security

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# Background

- Use of the electronic devices to monitor the whereabouts or behaviour of individuals is generally referred to in literature on the subject as 'Electronic Monitoring' (EM)
- EM has been in use for almost three decades in various settings and its use is on the increase.
- Various technologies have been used, initially Radio Frequency (RF) devices, more recently GPS-based systems have become the norm

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# Background

- Much of the literature on EM is related to its enforced use in offending populations
- A 2005 meta-analysis[1] concluded that applications of EM as a tool for reducing crime were 'not supported by existing data' (but no GPS data at that time)
- Recently, some more promising outcomes have been reported (note GPS study 2010[2])

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# Background

- In 2006, a well-controlled, large-scale evaluation[3] found that violent offenders on EM were

  - 91.2 percent less likely to abscond than their non-monitored counterparts and
  - 94.7 percent less likely to commit a new offence

- In terms of cost effectiveness, recent US study[4] estimated that EM could yield a social value in the annual reduction in crime of $481.1 billion, compared with an estimated cost of $37.9 billion for implementation.

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# Background

- Use in forensic psychiatry setting is novel
- EM was introduced in SLaM in February 2010 following a series of high-profile incidents, one of which had a tragic outcome[5]
- Episodes of leave violation also highly costly to both Trust and the patient
- Decision gave rise to considerable debate re: ethical concerns[6]

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# Background

- GPS-based 'tracking' device ('Buddi') was used for patients going on leave
- For MoJ approved leave, the device was introduced on a voluntary basis and no patient was forced to wear the device without consent*
- Was envisioned that both safety/public protection and patient recovery could be addressed

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# Background

- Safety/public protection: Staff made immediately aware should any patient violate any ‘exclusion zones’ agreed in the terms of their leave or if the patient was late to return from leave
- Recovery: proposed that the amount of unescorted leave may be increased.

  - Also hoped that relational security between clinicians and patients could be improved.

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# GPS ‘Tracking’ Device- Secure Version


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# Exclusion Zone

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# Concerns Addressed

- Legal and Ethical:
  - working group established and legal advice sought
  - focus groups also set up
  - was determined that use of EM in this setting *was* legal
  - ethical issues an ongoing point of discussion

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# Concerns Addressed

- Practical:
- Staff training provided
- Use of device explained to patients on an individual basis



# Concerns Addressed

- Effectiveness:

  - Research Group established to study various aspects

    effect on leave and leave violation

    cost effectiveness

    qualitative analysis

**Reducing leave violation and increasing unescorted leave using Electronic Monitoring in a medium secure forensic psychiatry service**

John Tully, Dave Hearn, Paula Murphy, Thomas Fahy

(pending submission)

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# Methods

- *For Leave Violation*: 'Datix' records checked for episodes of absconding and failure to return in year before EM and each of two years since
- *For Leave episodes*: ward records of leave checked for a 3-month period before EM introduced and a 3-month period after introduction*

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# Results

Leave Violation

| Period | Failure to Return | Abscond | Total |
|---|---|---|---|
| **April 1st 2009-March 31st 2010 (PRE-EM)** | **10** | **11** | **21** |
| April 1st 2010-March 31st 2011 | 13 | 3 | 16 **(p= 0.5)** |
| April 1st 2011-Date | 5 | 0 | 5* **(p= 0.0014)** |

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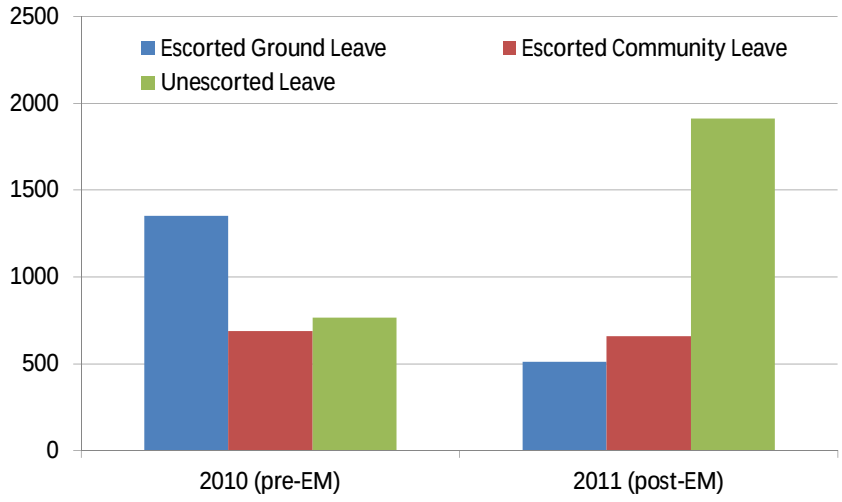
# Results

Leave Episodes

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# Other Studies

- Cost Effectiveness
- Qualitative Analysis

  - both currently underway

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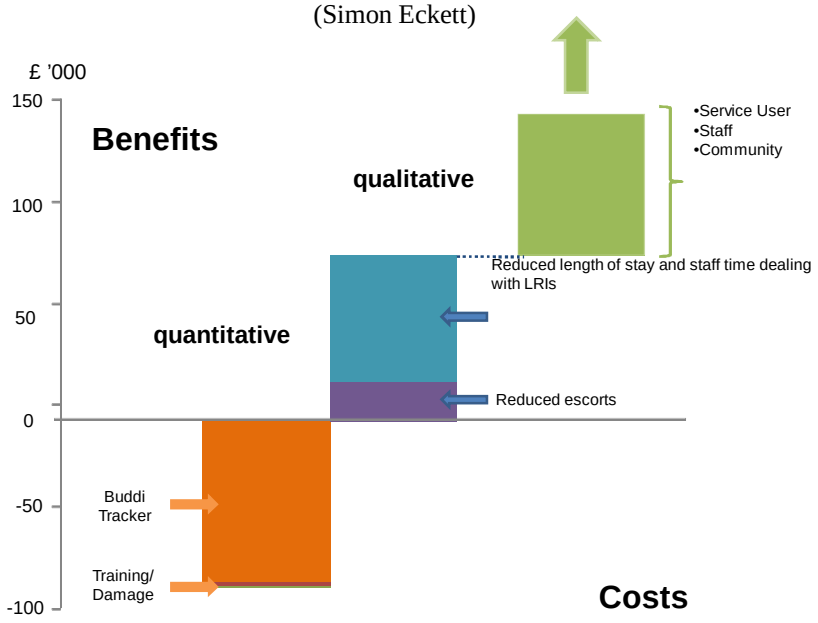
# Provisional Economic Analysis

(Simon Eckett)

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## Potential Applications for PICU and Low Secure Services

- **Physical security** for transfer to courts, transfer to other units and medical appointments

  - latter may be particularly relevant in PICUs as patients in acute units frequently need organic work-up

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## Potential Applications for PICU and Low Secure Services

- EM may be useful as a tool for *improving* **relational security**

  - provisional feedback from some users suggested it was a way of proving to treating team they were doing what they said they were doing

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## Potential Applications for PICU and Low Secure Services

- Key use may be as step on **pathway** to discharge through earlier and increased leave
- Potential to speed up discharge to acute general wards/longer-stay rehabilitation wards where main concerns are of risk of disengagement or violence towards others

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## Patterns of Use in MSU

| Ward Type | Beds | Use of EM for Escorted Leave (%) | Use of EM for Unescorted (%) |
|---|---|---|---|
| *Acute* | 14 | 77 | 43 |
| *Subacute* | 15 | 82 | 64 |
| *Subacute* | 12 | 92 | 86 |
| ***Personality Disorder*** | **12** | **74** | **80** |
| *Female (mixed)* | 15 | 49 | 9 |
| *Rehabilitation* | 15 | 25 | 14 |

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## Potential Applications for PICU and Low Secure Services

- In Low Secure services, EM may be most useful for those with **ongoing personality/behavioural difficulties**

  - ie where risk of leave violation is not as clearly related to acute illness

  - may allow for provision of adequate leave while providing assurance of continued engagement in interventions such as offence-related work or psychotherapy, which may in turn improve attitudes to leave over time

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## Potential Applications for PICU and Low Secure Services

- Other services currently using EM:

  - Behavioural Disorders unit (Asperger's/High Functioning Autism)- used in select patients

  - Long-term risk in offenders with dementia

  - Other PICUs are investigating its use

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# PICU and LS Standards and Guidelines- how EM might help

- National Minimum Standards for General Adult Services in Psychiatric Intensive Care Units (PICU) and Low Secure Environments
  (Dept of Health, 2002)
- Accreditation for Inpatient Mental Health Services (AIMS) Standards for Psychiatric Intensive Care Units (PICUs)
  (CCQI/Royal College of Psychiatrists 2010)
- **Psychiatric Intensive Care**
  Good practice commissioning guide, consultation draft
  (Dept of Health, January 2012)

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# PICU and LS Standards and Guidelines- how EM might help

*Therapeutics*

- 'An effective PICU design will have given the provision of therapeutic activity an equal status to safety and security.'
- 'Recreational activities as therapeutic diversional interventions including engaging in creative work, hobbies, special interests.'
- 'Patients should have access to and space for regular exercise with appropriate supervision.'

(National Minimum Standards, Dept of Health 2002)

## PICU and LS Standards and Guidelines- how EM might help

*Communication*

- 'If a patient is identified as presenting with a risk of absconding, then a contingency plan is described within the crisis plan, which includes instructions for alerting carers and any other person who may be at risk'
- 'Where appropriate, in the case of criminal justice engagement, policies include: victim issues; change of risk in the community; contact with the police; communication with MAPPA; communication with MoJ'

(AIMS-PICU)

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## PICU and LS Standards and Guidelines- how EM might help

*Staffing*

- 'Staffing capacity should be sufficient to deliver the care and treatment model and maintain a safe environment at all times.
- 'Provision of appropriate escorts given the nature, purpose and location of leave'

(**Psychiatric Intensive Care**
Good practice commissioning guide)

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# Conclusions

- EM has been shown to be effective in the criminal justice system and more recently, a Medium Secure Forensic Psychiatry setting
- There are several potential benefits for use of EM in PICU/Low Secure settings
- These must be weighed against ethical considerations and cost effectiveness concerns



# Conclusions

- EM can/should be seen as:

  - a **novel, innovative measure** for use in **some individuals** in keeping with use of other technological interventions in modern psychiatry

  - a risk management **tool** which as part of a **personalised** and comprehensive risk management plan, promoting earlier access to and increased amounts of leave

  - targeted at improving both risk management **AND** recovery

# Conclusions

- EM should **NOT** be seen as:

- A panacea or substitute for good clinical risk management

- A measure imposed liberally on any patient, particularly without consent ('nothing about me without me')



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# Contact

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# Questions

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# Thank you

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