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**Assessing the Probability of Patients Reoffending After
Discharge from Secure Forensic Mental Health Services**
An Inductive Prevention Paradox

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Abstract

Citizens of developed societies are deeply troubled by those who commit 'irrational' crimes against the person. Reoffending after discharge from secure incarceration for such transgressions triggers particularly intense angst which is amplified by media and political scrutiny. However, forensic mental health service providers who have to make critical discharge decisions are required to predict the future behaviour of patients living in an environment designed to prevent reoffending, precisely the risk which needs to be assessed. It will be argued that the 'inductive prevention paradox' arises because prophylactic measures erase evidence about what might happen if such measures were to be lifted. The paper will explore this problem in relation to data drawn from two qualitative studies undertaken in UK medium secure units, one providing forensic mental health, and the other forensic learning disability services. The data analysis will focus on how patients and staff respond to the inductive prevention paradox with respect to a highly sensitive issue. The wider applicability of this framework to health risk management will be considered in the Discussion.

INTRODUCTION

Mulvey had put on a penitent face and given a series of small humble nods. He knew the Governor and the Visiting Committee were watching from the gallery and he wanted to make an enduring impression. (O'Connor, 2006, p. 196)

Mulvey, the fictional nineteenth century prisoner mentioned in the opening citation, establishes trustee status in order to engineer his escape from a harsh 19th century Benthamite prison, brutally murdering a guard in the process. The present paper will explore an analogous issue to that raised in the novel quoted above, that of assessing the risk of serious reoffending by patients released from secure forensic mental health services. It will be argued that staff charged with managing this risk face the 'inductive prevention paradox'ⁱ (Heyman *et al.*, 2010, p. 103-104). The paradox arises when prophylaxis, in this case through confinement within secure accommodation, cuts off evidence about what might happen if such measures were withdrawn. The probability of a patient reoffending in the outside world has to be estimated from observations made in an environment designed precisely to prevent such events from occurring.

Although the paper focuses on the specific context of risk management in medium and low secure forensic mental health services, the inductive prevention paradox arises whenever prophylactic measures are implemented within a risk or non-risk interpretive framework. If the Aztecs did carry out human sacrifices in order to appease the Sun God (Meyer, Sherman and Deeds, 2003), they would have been trapped by the same paradox. From their perspective, the sun rising was a **contingency** (Heyman, 2012) which might or might not occur, depending on divine decision-making. The implementation of human sacrifices would have prevented the Aztecs from observing what would have happened in their absence. Similarly, the question of whether a detained forensic mental health service user would reoffend if released cannot be definitively answered through direct observation except by accepting this risk.

The wider implications of the inductive prevention paradox will be touched on in the Discussion. The data analysis presented in the Findings section will be concerned with discharge of offenders from secure mental health services as an example of the inductive prevention paradox, with particular reference to how staff and patients responded to this issue. The remainder of the Introduction will address three relevant background issues: firstly, the societal attitudes which render re-offending by discharged offenders from mental health services as unacceptable risk; secondly, the UK history of medium/low-secure forensic mental health services as a response to the inductive prevention paradox seen to arise from the structure of more remote high security institutions; and, finally, attempts to 'beat the trap' arising from the inductive prevention paradox through the use of psychometric actuarial methods. It will be argued that neither moving

closed institutions closer to 'the community' nor resorting to psychometrics offers a plausible way out of this paradox. However, staff who have to take decisions despite such epistemological limitations face public ignominy if a recently discharged patient reoffends. This analysis sets the scene for considering how staff and patients attempt to manage this conundrum.

Societal attitudes to the risk of reoffending by forensic mental health patients

Risk management for individuals who commit serious offences against the person attracts strong media and political attention in the UK and elsewhere despite the rarity of such crimes. Concern becomes especially heated when the offence is perceived as 'dirty', as in the case of sexual assault, particularly on children, or as driven by an 'irrational' motive, i.e. a belief system which the prevailing culture views as delusory. In contrast, more probable causes of death and injury, for example those caused by traffic accidents, and even 'rational' offences against the person such as assaults inflicted during bank robberies, attract much less societal angst. Douglas (1966/2002) explained the vehemence of the former reaction as a response to social structural weaknesses such as unclear internal lines or external boundaries. She argued that 'primitive' cultures, i.e. small-scale traditional societies which have not developed a high level of role differentiation, use belief systems invoking pollution and taboo to buttress the weak points of their relatively fragile social order. She also maintained that societies with more complex and robust organisation may employ similar devices when a challenge is sufficiently powerful to threaten their stronger social structure.

The release of offenders who have committed irrational or dirty crimes and subsequently reoffend exponentially intensifies the already powerful threat to the social order arising from the identification of irrational and therefore unpredictable assaults. The perpetrator has not only exposed the dangerously erratic nature of human behaviour. In addition, society has registered such disturbing transgressions, but has failed to prevent them from reoccurring. The present paper is not primarily concerned with explaining societal attitudes to 'irrational' or 'dirty' offences *per se*, but rather with the implications of their intense unacceptability for risk assessment and management. The separation of the mentally disordered offender from modern society is now accounted for in terms of a utilitarian risk management framework even though powerful resonances of cultural pollution remain. At the same time, the difficulty of predicting individual behaviour make avoidance of re-offending difficult or impossible to achieve.

A brief history of UK medium secure forensic mental health services

Ironically, UK medium-secure forensic mental health units (MSUs) were originally conceived of with just the issue of realistic assessment in mind. In the terminology developed above, the main aim underpinning the design of MSUs

was tackling the inductive prevention paradox. The idea originated in the work of The Butler Committee (Home Office and Department of Health and Social Security, 1975). Their report reviewed the discharge of mentally disordered offenders in the aftermath of the notorious case of Graham Young who had been confined to a remotely located high security special hospital after poisoning members of his family. Young was released despite having overtly developed his poisoning skills during his hospital stay, borrowing many library books on this topic. He subsequently poisoned a number of work colleagues, causing media uproar. Butler concluded that the system might fail to identify a service user's propensity to reoffend in the remote, esoteric environments of special hospitals.

At the time when the Butler Report was published, in 1975, risk assessment was a new and relatively unused procedure (Tidmarsh, 1992). In terms of the risk social science which emerged subsequently, it can be argued that the organisation of high secure units generated selective perception to the point of risk blindness, with tragic but also blackly comic consequences, epitomised by the Graham Young case. Despite the report's recommendations being widely publicised, only a few MSUs were opened in the 1970s and 1980s. After another national UK report offering a similar analysis had been published (Reed, 1992), MSUs began to be established on a large-scale, with their number increasing to 40 across the UK. Reed presented the benefits of MSUs in terms of them providing a half-way house between the high-security hospital and the community where service users could be observed and assessed in a more appropriate setting without putting the public at risk. Hence, one of the aims behind the expansion of MSUs in the 1990s was to provide a more revealing environment for risk assessment in relation to the communities to which service users would eventually return. Nurses' negative stereotyping and therapeutic pessimism about patients have been associated with high/medium/low security level (Mason *et al.*, 2010). However, as will be documented in the Findings section, staff charged with critical decision-making about discharge may not share the view that the probability of a patient reoffending can be validly assessed within the environments of medium and low security units.

In the period since the establishment of MSUs, isolated cases of serious reoffending by recently discharged patients have inevitably occurred. A number of UK formal inquiries conducted retrospectively have explained reoffending in terms of culpable service failures of communication and risk assessment. For instance, an inquiry into a killing perpetrated by a patient, John Barrett, one day after release from a medium secure unit (South West London Strategic Health Authority, 2006) criticised forensic mental health service providers for becoming too sympathetic to risky patients. As illustrated below, patients and staff who participated in the present research made a similar point when they argued that compliant patients could progress quickly through the system to discharge simply because they did not cause immediate problems. However, consideration of the information available to service providers challenges the assumption

underpinning the 2006 inquiry report that patient reoffending can be unproblematically predicted providing that staff try hard enough.

It might be suggested that this tragedy would not have occurred if it had not been for a single decision, to allow John Barrett out on leave from the medium secure psychiatric unit to which he had been readmitted on the day before he killed Denis Finnegan ... Too much confidence was placed in clinical judgements unsupported by evidence and rigorous analysis. (South West London Strategic Health Authority, 2006, p.9)

Once it is assumed that service-providers possess the capacity to accurately predict whether individuals will reoffend, it follows that their apparent failure to do so must arise from individual or organisational inadequacies deserving of censure. This interpretive framework thus transforms probability assessment into a moral issue. However, as well as discounting the inductive prevention paradox, such a perspective ignores the key limitation of probabilistic reasoning which, even if it can be based on induction from an adequate set of observations, is predicated on the assumption that predictive errors are bound to occur. The mindset documented above elides the (attempted) accurate calibration of probabilities with perfect prognostication. Staff thereby face a double shortfall with respect to meeting societal expectations based on the implicit assumptions that the chance of an individual reoffending can be measured, and that this metric somehow enables perfect prediction.

Confined to an institution where their riskiness is continually assessed, patients may react to being placed under constant observation. They may seek to please their clinicians in the hope of gaining more autonomy by reducing their assessed riskiness. Conversely, patients may 'fake bad', attempting to increase their official riskiness in order to invoke a therapeutic response, maintain self-esteem or postpone feared discharge, a phenomenon which insiders sometimes depict as 'gate fever'. In turn, clinicians may attempt to deceive in the hope of seeing through the camouflage of self-presentation in order to uncover a presumed psychological reality which will allow the risk of reoffending to be accurately assessed.

Service providers and users who live with this situation are likely to appreciate the problem arising from the inductive prevention paradox, an awareness documented in the Findings section. The following sub-section offers an analysis of attempts to predict an individual's probability of reoffending by means of formal risk assessment 'instruments'. Faith in the value of formal risk assessments has waned in recent years. Nevertheless, critical analysis of their underpinning epistemology can offer insights into the limitations of probabilistic inference in this context, a frame which can be obscured by pragmatic considerations and the routinisation of risk assessment procedures as 'tools'.

Risk assessment 'tools'

The process of discharge decision-making for forensic mental health service-users is organised around case conferences and the use of risk assessment inventories, often called 'tools' by health service insiders, although recommendations must, in most cases, be externally ratified. The routinisation of tool usage, a core feature of UK National Health Service culture, tends to conceal their shaky epistemological foundations (Webb, 2012). They contain sets of items on which patients are rated, generating summative scores designed to indicate a patient's probability of reoffending after discharge.ⁱⁱ Analysis of their limitations sheds light on the predictive difficulties arising from the inductive prevention paradox.

Such tools can be divided into three types (Gray *et al.*, 2004). Actuarial measures are based on easily encoded biographical information covering offending history and demographic factors inductively associated with the probability of reoffending (or, more accurately, the probability of being caught and convicted for reoffending). An example is the Offender Group Reconviction Scale [OGRS] (Copias and Marshall, 1998). A second type of risk assessment tool such as the Psychological Checklist, Screening Version [PCL-SV] (Hart, Cox and Hare, 1995) focuses on mental states presumed to give rise offending. Thirdly, risk assessment inventories, most popularly the Historical, Clinical and Risk Management Scales [HCR-20] (Webster, *et al.*, 1997), itemised in Table One below, assess an eclectic mix of biographical, psychological and environmental risk factors.

Insert Table One here

Gray *et al.* (2004) concluded that actuarial instruments based on easily coded socio-demographic and offending history information predict reoffending risk fairly accurately. Follow-up research indicated that about 75% of discharged forensic mental health service users were reconvicted for major or minor offences in the higher risk group over a three year periodⁱⁱⁱ, compared with 17% in the lower risk group. Unfortunately, less accuracy was obtained for (less frequent) major offences, the issue actually of concern, than for minor ones.

The HCR-20 is intended as an aid to holistic risk assessment rather than as a numerical decision-tool. Nevertheless, scores will influence patients' fates. Gray *et al.* (2004) concluded that the historical and risk management scales of the HCR-20 offer moderate predictive accuracy, whilst this and other clinical scales have virtually no prognostic power. Gray *et al.* (2007) also found that the latter predict reoffending more accurately for patients with learning disabilities than for those with mental disorders. This difference might be associated with whether patients are capable of presenting themselves strategically in order to manage perceptions of their riskiness. The issue of informational manoeuvring will be picked up in the Findings section.

The pattern of findings outlined above demonstrates a complete divergence between the probabilistic predictive value of scale elements and their usefulness for risk management purposes. Half of the items reference unalterable historical factors^{iv}. Patients who wish to reduce their measured riskiness (i.e. assessed probability of reoffending) need to work extra-hard to compensate for a poor score on this largest sub-scale. The distinction between the HCR-20 clinical and risk management scales is not conceptually clear (see Table One). But the former appears to cover mostly the personal factors which MSUs and other mental health services are primarily oriented towards dealing with, whilst the latter primarily addresses the environment which patients will return to. As with historical factors, the patient has hardly any control over the living conditions which they will be sent back to^v. Staff can do little to influence these risk factors on account of organisational fissures between MSUs and community services (Davies *et al.*, 2006). Moreover, their perceived riskiness can itself impede community integration for discharged forensic mental health service users (Coffey, 2012).

The predictive power of tools designed to measure the probability of forensic mental health service users reoffending thus appears to be inversely related to their risk management usefulness. The best predictors, derived from recorded history, are therapeutically immutable. Moreover, they work better prognostically for more frequent minor offences than for the less common major ones which are of primary societal concern. The task at hand for forensic mental health services charged with the rehabilitation of offenders is to identify those who have acquired a lower probability of future offending **despite** carrying a troubled history and having to return to criminogenic environments. The inductive prevention paradox makes this task particularly difficult. Consideration of presumed personal risk factors such as 'negative attitude' in the HCR-20 brings the analysis back to the question of how practitioners attempt to assess them in a secure environment. The research discussed below aimed to explore service user and provider navigation of this risk assessment task, taking into account reactive processes such as service user attempts to reduce assessed riskiness and staff efforts to see through such self-presentation endeavours.

METHODOLOGY

The qualitative data discussed below were drawn from two studies which employed a similar methodology. The studies were undertaken in two UK low to medium-secure residential facilities, one catering for offenders with learning disabilities (Heyman, Buswell-Griffiths and Taylor, 2002) and the other for those with mental health problems (Heyman *et al.*, 2004; Davies *et al.*, 2008), located in NE England and London respectively. A more recent project undertaken in a second MSU in London which has combined interviews with ethnographic observation generated similar findings but will not be discussed further in this paper. Approval from a UK NHS Ethics Committee was obtained for each project. These medium/low-secure residential institutions can be viewed as 'risk

escalators' (Heyman, Buswell-Griffiths and Taylor, 2002; Heyman *et al.*, 2004). This organisational form of care is informed by a psycho-logic, not always clearly articulated, in which service users are supposed to travel through progressively lower levels of security towards discharge as their assessed riskiness is judged to decline in response to therapeutic interventions. Patients can also be sent back up the risk escalator if their progress is considered to have reversed. This stepped approach confronts the inductive prevention paradox at each stage, but gives rise to accountability issues mostly at the point when a patient re-enters the public realm.

The studies were designed to explore service user and staff perceptions of risk assessment and management in relation to the discharge. Additional information about the two research sites is provided below. Each study was conducted in two stages, with general staff interviews followed by detailed data collection focussed on individual patients. The first stage interviews explored general staff perceptions of risk management within the hospital and decision-making about discharge. Second stage data collection included, as far as possible, two interviews with selected patients over a 6-20 month period, an interview with a staff member who knew them, and observation of ward rounds and case conferences (second study only). Patients were identified through staff and drawn from a range of security levels. Their perspectives do not necessarily represent those of the patient population, but they offered a wide variety of views about residential life and progress towards discharge. Patient interviews lasted 60-90 minutes, and those with staff about 45 minutes.

A grounded theory approach to design, data collection and analysis was adopted, with data collection and analysis undertaken concurrently so that subsequent interviews could take up emergent issues. The core category around which the research was organised was the operation of risk escalators (Heyman, Buswell-Griffiths and Taylor, 2002; Heyman *et al.*, 2004). Within this framework, a number of key issues were identified for analysis, including divergent views about the nature of 'the problem' (Davies *et al.*, 2006), multidisciplinary teamwork (Shaw *et al.*, 2007) and probabilistic risk assessment, the focus of the present paper. Further details about the two research sites and data collection in each are provided below.

The forensic learning disabilities study

Data collection was undertaken during 1999-2000 in an NHS residential facility catering for offenders with learning disabilities. This institution offers a range of security levels from medium-secure to unlocked houses. It is located in a rural area of Northern England, several miles away from the nearest town, spreads over a substantial area in its own campus, and has gradually evolved as buildings were added. The campus contains a range of architectural styles including an ultra-modern MSU sealed off by a visually unobtrusive electronic system of electronic locks, family houses formerly in domestic usage, and the old

low rise shabby brick buildings common in UK asylums. Senior staff members stated that the overall structure with its varied security levels had evolved over time, and had not been planned.

In the first of the two study phases, interviews were carried out with 13 staff members (two consultant psychiatrists, two clinical psychologists, one forensic service manager, three unit managers, three nurses, one social worker and one occupational worker). No staff member declined to be interviewed. The second study phase involved case studies of 11 patients, nine men and two women, selected randomly from units with different levels of security. Patients invited to participate received an information sheet, discussed with a nurse, which stressed the voluntary and confidential nature of the research. One additional male patient opted not to participate in the initial interview, one refused a second interview, and one who left the hospital could not be re-interviewed for clinical reasons. The above patients, and a nurse involved in the care of each (nine in total), were interviewed in a private location on the hospital site. Patients were subsequently re-interviewed in order to explore their perceptions about their progress. The time gap between first and second interviews averaged eight months, with a range of 4-11 months.

The forensic mental health study

The second study was modelled on the one outlined above, and was situated in a residential facility catering for patients whose offending was considered to result from mental health problems. Data collection was undertaken between 2000 and 2003. This institution, like the one discussed above, offers various levels of security from medium-secure. It is located in a deprived inner-city area of London, , and has a large proportion of patients and staff from diverse ethnic minorities. The pre-planned facility was originally designed to look municipal rather than prison-like, in keeping with the ideas put forward in the Butler and Reed reports, discussed above. However, during the mid-2000s the facility was surrounded by a high mesh fence in response to a media-fuelled scandal involving the escape of a patient considered dangerous. A bizarre visual combination which reflects oscillating public attitudes towards forensic mental health service users was thus created.

In the first stage of data collection, 43 interviews with general managers (2), qualified (19) and unqualified (7) nurses, psychologists (3), occupational therapists (3), social workers (3) and doctors (6), were carried out. The sample included 11 senior managers, with at least one at this level from each profession. Senior managers worked across ward-based and community services. Three nurse respondents were entirely community-based. Managers and medical staff all consented to be interviewed, apart from one consultant doctor who declined on account of pressure of work. Front-line staff were recruited through requests to volunteer, and were therefore self-selected. Nurses on one ward expressed suspicion about the purpose of the project and declined to become involved in

the phase one interviews, although one of these nurses agreed to participate in a case study.

The second study stage involved intensive case studies with 10 patients identified by staff. Data collection included, where possible, two interviews with each patient, the second undertaken after 11-20 months, an interview with a staff member involved in the individual's care, and observation of case conferences. Four additional identified patients were not included, two because they declined, one on account of concerns that participation might interfere with therapy, and one because he was judged too dangerous to be interviewed privately. One interviewed patient declined consent for a staff member to be interviewed about his case, and one staff member refused to participate in case studies. Sixteen staff were interviewed, providing staff views for nine of the 10 case studies. Two case conferences have been attended and recorded, and five patients have been revisited for a progress update. Of the other five patients, four were discharged during the study period and one died.

FINDINGS

The analysis will be presented in two sections: firstly discussing staff and patient perceptions relating to the inductive prevention paradox; and, secondly, considering staff attempts to overcome this problem in relation to patients' attempts to manage their own assessed riskiness.

The inductive prevention paradox and risk assessment

Data analysis suggests that assessment of the probability of patients re-offending is pervaded by uncertainty. This uncertainty can be contrasted with the official purpose of medium secure units, articulated in the Butler and Reed reports, discussed above, of providing a setting similar to that of the external world in which risks can be properly assessed. However, confidence in this mission was expressed by one very senior manager.

We should take somebody who has committed an offence while they have been unwell - bring them in here and be able to - it could be that it is homicide, but bring them in here and treat them, and be able to put them back in the community somewhere around eighteen months to two years.
(General manager, forensic mental health unit)

As illustrated below, staff who worked closer to the care sharp end often expressed considerably less confidence that rational decisions about discharge risks could be made. This comparison suggests the hypothesis that those who occupy role positions close to the top of the organisation may, like report and inquiry authors, be more likely to accept the validity of its official mission than those lower down the hierarchy who are engaged with risk management in

specific cases. One ward manager, discussing patient progress towards hopefully safe discharge believed that *'it's more luck than anything'*.

I think that we're such a mixture here of people and patients with difficulties. We're now dealing with someone with such an extensive forensic history, and such complex needs, that often there's no clear evidence that things have moved forward. (Ward manager, forensic mental health unit)

The same respondent contrasted the complexity of the processes giving rise to reoffending with the simplification embedded in standardised operational procedures.

If someone's worked well within the Home Office [requirements], and had their 12 community trips, and everything has gone according to Home Office plan, but there's still huge anxieties. Because the traits of the personality were, are, still in place, then the doctor will, may well, the team will turn round and say, you know, 'He can go to low secure' ... But he'd done everything by the book ... If he has done everything by the book then he will be discharged. (Ward manager, forensic mental health unit)

This analysis suggests that the forensic health care system responds to the inductive prevention paradox by proceduralising risks which cannot be otherwise assessed. Patients who comply, enabling the appropriate boxes to be ticked, are deemed safe enough for discharge. Such a critique points to a gap between official riskiness assessment and the unknown probability of reoffending. The respondent further argues that uncertainty is mitigated, at least for those making the decision to move a patient down the risk escalator, by the transfer of risk ownership^{vi} (Heyman *et al.*, 2010, pp. 33-34) to others.

They would transfer responsibility to going back into the community and to another RMO [responsible medical officer] which, with this particular chap's history, [would mean] a huge chance he will offend again. (Ward manager, forensic mental health unit)

As the next quotation suggests, one of the strongest demand characteristics (Orne, 1962) of the forensic mental health care environment is for patient compliance.

Patients get worn down really, not really being cared for. But you're [patients are] beating your head against the wall so many times, so you just accept what's going on. It's not really that you become all that better. You've just accepted what's going on ... I think it's just a case of getting used to the environment, or the rules and regulations. (Charge nurse, forensic mental health unit)

Most patients learnt, sooner or later, to go along with what was required of them.

Well, I suppose I played the game the right way, you know ... That's to keep quiet and wait, you know, to get better. (Forensic mental health service user)

This patient had become stuck in the system until a nurse '*frankly*' spelt out what was required.

The nurse told us quite frankly that this [compliance] is the gateway, the doorway to freedom, you know ... And I appreciated that, you know. (Forensic mental health service user)

De facto operational reliance on inducing conformity as a means of attempting to reduce riskiness raises two linked issues. Firstly, patients may be discharged because they have learnt to meet the demand characteristics of the medium secure situation. Secondly, patients who pose little risk may become trapped in the system because they cannot bring themselves to conform. The patient quoted below believed that sex offenders could '*run*' through the system even though their underlying riskiness was not tackled.

Patient: *What makes me mad about this place, right, is the fact that, like I say, people running through the system and all that, right ... And then you've got, like, on a Saturday, they go down to [local town] by themselves. And owt could happen. Anything's [i.e. children] around on Saturday.* (Forensic learning disabilities service user)

Qualitative research cannot demonstrate the extent to which compliance speeds up release. Nevertheless, this example does illustrate a concern about the validity of risk assessment comparable to that discussed by the ward manager quoted above.

Conversely, patients who do not comply with the demand characteristics of the secure unit difficult may find that their progress is blocked, even though the relationship between issues arising in this environment and reoffending in the outside world is problematic. For example, consultants expressed alarm at the behaviour of a one forensic mental health patient who had taken hair clippers around other wards without permission, hoping to earn money as an amateur barber. In a community context, this activity might be viewed as commendably entrepreneurial or as lovable Cockney (London East End) canniness. In the forensic environment it was seen as an indicator of serious riskiness.

A major cause of patient non-compliance was failure in managing expressions of anger. The significance of such displays depends on their meaningful context, in both everyday life and the forensic environment. The patient quoted below felt that a trivial action had been wrongly classified as a riskiness indicator.

I walked across to the table, the pool table, tapped on the top of it, and she [the nurse] wrote down that I was feeling aggressive, and that, and all things like that. And I just thought, 'Well, one tap on the table'. I thought that was entirely wrong. So I said. She discussed it. It came out in the ward round that, she wrote that, which was wrong, out of order. (Forensic mental health service user)

This patient felt that he had merely been indicating that his right to a turn at the pool table was being violated. The expansion '*and all things like that*' conveys a sense that an edifice of risk reasoning was being built on a misreading of a single observation about an action which would not register as a riskiness indicator elsewhere. By overtly challenging this interpretation, the patient may have further harmed his discharge prospects. A propensity for mental health professionals to interpret everyday behaviours in terms of pathological labels (Rosenhan, 1973) is well-documented, but takes on new forms within a risk assessment framework. Patients and staff occupy an enclosed, highly frustrating environment in which interpersonal conflict may be expected. In addition, patients may be subjected to minute observation designed to determine the probability of them reoffending. This combination of close confinement and total risk assessment may obscure the issue of primary concern, namely the likelihood of a discharged patient harming others.

A final illustrative example of contested risk assessment is of particular interest because it illustrates how a patient's direct statement of an intention to offend can be discounted within a medical interpretive framework.

He [patient] said that he wanted to [commit serious offences]. And they still let him go because he turned round and said, 'Well, I made it all up. I just wanted to go and see my mum' ... So, you know, as a nursing team, the day before, we had sat around just kind of gob-smacked that the consultant had said that he could go ... I would not escort him. (Health care assistant, forensic mental health unit)

This patient's tactic may have worked because the consultant viewed his behaviour as symptomatic of illness, and 'prescribed' a home visit. When asked why the consultant had agreed to his parole, a decision which the above respondent depicted as '*complete madness*', she cited the reason given in the patient's medical notes, namely '*to allay his [patient's] anxiety*'. Outside forensic mental health settings, people often make threats, such as 'I will kill you' which are not intended or taken literally. The forensic context frames such statement as potentially threatening. Health professionals are faced with the task of differentiating serious statements of intent from merely metaphorical threats. In this case, doctors felt that they knew the patient well enough to rule out real risk of offending. However, if their judgements prove with hindsight to have been incorrect, they might be held to account by judges of responsible risk-taking.

Strategies for managing the inductive prevention paradox

Some staff and patients expressed concern about the problematic validity of risk assessments, as illustrated above. In general, the data suggest that, not surprisingly, staff gave more attention to reducing the risk of released patients reoffending than they did to that of detaining patients unnecessarily. Service users were mostly concerned about getting released as quickly as possible. Staff, therefore, had to try to see through patients' attempts to disguise their riskiness. Three strategies which staff adopted are discussed below: discounting good behaviour; mini-trials; and formalised risk assessment.

Discounting good behaviour

Given that patients mostly want to be released as early as possible, they might be expected to attempt to act in ways which would reduce their assessed riskiness. Staff, in turn, might try to see through such attempts at self-presentation in order to minimise the risk of released patients reoffending. One forensic learning disabilities worker, discussing this issue, said that (male) patients would be asked questions designed to test their truthfulness such as whether they would look at a woman with large breasts! This approach, an informal version of personality test 'lie scales', provides an obviously fragile method for checking patient veracity. A psychiatrist indicated that staff might deliberately withhold revealing the purpose behind an activity involving a patient so that it could be used as a test of their underlying riskiness. The '*star patient*', discussed next, was seen as operating a policy designed to reduce his assigned riskiness and thereby maximise his prospects of early release.

Every time I stop, 'Oh I'm fine, I'm alright'. 'Have you got anything you are worried about?' 'No.' ... He's all pleasant. He looks normal ... We know he is the 'star patient' and everything, but [laughs] we have to watch him, [given] what he did before, you know. (Nurse, forensic mental health unit)

The patient's conduct is seen as too good to be true. This suspicion is framed by awareness of the seriousness of his previous offending, illustrating the difficulty which patients experienced about compensating for historical risk indicators, as discussed above in relation to risk assessment tools. Patients faced with this bind perhaps need to adopt a more subtle approach, first 'faking bad' so that their subsequent conversion to low riskiness might appear more credible! Mulvey, the fictitious nineteenth century prisoner described in the opening quotation from *Star of the Sea* adopted just this tactic.

Mini-trials

Testing through mini-trials involves allowing a small temporary increase in autonomy in the hope of assessing the probability of future reoffending more accurately, whilst hopefully limiting the risk of it actually occurring. Success can

be built on progressively, for instance by lengthening parole periods. This strategy had been adopted with the 'star patient' discussed above.

Nurse: *I personally think, when he ['star patient'] goes out [on parole], that's a big test for him, because he goes out on a Saturday to [large town], and [large town] is quite far, and anything can happen then ... If something really pushed him, he would do something.* (Nurse, forensic mental health unit)

Staff described covertly observing a forensic learning disabilities patient who had committed offences involving children when he went to a swimming pool in order to see if he showed an inappropriate interest in them. The strategy can be compared to that traditionally adopted for inductively testing the safety of novel foods by eating progressively larger amounts. Its limitations can easily be identified. As the above respondent indicates, a risk of immediate disaster is inescapably incurred. Conversely, patients might conceal their offending proclivity until permanently discharged.

Formalised risk assessment

Tools such as the HCR-20 which are used to assess reoffending risk can also take on a symbolic function. This way of 'managing' risk assessment is illustrated by the following extract derived from observation of a ward round. The consultant quoted came in after a lengthy discussion concerning difficulties arising from the actions of a female patient, including conflicts about bathing and money matters, and accusations directed at male staff.

Consultant: *What risk assessment was done. The pink thing? Do we need to assign numbers?* [Senior house officer reads out numbers from the ward round summary.] *Make a point of noting risk to others on the ward round minutes and notes. We need to be vigilant.* [Moves on to next patient.] (Ward round, forensic mental health unit)

The reading out of probability '*numbers*' combined with an admonition to be '*vigilant*' conveys a sense that an authoritative, scientifically rational resolution has been achieved, even though it skirts over their problematic meaning.

Measuring patient progress towards a level of riskiness which would justify their discharge relies on observing their behaviour. However, many of the issues which arise in a secure setting bear little relation to those which would be of concern outside and *visa versa*. The validity of the whole process depends upon assuming either that patients are judgemental dopes, or that their self-presentation strategies can be penetrated.

DISCUSSION

It has been argued in this paper that the rationality of risk assessment is undermined by the operation of the inductive prevention paradox. Forensic mental health service providers are expected to assess the probability of a patient harming others in the future after discharge by obtaining observational 'evidence' in a present environment designed to prevent just such events from occurring. They are required to answer the question of how, if at all, a patient's riskiness has been changed by long-term incarceration, even though the inductive prevention paradox cuts off the supply of '*evidence and rigorous analysis*' (South West London Strategic Health Authority, 2006, p.9) which those who conduct retrospective inquiries often assume to be readily available. Their role as risk owners puts staff into a trap which they struggle to escape from. They lack an inductive evidence base for probability estimation, whilst, at the same time understanding that they risk condemnation if a discharged patient seriously reoffends. The ultimate source of this bind is the prevailing cultural assumption that science, if properly applied, can banish risk. This problematic promise comes up against a double limitation: that probabilistic reasoning does not preclude the occurrence of adverse events; and that prevention blocks out risk managers' view of the most relevant evidence.

The inductive prevention paradox is particularly likely to trap decision-making in an evidence-impoorished virtual bubble when the contingency of concern is culturally abhorred, as in the case of 'mad' or 'dirty' offences against the person. However, other more or less emotionally charged examples can easily be identified. The most direct comparison is with prisoners attempting to negotiate release via parole boards who report similar concerns about risk game-playing to those illustrated in the present paper (Muhammad, 1996). Although such information games were depicted long ago, the inmates of the asylums observed by Goffman (1961) were not subjected to constant risk assessment as they would be today. In the heyday of asylums, staff stripped patients of identities which they considered defective. This form of governmentality has been replaced by one framed in terms of risk. Patients are sifted through a probabilistic filter which is designed to allow only acceptably safe individuals to pass through to the world outside.

Anyone who has taken preventative measures faces the question of what damage might result from lifting them. Although they can be resumed if necessary, their reapplication might not erase irreversible consequences of their temporary withdrawal. For example, a frail older person who has decided that going out alone is too risky might suffer a serious injury if they tried to test their current capabilities. Similarly, a person living with depression might commit suicide if they stopped taking medication; and a Crone's disease sufferer might experience uncontrollable flare-ups if they abandoned anti-inflammatory drugs for a trial period. As with incarcerated mental health patients, prophylaxis may itself change risk conditions in ways which are hard to assess. An older person who has confined themselves to their home for a lengthy period might become more vulnerable to falls through lack of practice if they do eventually go out. Similarly,

the long-term anti-depressant user might experience withdrawal symptoms from these addictive substances, or suffer long term psycho-physiological damage. Unless they remove protective measures, facing the risk of irreversible damage, individuals in these predicaments cannot know whether they are still necessary or not^{vii}.

The inductive prevention paradox can be escaped from if proxy measures associated with the probability of the outcome of concern, but unaffected by the operating preventative measures, could be identified. Unfortunately, the prognostic need for such measures does is not matched by their availability. The limitations of the 'tools' available for risk assessment in a forensic mental health context were reviewed in the Introduction. It was noted that the best predictor, offending history, adds no predictive value with respect to **changes** in the probability of a patient reoffending; that staff in practice had no sight or control of the post-discharge environment, the second-best predictor; and that the psychological factors which they did attempt to manipulate offered no prognostic value^{viii}. Lacking from the staff predictive toolbox was any way of observing what patients would have done if they had been living in the community during the lengthy period in which they had been confined to an institution, during which time their presumed propensity to offend might or might not have changed.

The efforts of forensic mental health service providers to compensate for such shortcomings were obviously flawed. Their strategies included trying to see through patient self-presentations, using suck-it-and-see mini-trials, and relying on the illusory precision of numerical risk assessments. Practitioners are entitled to ask what on earth they are supposed to do? Four constructive suggestions can be drawn from the present analysis. Firstly, societal expectations about the potential of risk assessment in this and other domains affected by the inductive prevention paradox need to become more realistic, so that a *de facto* retrospective blame culture is replaced by one which allows for positive risk-taking (Titterton, 2005). Secondly, service users can be actively engaged in an open risk assessment process (Langan and Lindow, 2004), rather than being deceived in order to try to prevent them from concealing their real riskiness. Thirdly, top-down moralising about poor inter-agency and multi-professional collaboration should be replaced by serious attempts to analyse the organisational reasons why such failures endlessly recur (Shaw *et al.*, 2007). Risk systems theory (Japp and Kusche, 2008) provides a useful starting point for analysing barriers to collaboration by postulating that organised groups unreflectively construct and orient to distinctive risk objects. Finally, serious attempts to address the environments which offenders return to (Mullen, 2000; Brett *et al.*, 2007; Coffey, 2010) would complement the present focus on assessing and reducing personal riskiness. Although currently inhibited by organisational and political barriers, attention to the quality of the lives which forensic mental health patients will return to offers the most promising means of combining controllability with probabilistic predictive purchase.

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TABLE ONE
RISK ASSESSMENT DOMAINS COVERED BY THE HCR-20

Historical	Clinical	Risk Management
H1 Previous violence	C1 Lack of insight	R1 Plans lack feasibility
H2 Young age at first violent incident	C2 Negative attitude	R2 Exposure to destabilisers
H3 Relationship instability	C3 Active symptom of major mental illness	R3 Lack of personal support
H4 Employment problems	C4 Impulsivity	R4 Non-compliance with remediation attempts
H5 Substance use problems	C5 Unresponsive to treatment	R5 Stress
H6 Major mental illness		
H7 Psychopathy		
H8 Early maladjustment		
H9 Personality disorder		
H10 Prior supervision failure		

ⁱ The 'inductive prevention paradox' should be distinguished from the widely discussed 'prevention paradox' (Rose, 1981) which arises from attributing a risk associated with an aggregate category such as alcohol consumption to individuals who meet the specified criteria for category membership. Both paradoxes are bound up with the limitations of probabilistic thinking. But the latter, which could be termed the 'ecological prevention paradox', derives from the requirement to shift between the aggregate and the individual in order to quantify probabilities (Heyman *et al.*, 1998; Hunt, 2003). The inductive prevention paradox results from limitations in the observational evidence base itself.

ⁱⁱ Tools direct selective service attention to particular adverse events, thereby carrying implicit value judgements.

ⁱⁱⁱ Probabilities can only be quantified in relation to a temporal horizon, in this case three years, beyond which adverse events are not taken into account. Practically focused risk managers tend to frame time unreflectively.

^{iv} More accurately, the probability of a patient reoffending is related to recorded history. Patients can influence their 'history' in this sense, for example by concealing previous offending. However, once their offending history has been encoded in a patient record, patients are cannot change it, unless they can demonstrate their innocence, a very unlikely possibility for those who have committed offences against the person.

^v Discharged patients may be directed away from localities associated with former offending. However, they will thereby also separated from social networks and familiar surroundings, and tend to end up in areas of serious socio-economic deprivation which are associated with additional problems such as high crime rates and drug problems.

^{vi} The concept of risk ownership originated in corporate governance where it is used to convey a top-down model of social order in which a senior manager at board level is made accountable for each risk which the organisation is deemed to face. As with risk management, the notion can be applied more generally to everyday life. For example, in the forensic mental health sphere, close relatives may decline to take back responsibility for a discharged offender (Heyman *et al.*, 2010, p. 34).

^{vii} Randomised controlled trials (RCTs) can provide counterfactual evidence at an aggregate level. For instance, patients in the placebo group can be expected to have done as well on average as those in the treatment group if they had received an experimental drug. However, this aggregated knowledge offers limited predictive accuracy in individual cases, and the methodology of RCTs is difficult or impossible to apply with respect to long-term, complex interventions.

^{viii} A parallel debate has taken place in the criminal justice system, with advocacy of a 'tool' for assessing reoffending risk, the Psychopathy Checklist–Revised (PCL-R) challenged by sceptics (Gendreau, Goggin and Smith, 2002).