



Review of management, business, and human resources literature

This report was completed for the inSCALE project by Ryann
Manning

September 2010



inSCALE – Innovations at Scale for Community Access and Lasting Effects

The inSCALE programme, a collaboration between Malaria Consortium, London School of Hygiene and Tropical Medicine (LSHTM) and University College of London (UCL), aims to increase coverage of integrated community case management (ICCM) of children with diarrhoea, pneumonia and malaria in Uganda and Mozambique. inSCALE is funded by Bill & Melinda Gates Foundation and sets out to better understand community based agent (CBA) motivation and attrition, and to find feasible and acceptable solutions to CBA retention and performance which are vital for successful implementation of ICCM at scale.

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Preface

This document was prepared for an internal meeting of the inSCALE project. It does not aim to be a comprehensive systematic review of the topic. Rather, it pictures the landscape based on review articles and informal discussions with expert colleagues. This document is not an official inSCALE publication but rather an internal working document.

None of this document may therefore be quoted, copied or referenced.

Discussions about the content of this document are welcomed.

Introduction

Management scholars have long been interested in how to improve employee performance and reduce turnover. There is therefore a rich and extensive field of literature with relevant insights for iNSCALE's work with community based health agents (CBAs). This literature review could not even begin to capture the full scope and depth of this literature. Instead, it presents a broad overview of some of the most important, influential, and/or innovative human resource practices from the business, management, and human resources literature, as well as a few key concepts, in order to highlight potential innovations for the effective management of CBAs and to suggest promising areas for further research.

Aim and Research Parameters

The aim of this review, as stated in the scope of work, is as follows:

“To review the management, business and human resources literature to identify concepts and strategies which can inform the design of innovative interventions to both increase coverage of integrated community case management (iCCM) and improve its quality through better performance and retention of health focussed community based agents (CBAs).”

Given the nearly-limitless potential scope of such a review and the limited time available¹, and in order to ensure the review provided relevant and helpful information, it was agreed² that the consultant would focus the review as follows:

- Focus primarily on specific human resources policies and practices that have been shown or theorized to have a positive impact on employee performance or retention. (See below for more specifics.)
- Would not spend extended time reviewing factors related to organizational context, but would include some abbreviated discussion as time and space allow of those organizational factors that have been shown or theorized to have a positive impact on performance or retention (e.g., corporate culture, job design and structure of work, organizational design).
- Would not include an in-depth review of the individual differences (e.g., personality, attitude) considered to be antecedents of performance and retention. These concepts may be introduced as part of an overview of macro concepts, and some will relate to specific HR policies and practices, but will not be a major focus of this review. Some will be covered in other reviews being prepared separately by other consultants or iNSCALE staff.

It was also agreed that even after focusing specifically on HR policies and practices, the review would still need to be narrowed further. Any one sub-topic – such as incentives and compensation – would easily merit a full-length review on its own. To this end, a few principles were agreed for the balance between breadth and depth in the review, and for how to narrow the scope to a manageable size.

¹ The consultant's contract was signed on 11 August 2010 and it was agreed that the bulk of work would be completed by the end of August, due to the consultant's other commitments in September.

² Phone conversation 17 August 2010 between Karin Källander, Ryann Manning, and Daniel Strachen, and associated correspondence

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In general, the iNSCALE project representatives expressed a desire for a relatively broad overview of the management literature, to give them a sense of where this literature might lend new and relevant perspectives, and where it might be worth investigating further to learn more. On this basis, they agreed that the consultant would:

- Aim for a relatively broad topical overview, covering the major categories of HR policies and practices reflected in the business, management, and human resources literature. By necessity this requires a trade-off in terms of the depth to which the consultant can explore any specific topic, and she will therefore prioritize breadth over depth while trying to maximize both.
- Look especially for exciting and promising practices that have proven successful in the business world or in other sectors studied by business or management scholars, and which might be appropriate for application to CBAs.
- Keep a log and be prepared to explain which topics, specific articles, or areas of the literature have been excluded and why she decided not to include these. The consultant should also provide suggestions for where to find more information or depth of analysis on the most important of these topics.

The iNSCALE project will then be able to follow up in greater depth on any areas that seem promising, and may also go back to the consultant for more input.

Methodology

Obviously it was not possible to include every article or paper ever written on this topic, so it was necessary to decide which articles (or, in some instances, topics) to include or exclude. Below is the methodology the consultant used for identifying articles and other publications for inclusion in the review. Also see Appendix 2 for more detail about topics and areas of the literature that were excluded.

Searching for papers:

- Primarily used two databases with a wealth of business literature: ABI/ProQuest and EBSCOhost Business Source Complete. These include peer-reviewed academic journals but also other sources, such as newspapers, magazines and trade publications.
- Identified some articles through subject searches (e.g., for articles that address specific human resource practices, and/or address the performance and retention of staff). However, this tends to cast a very wide net and makes it difficult to identify the most relevant or important papers.
- Searched for papers by well-known and well-regarded scholars in the field, especially those that have been widely cited.
- Searched for more recent articles that cite articles already included in the review.
- Used the bibliographies of articles to find other relevant publications.

Limitations and criteria for selecting papers:

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- Limited the review to articles published after 1990 except in rare cases where a much-cited influential work was published prior to that.
- Prioritized more recent works, which should represent the latest thinking and which often review or cite the most influential earlier studies.
- Started with articles in well-regarded, peer-reviewed academic journals,³ but also included other types of materials if they were cited by other sources.
- Prioritized the most relevant and/or most cited articles, and those with rigorous research methodologies.
- Prioritized literature reviews and meta-analyses that provide an overview of the literature on a particular topic.
- Underemphasized (but did not entirely exclude) topics being covered by other reviews, such as pay for performance and motivation of staff.
- Actively sought studies that address the relevance or effectiveness of concepts or innovations to developing countries and/or health sector institutions. Despite this, such articles are still a small minority of the publications included, because business and management literature tends to focus primarily on private sector contexts and/or on developed countries.

In summary, the consultant read upwards of 75 articles, chapters, papers, or other publication, the vast majority from peer-reviewed academic journals or textbooks.

Macro Concepts

The iNSCALE team asked that this review “document key theories, concepts and overarching strategies and / or approaches (macro⁴) relating to the retention and performance of staff even where examples do not offer an obvious rationale for their application across contexts (i.e. to iNSCALE CBAs).”⁵ This section will therefore review a selection of these theories and concepts, and will highlight a few areas not addressed in depth in this review but which may merit further exploration.

This section should not be seen as a comprehensive review of the vast body of theory that underlies organizational scholarship. I did not, for instance, opt to go back and review Marxist theories on the

³ According to one study that asked experts to rank the top journals in international human resource management (Caligiuri 1999), the top five journals in this field are the *Journal of International Business Studies*, *International Journal of Human Resource Management*, *Academy of Management Journal*, *Academy of Management Review*, and *Human Resource Management*. I also weighted top journals in psychology and sociology where appropriate.

⁴ “A macro concept is seen by the iNSCALE team as an overarching approach which informs the development of micro activities. More than an ideology, it is a underlying principle which serves the purpose of guiding activities towards meeting program or organisational goals.” iNSCALE project, *Scope of work: review of management, business and HR literature for innovations likely to lead to increased retention and performance of health focussed Community-based Agents (CBAs)*, August 2010.

⁵ Ibid.

alienation of labor. Nor will I discuss once-revolutionary frameworks for work design, such as “Taylorist” scientific management,⁶ now largely rejected, or Tavistock’s socio-technical approach.⁷

Instead, I have focused on a few core concepts that relate specifically to the performance and retention of employees, and which I believe to be useful for someone new to management literature as they review the micro innovations discussed in the next section.

1. Turnover

There are several different types of turnover, although we often do not distinguish among them. For instance, there is an important distinction between voluntary and involuntary turnover. *Voluntary turnover* is when an employee decides voluntarily to leave an organization (quits or resigns); *involuntary turnover* is when he or she is fired or otherwise asked to leave. The second distinction is between functional and dysfunctional turnover (see, for example, Haines, et al (2010) p. 232). *Functional turnover* is when a poorly-performing employee leaves the organization, such that their departure is actually a net positive for the organization. *Dysfunctional turnover* is when a better-performing employee leaves.

Obviously, different types of turnover have very different effects on organizations, and may also respond quite differently to incentives and other interventions. Usually when we speak of turnover as something problematic that organizations should seek to reduce, we actually specifically mean dysfunctional voluntary turnover. However, this distinction is often ignored in both the measurement of turnover and in the design of programs to reduce it. For instance, as I will discuss later, performance-based incentives are believed to increase functional turnover while decreasing dysfunctional turnover, but researchers and managers often look at total turnover when testing the impact of these incentives. This type of error can not only confound efforts to study such programs, but also undermine their effectiveness.

Another important concept for understanding turnover is that the act of leaving an organization is actually the final step in a process, which management scholars deem “withdrawal.” This process – in which the employee reduces his/her effort or output as he/she prepares to leave – has been well-documented and -studied. In some sense, the withdrawal process may actually be a more relevant phenomena to consider than the final departure, because the effect on the organization starts much earlier in that process, and because in extreme cases, the person may never actually quit or be fired but may have effectively withdrawn from their job.

Related to this withdrawal process is the distinction between proximate and distal determinants of turnover. The strongest *proximate determinant* of turnover, for instance, is an employee’s intention to leave. Human resource policies, on the other hand, are *distal determinants* which may influence turnover indirectly via attitudes or behaviors (Haines, et al (2010), p. 242).

A simple framework for understanding voluntary turnover is the theory of “organizational equilibrium,” which centers on the concepts *ease of movement* and *desirability of movement* (March and Simon (1958), as cited by Haines, et al (2010), p. 230). “Desirability of movement reflects participants’ motivation to leave, with relates to their job satisfaction. Ease of movement reflects participations’ assessments of how easy it is to find employment in another organization, which is a function of market

⁶ For a brief review of Taylorist approaches, see Fincham and Rhodes (2005), p. 380.

⁷ For a brief review of Tavistock’s research and classic approach to work design, which underlies some of today’s efforts to empower workers, see Fincham and Rhodes (2005), p. 425.

conditions and competencies” (Haines, et al (2010), p. 230). These constructs can be helpful in predicting the effect of new policies or other changes, whether internal or external to the organization, on employee turnover.

A related theory is “market signaling theory,” which predicts that factors such as training, rewards, and promotions send a signal to the market about an individual’s productivity. This signaling may improve their job alternatives, and therefore their ease of movement, and may therefore increase turnover. (See Haines, et al (2010) p. 230, and sources cited, including Spence 1973.) To the extent that access to training, rewards, and promotions are correlated with an employee’s performance (whether as a reward for performance or because they help improve performance), market signaling will specifically increase dysfunctional turnover.

2. Performance

As with turnover, it is important to distinguish what we mean when we talk about performance. Probably the most important distinction is the unit of analysis: individual, unit, or organization. Higher-level performance measures, such as profit or productivity for a business, or patient mortality for a hospital, are obviously affected by many factors aside from those related to human resources. On the other hand, a focus on individual-level performance can miss the group- and organizational-level dynamics that also affect outcomes (Van Iddekinge, et al, p. 829-830). It is not necessarily true that a collection of high-performing individual employees added together will result in equally strong overall performance.

Performance can also be measured in many different ways. Some of these measurement issues will be discussed in the “measurement and methodology” section below.

3. Antecedents to Employee Retention and Performance⁸

The business, management, and human resources⁹ literature identifies a number of antecedents to employee retention and performance – i.e., factors that precede and therefore help predict and possibly cause performance and turnover. These can be roughly categorized into four groups: stable individual differences, job-specific individual differences, organizational context, and human resource policies and practices.¹⁰ I will discuss each of these, briefly, below.

Stable Individual Differences

These are characteristics of individuals that are relatively consistent over time and across different jobs or contexts, and have been theorized or shown to predict job-related performance and/or turnover. They include cognitive ability and certain personality traits.

⁸ Throughout this section I will rely heavily on an organizational behavior textbook by Fincham and Rhodes (2005). Because the iNSCALE team decided that most of these topics would be beyond the scope of this report, I did not spend time seeking additional sources. I have used the Fincham and Rhodes text, therefore, as a resource to convey some of the most important concepts, for the purpose of informing possible further research.

⁹ This is also meant to include such fields as organizational behavior and organizational psychology.

¹⁰ The author is grateful to Lisa Leslie, Assistant Professor, Center for Human Resources and Labor Studies, Carlson School of Management, University of Minnesota, who defined these categories and suggested some of the examples. (Personal correspondence, August 2010).

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I will not delve here into the long and often controversial histories of intelligence and personality testing, which have been well-documented elsewhere.¹¹ I will focus instead on the concepts that are most widely accepted today and that provide the basis for employment testing, now an extremely widespread practice that I will discuss later in relation to employee selection.

Perhaps the most important concept to understand about intelligence in relation to organizations and employees is “G” or “general mental ability.”. Although there may be numerous types of cognitive abilities – such as special ability, verbal reasoning, memory, and inductive reasoning – there is strong evidence and wide agreement that these are largely inter-correlated and explained by a single factor, “G” (Fincham and Rhodes (2005) p. 138). Despite extensive controversy over the years, G has been widely used in employment environments, and has shown to be a robust predictor of performance. As one study concluded, in summary of eighty-five years of research on employee selection, “if hiring individuals with no previous experience of a role, an individual’s performance on a test of G still seems to be the best predictor of his or her future performance” (Fincham and Rhodes (2005), p. 138, citing Schmidt and Hunter (1998)).

Tests of G or general mental ability (GMA), are often “diagrammatic” or “abstract reasoning” tests, intended to provide the “purest” measure of potential (Fincham and Rhodes (2005), p. 177-178). Employers also sometimes use specific ability tests, which focus on specific cognitive abilities such as verbal or numerical reasoning. Critical reasoning tests are particularly common; however, it is important to note that “unlike other specific abilities... [critical reasoning] appears to be an amalgam of personality, ability, and experience” (Fincham and Rhodes (2005) p. 178). Critical reasoning tests are also often applied to jobs for which they are not relevant (Ibid).

The basis for personality testing is the idea that there are certain relatively consistent underlying traits that describe and predict how we think and behave (Fincham and Rhodes (2005) p. 94-96). Although there have been many different models of personality, the most widely used and discussed now is probably a framework known as the “Big Five.” Without going into great detail, the Big Five framework posits that people’s personalities are largely described by the following five factors (Fincham and Rhodes (2005) p. 102):

- 1) Extraversion
- 2) Neuroticism
- 3) Conscientiousness
- 4) Openness to experience
- 5) Agreeableness

As I will discuss later, studies show that Conscientiousness is one of the best predictors of performance across a range of jobs and industries, while other traits – notably Extraversion and Agreeableness – are valid for specific types of positions.

I will come back to these concepts of stable individual differences later in the review. Many recruitment and selection processes are based in part on theories about individual characteristics. In particular, cognitive and personality tests are used widely in employee selection.

Job-Specific Individual Differences

¹¹ For a brief review of that history and aspects of the controversy that relate to organizations, see Fincham and Rhodes (2005), Chapter 3.)

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These are individual characteristics that change over time or from one job to another. For example, people hold certain attitudes about themselves, about the organization they work for, and about their job. These include perceptions of self-efficacy (i.e., perceptions of one's own capabilities), job satisfaction, and organizational commitment, among many others, and there is a wealth of literature on which attitudes predict performance and/or retention, on how these attitudes can be measured, and on how such attitudes are formed and what factors influence and shape attitudes.

This review will not deal in depth with these concepts, many of which may be covered in a separate review on motivation. Ultimately, many of the human resource policies and practices I will discuss are intended, implicitly or explicitly, to influence employees' attitudes, and thereby to indirectly improve performance and reduce dysfunctional turnover.

Organizational Context

There are a wide range of characteristics of organizations that have been shown or theorized to affect performance and behavior, and a wealth of literature that discusses them. In general, it was decided that these topics would fall beyond the scope of this review,¹² but I will attempt to touch briefly on a few of the most important, influential, or relevant.

This is a rich field of inquiry in business and management scholarship, and in management practice, and in many ways reflects some of the most innovative and sophisticated thinking about how to improve employees' satisfaction, motivation, organizational commitment, and performance. The specific innovations that follow from these theories are often very complex and require skilled organizational management, and may therefore be inappropriate for a community-based, public-sector program in a poor country. Nonetheless, this may be a worthwhile area for further research.

Corporate Culture and Values

Organizational culture may well be a very important factor in performance and turnover. Many management experts have looked at how an organization's culture and values can help shape employee behavior, and ideally increase job satisfaction, build organizational commitment, improve performance, and reduce turnover. Some organizations are said to have "strong" cultures which hold their members together and make the organizations more cohesive and possibly more lasting and better performing. For others, the culture and values may be weak, contradictory, or otherwise unlikely to affect employee attitudes or behavior. Among the hot topics in management scholarship today are the links between organizational culture and factors such as learning or innovation; in other words, can an organization develop culture that makes innovation more likely, or that facilitates learning among the employees.

Job Design and Structure of Work

The structure of work is also believed to effect employee attitudes and behavior, and there have been efforts to redesign jobs to make them more fulfilling and meaningful. Job redesign is generally understood to occur along one or more of three dimensions:¹³

¹² See earlier section on "Aim and Research Parameters." It was decided that the review would touch briefly on some of the topics related to Organizational Characteristics, but would focus primarily on specific human resource policies and practices.

¹³ This is taken from Fincham and Rhodes (2005), p. 423.

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- **Variety:** “The complexity and differentiation of work. An increase in task variety and the multiplicity of skills exercised should improve the content and quality of a job, increasing its interest for the individual and reducing the monotony and routine of work.”
- **Autonomy:** “The degree of control that people have over their jobs... Work experience can be greatly enhanced by the introduction of ‘higher-level’ tasks which involve... discretion and responsibility, and by the group allocation of work and the self-selection of groups.”
- **Completeness of task:** In contrast to an extreme division of labor, which “creates highly fragmented, meaningless work and means that people are unable to see any sense in what they do.” Job redesign attempts to “create ‘whole’ tasks that are more identifiable and meaningful, and based on integrated work cycles.” (Fincham and Rhodes (2005), p. 423).

The principles of job redesign underlie some of the employee involvement interventions I will discuss later .

Organizational Design

Organizational structure refers to the rules by which decisions are made in an organization, and there is wide variation in the design of such structures (Fincham and Rhodes (2005) p. 482). Management scholars have spent a great deal of time and effort thinking about organizational design and how it might relate to effectiveness, efficiency, and other considerations, including how organizational structure effects the attitudes and behavior of staff.

I will not attempt to tackle this rich and extensive field of literature here, but I will offer a few examples of alternative organizational designs, which demonstrate the variation that exists.

- a) **Functional form:** The most basic and enduring organizational structure, often associated with large bureaucracies, organizes people according to their jobs or functions. The risk of this design, however, is when people begin to focus too much on their internal processes to the detriment of their actual organizational goals. (Fincham and Rhodes, p. 485-486.)
- b) **Organic model:** This “elegant” organizational design, which in some ways is more a concept than an actual design, involves “strong informal networks, fuzzy divisions of labor, a preponderance of verbal communication, and delegated authority,” which allowed the organization to “respond flexibly to changes in dynamic and complex environments.” (Fincham and Rhodes (2005), p. 487.)
- c) **Product-based / divisional:** These structures group people according to outputs, such as individual products or collection of products for particular markets or regions. In contrast to the functional form, people with different technical skills are grouped together into cross-functional, product-based departments. (Fincham and Rhodes (2005), p. 487.)
- d) **Lean structures:** These “flat” organization structures became popular in the last 30 years, and involve “delaying” bureaucracy, downsizing management, and empowering junior positions. There is an emphasis on teamworking, the structure is often built around semi-autonomous work teams. (Fincham and Rhodes (2005), p. 489.)

It is also worth noting that contingency theory, to which I will return later in relation to human resource policies, argues that the preferred structure for any given organization is contingent on its strategy and context (Fincham and Rhodes (2005), p. 473-474).

Human Resource Policies and Practices

The next section on innovations will focus almost exclusively on human resource (HR) policies and practices that have the potential to influence employee performance and retention, so I will not spend much time on those policies here. It is, however, worth mentioning the concept of strategic human resource management, which links HR management (HRM) to organizational strategy and performance. In fact, proponents of strategic HRM suggest that HR is one of the most important “strategic levers” available to management (Becker, et al (1997)).

4. Measurement and Methodology

Measurement techniques and research methodologies are discussed in Appendix 1 for each of the studies included, and will be discussed intermittently in relation to the micro innovations in the next section. However, there are a few concepts related to measurement and methodological techniques that are worth discussing here.

As mentioned earlier, performance can be measured in a number of different ways. In addition to variations in the unit of analysis (e.g., individual, unit, or organizational) there are options regarding the type of measurement. In business, the key distinction is between financial and non-financial (usually operational) performance metrics. Choosing the right performance metric is a key methodological issue, and warrants careful consideration.

Another important methodological issue is the use of perceptual versus objective data. Many studies use perceptual data for performance – whether at the individual, unit, or organizational level – as well as for other variables such as HR policies and practices. Often perceptual data is simply easier to come by for a given unit of analysis, and in the case of public sector and not-for-profit institutions may sometimes be one of the only measures available. Researchers defend this method with the argument that perceptual measures have been shown to correlate strongly with objective measures (see, for example, Brewer (2005) p. 511). However, there is still significant potential for bias, including systematic bias. For instance, in Brewer (2005) employees of U.S. federal agencies are asked to rate the performance of their unit and agency, relative to others. It is possible that the resulting data reflects less on actual performance than on agency culture, loyalty, or commitment. The best-performing units or agencies might actually rate themselves lower, if they also hold themselves to higher standards and have a culture of self-reflection and continuous improvement.

Another methodological question is whether to study organization-level HR policies or to collect data on the actual implementation on the ground, which might differ significantly from the stated policy. For instance, one very strong study of the effect of training and pre-employment testing on performance and turnover looked at the actual implementation of policies by individual fast food restaurants (units) within a single company. Although the same policies applied to all units, the researchers found and exploited significant heterogeneity both among units and within the same unit over time. (Van Iddekinge, et al (2009)).

One very common research design for studies of HR practices is a “single-respondent” design, in which researchers ask a single respondent – typically the HR manager or CEO – to provide aggregate data on HR practices and on organizational performance, turnover, and other variables. This design, though extremely common, presents a range of methodological problems. First, it assumes homogeneity in the implementation of policies, which as discussed above is most likely not the case (Van Iddekinge, et al, p. 830). In addition, data from single respondents may be unreliable, particularly when that individual is

being asked to answer very detailed questions on a wide range of topics. The answers also may vary according to who you ask; for example, in a study of federal employees, supervisors were found to be more positive and optimistic than their lower-level employees in rating unit and agency performance (Brewer (2005) p. 514-516). As a result, some researchers argue strongly that it is better to ask multiple individual employees than it is to ask a single respondent, in order to find out how policies are actually being implemented and to include internal variation among sites and job groups (Wright, et al (2005) p. 425-426).

Finally, there are important methodological considerations related to temporality and causality in study design. Many studies collect data on HR policies and performance from a single point in time, or even HR policies from the present and performance data from a period in the past. (See Wright, et al (2005) for a review of methodologies from 68 studies of HR systems.) This design does not support causal inference, and yet many researchers claim just that, that their findings show that HR practices affect performance. Ideally, studies should use longitudinal data, or should control for past and current performance and test for a relationship between past and current HR policies and future performance (Wright, et al (2005)).

5. Culture and Context

The cultural and socioeconomic contexts in which iNSCALE operates will likely be tremendously influential to the success or failure of innovations. It is not possible to discuss issues of culture or context in great detail here, though I will raise them at times in Appendix 1 and in the discussion of micro interventions below. However, it is worth mentioning one study that reveals starkly some of the risks involved in transferring a practice that worked in one place to a very different culture or context.

Mellahi and Frynas (2003) examined the “applicability of western HRM practices in developing countries” through a detailed case study in the Algerian auto industry. The authors use a variety of methods (interviews, observation, archival analysis) to study the process by which the Algerian firm imported work practices from France and Germany, and the difficulties they faced in doing so. The paper provides rich qualitative data about how these practices ultimately failed, because they were in contradiction to the dominant norms and work practices in the company. For instance, the managers took empowerment-based practices (quality circles) and imposed them in a top-down, control-based manner that completely undermined their success. New work practices from Germany were required by the installation of new equipment, but were resented by employees because they required them to work individually and physically separate from one another, but they strongly preferred to work collectively. Ultimately, a dual system arose, with the “official” system imposed from outside and the “unofficial” system developed from the bottom up (Mellahi and Frynas (2003), p. 72).

The authors also document a gap between the stated policies for employee selection, rewards, and promotion and what happened in practice. “Job interviews and the use of cognitive ability tests in the hiring process were usually omitted” in favor of nepotism, they found (Mellahi and Frynas (2003), p. 73). Similarly, despite a stated policy of performance-based rewards and promotions, “there was a low correlation between the work individual workers actually performed and the wages they obtained,” and neither did performance play a role in promotion decisions (Mellahi and Frynas (2003), p. 74). According to company records, the most common reasons given for promotion were “seniority, ability to achieve harmony and collective interests” (Mellahi and Frynas (2003), p. 74).

Although this is just one case, it does raise important issues about the risks and challenges in importing HR practices into an existing organizational culture and context, and may be worth reading as an

important cautionary tale. It also points to the importance of internally-coherent and -coordinated HR systems, rather than a patchwork of contradictory policies and practices, a topic that I will return to later.

Interventions / Innovations (“Micro” Policies and Practices)

The Scope of Work for this review specified that it “document both actual interventions / innovations (micro¹⁴) where activities have had a positive impact on worker retention and performance, and promising practice that perhaps does not yet have such an evidence base.” These interventions and innovations are listed in the table in Appendix 1, and this section provides additional information and discussion to supplement that table.

As mentioned earlier, I focused primarily on human resource policies and practices, rather than other types of innovations and interventions that organizations might undertake to improve the performance and retention of staff. I will structure this discussion according to the categories used to group innovations in the table, but it will become apparent that there is a fair amount of overlap and inter-relations among these categories.

1. HRM Practices and Systems

Given iNSCALE’s desire for an overview of the range of HR policies and practices covered by the management literature and believed to impact performance and retention, I prioritized finding and reviewing studies which provide a broad view of what are often known as High Performance Work Practices and High Performance Work Systems. This included several comprehensive meta-analyses and literature reviews, as well as a few strong empirical studies.

The findings are relatively consistent that certain HR policies and practices are correlated with better organizational performance, but it is very difficult to confidently isolate the causal direction. In other words, it may be that better HR policies lead to better outcomes, or it may be that better-performing units or organizations have the resources to commit to better HR policies, or that some other factor – such as strong and effective leadership – causes both improved performance and better HR policies. There are also lively debates (discussed in greater detail below) over whether good HR practices are universal (“best practices”) or contingent, and whether individual policies should be implemented or studied independently of one another or as packages or “systems” of interventions.

Ultimately, many of these policies are virtually standard practice and are widely believed to make a difference, and there is some empirical evidence that they do. The research is not at all clear how much systems matter versus individual practices, nor on how important it is to have policies that are internally coherent and aligned with the organization’s structure, strategy, and external environment.

Detailed discussion

¹⁴ “A micro activity may be a single application of a macro concept or a stand alone approach. Either way this micro activity is a single intervention / innovation which aims to achieve or contribute to the achievement of program or organisational goals.” iNSCALE project, *Scope of work: review of management, business and HR literature for innovations likely to lead to increased retention and performance of health focussed Community-based Agents (CBAs)*, August 2010.

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High Performance Work Practices (HPWPs) are human resource practices that are believed to result in better performance or other desirable outcomes, such as a reduction of dysfunctional turnover. There is no consensus on what count as HPWPs, but they are “generally thought to include rigorous recruitment and selection procedures, performance-contingent incentive compensation systems, and management development and training activities linked to the needs of the business.” (Becker et al 1997)

A major 2006 meta-analysis of HPWPs (Combs, et al (2006)) identified 13 practices that were defined as HPWPs in at least five separate studies.¹⁵ These are:

- a. Selection
- b. Compensation level
- c. Training
- d. Incentive compensation
- e. Internal promotion
- f. Participation (“degree to which employees can influence decisions”)
- g. Flextime
- h. Grievance procedures
- i. Employment security
- j. Teams
- k. Performance appraisal
- l. Information sharing
- m. HR planning

The authors group these 13 practices according to three “channels” by which they are believed to affect organizational performance: “increas[ing] employees’ knowledge, skills, and abilities (KSAs)... motivat[ing] employees to leverage their KSAs for the firm’s benefit, ... [and] empower[ing] employees to do so.” (Liu, et al, p. 504).

The term High Performance Work Systems is used to describe systems of such practices, usually with the connotation that these systems are internally coherent and aligned with the organization’s strategy and structure. (The universality or contingency of human resource policies will be discussed in more detail below.)

Findings

Findings for specific HR practices will be discussed below, but in summary, the existing evidence does show a positive relationship between individual HR practices and performance and/or retention of staff. For instance, the recent meta-analysis discussed above – which looked at 92 studies with data from more than 19,000 organizations – found that 10 out of 13 HPWPs studied were positively and significantly related to organizational performance, and the magnitude of these effects was “not only statistically significant, but managerially relevant” (Combs et al p. 517-518).

The same meta-analysis also tests for a “system” effect that goes above and beyond the aggregate effect of component practices. This is based on the theory that a coherent system of HR policies – particularly one that is vertically aligned with the company’s strategy and context and horizontally aligned with internal policies and systems – will have self-reinforcing tendencies and other interaction effects, and therefore a greater impact on performance and/or retention. Indeed, the meta-analysis

¹⁵ Another 9 HPWPs appeared in fewer than five studies. Combs, et al (2006) p. 509.

found that “the effect of a coherent HRM system is very strong... twice as large as that of using a single practice” (Liu, et al, p. 509) and the authors speculate that this system effect may be even larger because, as discussed below, the measured impact of individual HPWP effects may be biased upward by the system in which those individual practices are embedded (Combs, et al, p. 519). They also found that “human resource planning” – which could be considered a measure of vertical alignment – was more strongly related to performance than any other individual practice studied (Liu et al p. 509).

These findings should be viewed with caution, however, particularly with regard to claims that they prove that better HR practices lead causally to better performance. One recent article examined the methodology and causal inference in 68 previous empirical studies of HR systems and organizational performance measures, and found that very few, if any, had a sound empirical basis for drawing conclusions about causality. As the authors argue, “this body of work tends to lack sufficient methodological rigor to demonstrate that the relationship is actually causal in the sense that HR practices, when instituted, lead to higher performance.” (Wright, et al (2005), p. 410) For instance, the vast majority of studies use data on performance from one period and data on HR practices from a *later* period, which is exactly the opposite of what you would want to show that HR practices have a causal effect on subsequent performance.

There are several possible alternative explanations for the observed relationships. The relationship may be spurious, with both performance and HR practices affected by a third variable. For example, a strong leader might successfully push an organization to deliver both improved performance and better human resource policies. The data would show a relationship between HR practices and performance even though the two are not causally linked. Alternatively, there might be reverse causality. Perhaps high performance and/or lower turnover allows organizations the freedom and resources to implement more generous policies for their employees, while low performance and high turnover constrain organizations and make policies less generous. Again, the data would show a strong correlation, but would not support a conclusion that HR policies actually cause better performance and retention.

Wright and his collaborates test for causality with a more rigorous methodology.¹⁶ They found that HR practices were indeed related positively and significantly to organizational performance, but that the relationship was reduced “drastically” – often to where it was no longer statistically significant – when they controlled for past or concurrent performance. “These results suggest that the proposition that HR practices cause higher organizational performance should be, at best, tentative, and great caution should be exercised in interpreting past HR-performance research.” (Wright, et al, p. 432) Another recent study, which reviewed a number of literature reviews and meta-analyses as well as several empirical studies in the healthcare industry, also concluded that the evidence was encouraging but tentative. The literature review “illustrated the difficulty of establishing unequivocal links between single or multiple practices and performance outcomes,” the authors argued. “The majority of findings... remain equivocal.” (Harris, et al (2007), p. 457).

Other Issues

There are two debates in the study of HR practices and performance which are important to consider when viewing the research findings.

The first debate is over whether we can examine human resource practices individually or whether we must view them as part of a bundle, package, or system. Many say such policies can only really be

¹⁶ See the table in Appendix 1 for details about this study methodology.

understood as packages, and that efforts to isolate the impact of individual practices will overstate their impact, due to the tendency of organizations to implement HPWPs in combination. As Huselid argued in his extremely highly-cited 1995 article, “to the extent that any single example reflects a firm’s wider propensity to invest in High Performance Work Practices, any estimates of the firm-level impact of the particular practice will be upwardly biased” (Huselid (1995), p. 641).

Others argue the opposite, that practices should be studied independently, because aggregate measures can mask variation that exists within and amongst component HR practices. For instance, Van Iddekinge, et al (2009) examined actual unit-level implementation, over time, of two HPWPs – rigorous test-based employee selection and training – on performance and retention. Tests and training were both standard policy across the company, but the authors discovered significant variation in how closely these policies were followed across time and across different units. Moreover, the unit-level correlations between these two practices were relatively small for a given period of time, and the evidence suggest that the two practices might impact unit performance in different ways. (Van Iddekinge, et al, p. 840). Based on this, the authors conclude that it is essential to examine the “unique effects of individual HR practices,” and that the failure to do so “may inhibit advances to both theory and practice.” (Van Iddekinge, et al, p. 841).

The second debate is over contingency versus universalism – i.e., the extent to which policies and systems must be firm- and context-specific or whether there are relatively universal “best practices” that can improve performance and retention across industries and situations. Most studies take an implicitly universal approach, drawing generalized findings from a particular empirical study. Others take issue with this, arguing for contingency (Becker, et al (1997); Roca-Puig, et al (2006)). “HRM systems only have a systematic impact on the bottom line when they are embedded in the management infrastructure and help the firm achieve important business priorities,” argue Becker, et al (1997).¹⁷ Firms may be able to adopt “best in class” practices from their competitor firms, but these “will only have a strategic impact if they are appropriately aligned with the rest of the HRM system and with the firm’s broader strategic infrastructure,” and in any case will not confer competitive advantage if they can be easily replicated by competitors. (Ibid.) Policies must also be “internally coherent”, and firms that do not consider the alignment of policies may end up with what the authors dub “Deadly Combinations,” which are “policies and practices that might well make sense in isolation but... are a recipe for disaster” when combined with other HR management policies in the firm. (Ibid.) One example they offer is a system that encourages teamwork but rewards individual performance.

2. Rigorous Employee Selection Processes¹⁸

One important area of human resource practice relates to the selection (hiring) of staff. This topic has been reasonably widely studied, and I reviewed several meta-analyses, literature reviews, and strong empirical studies.

In summary, there are a number of rigorous employee selection processes for which there is relatively solid empirical evidence of their effectiveness. Employment testing is particularly common and also particularly well-studied, although (as with all HR practices) causality is sometimes difficult to nail down. (For example, some people argue that better performance and higher retention allow organizations to

¹⁷ The page numbers for this article were not visible in the electronic version available online, and therefore these quotes cannot be cited by page.

¹⁸ Related to selection is recruitment: the effort to attract a larger and higher-quality pool of candidates from which to select employees. For an explanation for why recruitment is not addressed here, see Appendix 2.

Working paper

be more selective, thereby leading them to use more rigorous selection techniques, which then appears in the data as a correlation between selection and performance but with reverse causality from what we hope to see.) Sometimes the most effective practices go against the instincts of those responsible for hiring – e.g., structured versus unstructured interviews – so it is worth designing hiring practices around the available evidence, and also paying close attention to ensure that the chosen methods are actually used.

It is interesting to note that many of these practices have become *de rigueur* in many industries, including private companies and large public sector institutions, but to my knowledge have not been widely used in the selection of community-based health workers. The use of psychometric tests and other formal selection criteria may be a departure from usual practice in selecting CBAs, particularly the involvement of communities in that selection, and may face resistance from the communities themselves and also from government agencies, NGOs, and other implementing institutions. However, their use would also be quite innovative for that reason, and it is possible that a compromise procedure might allow for both rigorous selection and the involvement of communities. (For example, a test could be used to select a pool of eligible candidates who meet minimum criteria, and the community then empowered to select among those candidates.)

Detailed discussion

In essence, employee selection practices link directly to the individual differences discussed in brief in the Macro Concepts section above. These mechanisms help organizations increase the likelihood that new employees have the stable and/or job-specific characteristics that will make them more likely to succeed and less likely to voluntarily leave the organization.

At a macro level, employee selection processes do seem to matter for organizational performance. The meta-analysis by Combs, et al found that selectivity of hiring was positively and significantly related to measures of performance, including retention. The strength of this relationship was “modest,” equal to the average of all HPWPs studied (Liu, et al p. 506).

A large review of meta-analytic studies from the last 20 years on the predictive power of 19 different employee selection methods reveals significant variation in the validity of these measures (Schmidt and Hunter (1998). Their findings are summarized in the chart below, which is based on the data from Schmidt and Hunter but was printed in a later article by different authors (Robertson and Smith (2001), p. 443). The values on the left-hand side are the predictive validity for success in training, and on the right is predictive validity for job performance. The top three values are for combinations of techniques.

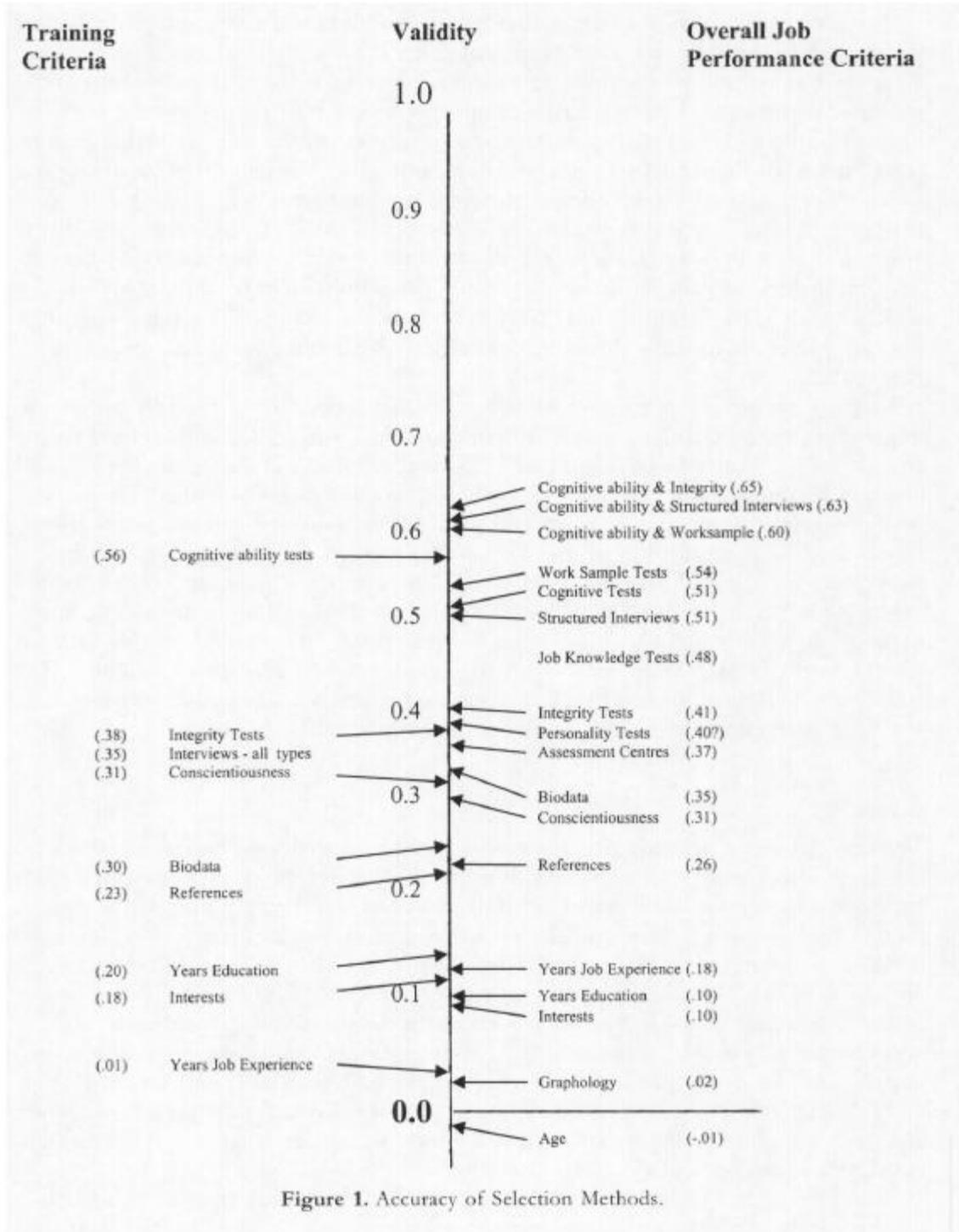


Figure 1. Accuracy of Selection Methods.

I will discuss several of these selection methods in greater detail below, including employment tests (cognitive, integrity, and personality), biodata, and structured interview.

Biodata

Working paper

This is the use of standardized questionnaires or application scoring systems to select candidates on the basis of biographical characteristics (ranging from concrete to attitudinal) that have been shown to correlate with performance and retention in particular positions. This is most effective if characteristics are identified empirically, by testing large numbers of employees – ideally over time to capture turnover as well as performance – in order to find statistical correlations between biographical characteristics and desired outcomes. Future candidates are then scored according to these characteristics, and this score is a factor in employment decisions. One study of the UK accounting industry found that the use of biodata scores “made it seven times more likely to recruit a success,” (Fincham and Rhodes (2005), p. 160, citing Harvey-Cook and Taffler (2000)). The meta-analytic study discussed above found that biodata did have a significant validity, but that this virtually disappeared when the model also included tests of general mental ability (GMA) (see below), because the two are very highly correlated (Schmidt and Hunter (1998)).

Biodata scoring systems may be effective, but can be difficult and expensive to develop initially if done empirically, and it is not clear that they offer significant incremental benefits beyond more standardized psychometric tests.

Psychometric Testing

In the Macro Concepts section I discussed the main concepts underlying psychometric tests of cognitive ability and/or personality. These tests are controversial, but extremely widely used; according to Fincham and Rhodes, the use of “point of entry” selection test reached about 75% among large firms, though much lower (16%) in professions and smaller employers (Fincham and Rhodes (2005), p. 161).

A summary of the research findings on different types of tests are as follows. Details are available in the table in Appendix 1.

- Cognitive tests: A major review of meta-analytic studies found that General Mental Ability (GMA) – also known as “general cognitive ability,” “general intelligence,” or “G” – is one of the strongest predictors of job-related performance (Schmidt and Hunter (1998), p. 264). Tests of GMA have been widely used across a range of industries, and have been rigorously tested for validity and reliability, usually with groups of people from developed countries. However, they would probably have to be adapted and validated for use for CBA candidates in the context of very poor countries.
- Integrity tests: Evidence suggests that these predict not only counterproductive behaviors but also job performance overall. (Schmidt and Hunter (1998), p. 267). Again, it would be necessary to make sure the tests are valid and reliable for CBA candidates.
- Personality tests: A very extensive recent review of the literature makes a compelling empirical case that personality traits do matter to job-related performance. Specifically, two of the Big Five traits – “Conscientiousness” and “Emotional Stability” – were found to validly predict performance across a wide range of jobs (Barrick and Mount (2005), p. 360). Three other characteristics are valid predictors for specific types of jobs. With relevance for CBAs, both “Extraversion” and “Agreeableness” have been found to predict performance for jobs that involve significant amounts of interaction with others: “Agreeableness” where interaction involves “helping, cooperating, and nurturing others,” and “Extraversion” in jobs like sales and management, where interaction involves “influencing others or obtaining status and power.” (Barrick and Mount (2005) p. 360). “If working in a team comprises an important component of

the work, Agreeableness may be the single best personality predictor,” they argue (Barrick and Mount, p. 360).

- Mixed / combined tests: In practice, many organizations use employment tests that include several different types of questions to test knowledge, skills, attitudes and other characteristics (KSAOs). One rigorous longitudinal study of the use of this sort of mixed test in a food services company found that selection was positively related to unit-level performance, but the direction of causality was not clear. (The authors speculate that actually improved performance and reduced turnover lead to more consistent application of the test as a requirement for employment.) (Van Iddekinge, et al (2009), p. 839)

Structured Interviews

Structured interviews are designed to be systematic, structured, and consistent across candidates, in order to overcome some of the problems that people confront in accurately perceiving and judging others in an interview setting, such as impression formation, stereotypes, primacy and recency effects, and ethnocentric bias (Fincham and Rhodes pp. 152-156). The addition of structure make interviews dramatically more effective in predicting job-related performance. For instance, one 1997 study cited in Fincham and Rhodes found that unstructured interviews could predict only 4% of the differences in job performance, but structured interviews could predict 36%. (Anderson 1997, listed in Appendix 2, as cited in Fincham and Rhodes p. 156.)

There are two main types of structured interviews. Situational interviews give candidates identical hypothetical situations and ask them to explain how they would deal with the situation. Behavior description or past behavior interviews ask people to describe actual situations from their own past. (Fincham and Rhodes, p. 156). One meta-analysis examined the relative validity of the two types of structured interviews. It found that both question types are valid predictors of future job performance, but that studies using past behavior questions have a higher validity than those using situational questions, after controlling for the use of “descriptively-anchored rating scales.” These standardized scales are almost universally used in situational interviews, and were shown to improve the validity of past behavior interviews (Taylor and Small (2002)).

Evidence suggests that structured interviews, if properly executed, can be strong predictors of employee performance. The meta-analysis by Schmidt and Hunter (1998) found that unstructured interviews had the second-highest validity of all employee selection methods studied, equal to tests of GMA. Moreover, they found that structured interviews have significant incremental predictive power when combined with GMA tests, leading the authors to conclude that “the combination of a structured interview and a GMA test is an attractive hiring procedure. It achieves 63% of the maximum possible practical value (utility), and does so at reasonable cost.” (Schmidt and Hunter, p. 265)

The biggest challenge for the use of structured interviews may be that interviewers and candidates alike tend not to like them (Fincham and Rhodes (2005), p. 157). This may cause interviewers not to execute the interview as intended, or it may provoke resentment on the part of candidates. Another challenge will be ensuring that interviewers have the necessary skills and expertise in how to administer structured interviews.

3. Training and Development

The category of HPWPs known as “training and development” includes formal and informal training programs, coaching and mentoring, and policies to create an “internal labor market” with opportunities

Working paper

for internal promotion and career development within the firm. Research on this area is quite extensive, so it was necessary to be selective and reserve a few topics for further research. (See Appendix 2 for details.) I review a selection of studies that examine the relationship between training and development practices and performance and retention, including the Combs, et al meta-analysis of HPWPs and several quality longitudinal studies of service industries.

In summary, there is evidence that training improves performance, at least in the short term, and that it can reduce turnover in certain circumstances. However, training can also increase the “ease of movement” for employees and therefore increase turnover, particularly when training programs help employees to develop easily transferrable skills or send a clear signal to the market about the person’s skills and expertise. For this reason, informal on-the-job training and/or training that develops firm-specific skills may be better than formal training that results in transferrable, highly visible qualifications.

Detailed Discussion

There are essentially three main types of employee training programs: formal, employer-supported off-site training (e.g., tuition reimbursement programs); formal, employer-provided on-site training (e.g., employee induction programs); and informal, on the-job training (e.g., coaching and mentoring). In addition, training and development policies include those which promote an “internal labor market” by providing opportunities for development and career advancement within the firm.

Tuition reimbursement programs and other employer-supported off-site training opportunities can be an attractive benefit for employees, but may also increase turnover if the programs are not well-designed. One recent study looked at nearly 9,500 employees of a manufacturing company which offered generous and relatively unrestricted tuition reimbursement benefits and training bonuses for any degree or professional development program, whether related to the industry or not. They found that turnover was reduced among participating employees while they were in school, but increased significantly for those who earned a degree, particularly a graduate degree. If employees were promoted after earning a degree, however, their turnover was reduced. (Benson, et al (2004))

Formal, on-site, employer-provided training programs, such as formal induction programs, have had a consistently positive relationship with performance in a number of meta-analyses and quality empirical studies (Combs, et al (2006); West, et al (2002); and Van Iddekinge, et al (2009)). In addition, Van Iddekinge, et al use sophisticated empirical methods to test different causal models for the data from their longitudinal study, and conclude tentatively that training leads to (causes) unit performance (Van Iddekinge, et al (2009), p. 839).

Findings on the relationship between formal training and turnover are more mixed. Van Iddekinge, et al (2009) find a negative relationship with turnover in their longitudinal study. Haines, et al (2010) find the opposite: that employer-provided training (both “classroom” and “on-the-job”) was related to higher levels of turnover (p. 240). Their study was based on data from a large, multi-industry survey of general managers and HR managers in Canada, and the authors acknowledge that they cannot conclude causality from their two-year panel design, and that the causal relationship may be reversed (i.e., high turnover requires high levels of training to bring new employees up to speed) or spurious.

The evidence for informal on-the-job training, mentoring, and coaching is also quite positive. One well-designed, longitudinal empirical study of telephone operators found that the on-the-job coaching had a significant positive impact on performance, as measured by call handling time (Liu and Batt (2007), p. 83). This impact was greater for those for whom pre-training proficiency was lower (p.. 85). The study

also looked at who provided the training, and found that low-proficiency workers benefited more from supervisor-provided than peer-provided coaching (p. 85).

Another promising innovation, but for which evidence was limited, is the “polyvalent” training common in Germany. In this system, job rotation and cross-training opportunities help develop flexible, multi-skilled industrial sector employees who are better able to cooperate across hierarchical divisions (Fincham and Rhodes, p. 683-684).

Finally, policies to promote employee training and development by means of an internal labor market are found to be very important, particularly for employee retention. Several studies found a negative relationship between firms’ approach to “hiring from within” and employee turnover (Benson, et al (2004); Combs, et al (2006); Haines, et al (2010)). As one study explained, “Staffing policies that emphasize hiring from within provide participants with the opportunity to move into the firm's more desirable jobs and may help build a strong corporate culture that is conducive to employee retention.” (Haines, et al (2010), p. 241) One study looked at the interaction between individual performance and turnover, on the grounds that firms should be more concerned with retaining high-performing staff and less concerned about turnover among low-performing staff (Nyberg (2010)).¹⁹ This study found that high promotion rates help strengthen the negative relationship between performance and turnover, meaning that opportunities for promotion made high-performing employees less likely to leave the firm, although this finding is somewhat confounded by the close relationship between promotion and pay rate (Nyberg (2010), p. 448-451).

4. Performance Measurement and Communication

A comprehensive discussion of techniques for measuring (individual and/or organizational) performance seemed beyond the parameters of this literature review. However, I did include one common and somewhat innovative measurement technique (“mystery shoppers”) as well as the Balanced Scorecard (BSC), an extremely influential framework for measuring and communicating a range of important performance metrics. I also discussed several options for how firms can actively share information with employees about organizational and/or individual performance. These practices link with employee involvement practices and performance-based incentives, discussed below.

The evidence on communicating performance information with employees is far from conclusive, but is suggestive that doing so may improve commitment, satisfaction, performance, and/or retention. Given that INSCALE will need to develop metrics for measuring performance for monitoring and evaluation purposes, it may be worth adopting some of these innovative performance measures and/or developing systems for communicating information about performance to employees and CBAs.

Detailed discussion

This section will move freely between individual-, unit-, and organization-level performance metrics. For a more detailed discussion about the different types of performance that organizations sometimes measure, see the section on Macro Concepts, above.

Mystery shoppers

¹⁹ Turnover by staff in high and low performance groups is sometimes defined as “dysfunctional” versus “functional” turnover. See Macro Concepts section for more information.

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The “mystery shopper” technique is one example of how service firms can be creative about collecting objective data on performance. The fast food company studied by Van Iddekinge, et al (2009) uses mystery shoppers to measure customer service at its various stores. These individuals are hired and trained by the corporate headquarters, but are unknown to the individual unit managers and staff. They visit each store (unit), purchase a meal, and rate each unit on food quality, customer service, and cleanliness (Van Iddekinge, et al (2009)). It is easy to imagine how this method could be adapted to the primary health sector, with obvious limitations for safety and ethics. For instance, an adult “mystery patient” could go for a simple check-up and rate the behavior of nurses, doctors, and the cleanliness of the facility, as long as they were not subjected to any invasive or otherwise dangerous procedures. It is less clear how it might be applied to the work of CBAs, who presumably know all the members of their community, but it may be worth considering.

Balanced Scorecard

The Balanced Scorecard (BSC), introduced in the 1990s, is an extremely popular performance measurement technique used widely by private companies and non-profit organizations, including a number of healthcare institutions. In 1997, BSC was named “one of the most influential management instruments of the 20th century,” and a study in 2007 by consulting firm Bain & Company found that 66% of 1,221 global companies were using BSC (as reported in De Geuser, et al (2009), p. 93-94). Some experts argue, however, that use of the BSC has far outstripped the evidence base for its effectiveness, if any.

The basic idea of BSC is to measure and report, in a quick and accessible format, a “balance” of both financial and operational macro-level indicators. Usually the development of these indicators is a participatory and interactive process involving a wide range of staff from across the organization, and some people argue that the benefits from BSC derive primarily from this process (Mooraj, et al (1999), cited in de Gueser, et al (2009)). Appendix 1 lists several studies of BSC, including a number of case studies (one from the Mayo Clinic) on how organizations go about developing and implementing the BSC. However, none of these offer convincing empirical evidence on the link between BSC and staff performance or retention, and the case studies make clear that the process of developing and implementing a comprehensive BSC framework can be costly, complex, and time consuming, and requires high capacity for collecting, managing, and utilizing performance data.

Communicating with employees about performance

Usually when employees are engaged in conversations about performance at work, it is part of a performance appraisal process and is based on their own individual performance, and possibly the performance of a small group or unit of which they are a part. The outcome of the appraisal is often but not always tied to compensation, promotion, or other rewards or punishments. There is some evidence that performance appraisal, if done well, is related to performance outcomes. For example, in a review of existing literature on performance appraisal, West, et al (2002) argue that there is “considerable evidence that the extensiveness and sophistication of appraisal are linked to changes in individual performance.” (West, et al (2002), p. 1301). The authors then test that proposition with a new empirical study of acute care hospitals in England, and find that the sophistication of performance appraisal had the strongest negative relationship with patient mortality of three HR practices studied, although they acknowledged that it was not possible to draw a causal conclusion from their study design. (West, et al (2002), p. 1308).

Some organizations are now trying to have a different kind of conversation about performance with their employees. This conversation focuses not on their own individual performance but on the organization's core strategy, news and issues, and performance measures. Sometimes known as "business literacy" programs, these initiatives are meant to give employees a greater understanding of the business and how their work contributes to overall performance. Some experts argue that communication of this sort can improve employee commitment and satisfaction, and lead to improved performance and reduced turnover. I could not find conclusive evidence on the impact of these programs, but there are some promising anecdotal accounts (Hawk and Sheridan (1999)) and non-significant but promising statistical results (Combs, et al (2006) p. 516; and Liu, et al (2007), p. 508).

5. Performance Incentives

The review uncovered a number of quality studies that address pay-for-performance and other types of financial incentives, including a large meta-analysis (Combs, et al (2006) and Liu, et al(2007)), a large longitudinal study that examined determinants of turnover among high performers (Nyberg (2010)); and a large cross-industry study of turnover (Haines, et al (2010)).

Unfortunately, I did not find as much on non-financial rewards, despite efforts to actively seek articles on that topic. I strongly suspect that there has been research on this topic which could be found with more time to speak with experts in the area and to do a more comprehensive review of the literature. This may be a valuable area for further inquiry.

In summary, the research does seem to support a link between financial incentives and organizational performance, but the relationship with turnover is less clear. This may be because incentive compensation decreases turnover among high performers, but increases turnover among low performers, and most study designs do not distinguish between these two groups.

It is also important to acknowledge that there may be significant cultural or social resistance to performance-based pay in the contexts in which ICCM programs operate, and which is generally not confronted or addressed in the studies cited here.

Detailed discussion

The most important principle for designing effective performance incentive programs is to align the incentives with desired behaviors. In other words, you will get what you pay for, so make sure you are paying for what you want to get. Remarkably, this principle is frequently neglected by organizations. A landmark paper in 1975 by Steven Kerr, "On the folly of rewarding A, while hoping for B," offers a number of excellent examples of perverse incentives instituted by otherwise sensible institutions in the areas of politics, war, medicine, sports, and academia, among others. This highly accessible and entertaining piece is one of the most well-known and widely-read management articles, and would be wise reading for anyone developing a system of performance incentives.

As discussed by Ulrich and Brockbank (2005), there are a very wide range of non-financial rewards that can be offered to employees. Many of these are often awarded randomly or universally to all staff, but could instead be allocated according to performance. The authors categorize these rewards as follows (Ulrich and Brockbank, p. 22):

- a. *Vision*. "A strong vision gives employees pride in the company."

Working paper

- b. Opportunity. “The chance to shine,” for example, by giving presentations to senior managers, or attending training usually reserved for more senior staff.
- c. Incentive. Recognition, praise, gratitude.
- d. Impact. “People like to make a difference.” The authors suggest this can be achieved by decentralizing decision-making, encouraging and rewarding employee suggestions, and allowing employees to represent the company externally.
- e. Community. Activities outside of work, or allowing teams to participate in selecting future team members, can help build community.
- f. Communication. “Access to information may be a reward.” Some types of communication – about company news or opportunities, for example – may be made available first or only to high-performing employees.
- g. Experimentation. This may involve flexibility in hours, working place, and working conditions.

Financial rewards also come in a range of different types and formats, which Ulrich and Brockbank group in four “clusters” (Ulrich and Brockbank, p. 22):

- a. Short-term cash. This includes “Base salary or on-the-spot cash compensation,” and it is important that the levels of compensation are equitable in terms of both external market rates and internal salary structures
- b. Short-term equity. Stock grants.
- c. Long-term cash. This is performance pay that is “based on continuing performance,” often over three years.
- d. Long-term equity. Stock options.

Empirical studies of non-financial incentives were surprisingly absent from the literature collected for this review, with the exception of one study with a relatively weak methodology and no details about the type of “rewarding” being studied (Elmadag, et al (2008)).

Financial incentives are used in many industries, and are supported by many anecdotal accounts of positive impact, such as the case study of a gainsharing program presented by Hawk and Sheridan (1999). The one comprehensive study of the impact of financial incentives on performance in this review is the major meta-analysis by Combs, et al (2006) discussed earlier. They found that incentive compensation was the “most frequently studied HR practice, with 31 relevant studies found... most of which reported a positive link between incentive compensation and performance,” (Liu, et al (2007), p. 506). The magnitude of this relationship was roughly equal to that of training or internal promotion, but smaller than the average for all HPWPs studied (Combs, et al (2006), p. 516). In short, incentive compensation may be related to improved performance, but is perhaps not the most effective method for improving performance.

The relationship between performance incentives and turnover is much murkier, however. This may be because the theory suggests that performance-based incentives may actually increase turnover among low-performers while decreasing turnover among high-performers, but most studies do not distinguish impact according to employees’ relative performance (Haines, et al (2010)). For instance, Haines, et al (2010) use a large multi-industry dataset from Canada which does not distinguish by individual performance, and find not much evidence for, but no evidence against, the hypothesis that variable pay

will decrease voluntary turnover. This fits the pattern they found in previous research, which they felt was also inconclusive (Haines, et al (2010), p. 232).

One rigorous longitudinal study did examine whether and how pay for performance and other HR practices moderate the relationship between individual performance and turnover (Nyberg (2010)). Using “perceived pay for performance” as the independent variable, they found no significant moderating impact (Nyberg (2010), p. 448).

Although none of the studies address this, it seems possible that there may be some resistance to performance-based incentives – both financial and non-financial, although perhaps more so with the former – in the countries and communities in which iCCM operates. Variable pay programs can involve some financial uncertainty (Haines, et al (2010), p. 241), which may be problematic in contexts of high poverty. In addition, in many places there is a strong tradition of compensation being tied only to length of tenure, position, and possibly concrete qualifications such as education or certification. A shift to performance-related pay is quite a radical departure from that tradition, and may well meet significant resistance, as in the Algerian case study by Mellahi and Frynas (2003) discussed above.

6. General Pay and Benefits

The review included a handful of high-quality studies that looked at the effect of the level of pay, overall pay growth, and/or the generosity of benefits on performance or turnover. (Combs, et al (2006) and Liu, et al (2007); Haines, et al (2010); and Nyberg (2010)). Overall, the research findings seem pretty consistent that higher pay, greater pay growth, and more generous benefits are correlated with higher performance and lower turnover, although the causality is not always clear.

The most important consideration in implementing interventions related to compensation and benefits, of course, is financial sustainability. The demonstrated effect of pay growth may argue for starting salaries relatively low and allowing for frequent but relatively small increases over time, but the financial sustainability of this approach must also be considered.

Detailed Discussion

One large meta-analysis (Combs, et al (2006)) found that the effect of compensation level on performance was positive and slightly higher than for other HR practices studied, although they also note that some studies found a small negative relationship. Another major study (Haines, et al (2010)) found that both relative pay and generosity of benefits were negatively related to turnover in the following year, but that these relationships became insignificant or only marginally significant in a multivariate regression (Haines, et al (2010) p. 240).

Finally, the Nyberg (2010) longitudinal study argues convincingly that pay growth, in addition to overall pay, interacts with employee performance such that higher performers are less likely to leave when they experience pay growth, even if this is not explicitly tied to performance. “When pay growth was high, the negative relationship between performance and voluntary turnover was stronger,” the authors conclude (Nyberg (2010), p. 446).

7. Supervisors and Managers

I spent less time searching for literature on supervision because iNSCALE has commissioned another literature review specifically on that topic, but I did review a few studies and innovations that emerged in my search. These few studies suggest that quality of supervision does matter, but most are not

explicit about how organizations can develop good supervisors. However, one paper discusses the development and testing of competency framework for nurse managers, which in theory could be used to select or appraise supervisors, or possibly to design training programs to build the required competencies.

Detailed Discussion

Several of the studies focus on what they call “frontline managers” or “frontline supervisors,” which includes technical or frontline service staff who also have supervisory responsibilities, as opposed to higher-level professional managers. There is a strong argument that these supervisors, literally the first line of supervision above core frontline workers, are the most important link in the supervisory chain.

One large-scale study of US federal agencies found that frontline supervisors and “supervisory management” were important to agency effectiveness (Brewer (2005), p. 506), although the study design and perceptual performance measures bring some of these claims into question. (See table for details). However, the same conclusion is drawn by a much more rigorous empirical study of eight hospital patient care teams, each headed by a nurse manager. In this fascinating study, the researchers found first (to their surprise) that hospital units whose teams were “especially well structured and managed had significantly more medication errors than other units” (Hackman (2003), p. 912). Upon further investigation, however – including study of the management styles of nurse managers and the social climate of each unit – they found “nearly a perfect match between social climate and medication errors,” such that more open units had higher error rates and more “closed” or authoritarian units had lower error rates. They concluded that the actual errors did not differ between units, but that the willingness to talk about such errors – and thereby to acknowledge and find solutions for them – did differ. In short, “nurse managers who preferred a more open climate have created self-correcting teams whose members were actively encouraged to report and discuss medication errors without fear of recrimination,” (Hackman (2003) p. 913))

Finally, a dissertation by DeOnna (2006) starts from the assumption that nurse managers matter to performance outcomes, particularly staff retention, and then describes the process of developing and validating a competency framework for nurse managers. This process incorporates findings from the literature, a job analysis, interviews with “exemplary” nurse managers, and input from a panel of experts. In theory, the resulting competency framework could be used to select or appraise nurse managers, or possibly to design training programs to help them build the required competencies. However, the study does not test the predictive power of this framework for nurse manager performance, staff retention, or other outcomes.

Although the evidence on supervision reviewed here is limited, there are a few implications for the development of innovative solutions for CBA performance and retention. First, the literature provides a compelling argument that in order to improve the performance and retention of CBAs, one should also look one level above, at their frontline supervisors, and possibly also at higher-level managers. Second, it raises the important point that *if* “good supervision” matters, we must also understand what is meant by good supervision – what behaviors and characteristics improve performance and retention among supervisees – and then how to select for, encourage, and/or develop those skills and behaviors.

8. Employee Involvement

The review includes quite a few studies that deal with employee involvement (EI) practices of one type or another. These practices are quite varied, and the results are mixed. In part, this may be because EI

practices can be challenging to implement in a meaningful way, and researchers cannot always distinguish between well-run and “meaningful” EI initiatives and those which are merely superficial or even counterproductive. It may also result from possibly divergent goals of EI initiatives: to improve employees’ work experiences in order to reduce absenteeism, turnover, and other negative outcomes; or to better utilize employees’ skills and ideas in order to improve business performance (Shapiro (2000), p. 306).

In summary, there is probably reason, as one study says, to be “cautiously optimistic” about teamworking and other EI practices (Liu, et al (2007), p. 508) but only when such initiatives are well-designed and well-managed, and are appropriate to the context and acceptable to the employees themselves. At their worst, EI initiatives may be resented by employees and have the opposite effect from what was intended.

Detailed Discussion

A wide variety of interventions fall under the rubric of “employee involvement” (EI), ranging from relatively modest employee suggestion programs to dramatically restructured modes of working which aim to eliminate traditional hierarchal management structures and empower employees to work autonomously and in groups. This complexity and consequent ambiguity is part of what makes it difficult to study the impact of EI initiatives in a manner that allows for generalized findings. No one EI initiative is the same as any other.

In addition, the goals of one EI initiative may differ greatly from the goals of another. As Shapiro (2000) argues, older EI efforts were focused on overcoming such problems as absenteeism and turnover among employees, and were (in Europe, at least) sometimes union-led. In contrast, the new wave of EI is focused on improving business performance and is linked to strategic goals such as innovation, customer satisfaction, and flexibility (Shapiro (2000), p. 306). These goals may sometimes be quite divergent, or even contradictory, and may change dramatically their impact on workers and out performance outcomes.

To illustrate these points, it may be helpful to contrast an EI initiative with psychometric testing. The latter is a clear, discrete, well-defined intervention, and there are a wide variety of relatively standardized, quality tests on the market that any organization can implement without much difficulty. That makes it relatively easy to determine whether an organization is using psychometric tests in employee selection, and then to analyze the impact of those tests, if any, on performance outcomes. Contrast this with “autonomous work groups” (AWGs), an EI innovation, which may be understood and implemented in very different ways by different organizations. AWGs are also difficult to implement: they require a shift in the structure of work and in the traditional power structures of an organization, and it may not be immediately evident whether an organization has achieved a meaningful level of involvement through AWGs or whether the groups are merely superficial and leave the traditional power relations between managers and employees intact. This makes it difficult to study AWGs in a way that allows for generalized findings.

In part for this reason, the available research on employee involvement shows very mixed findings. Several studies found that EI initiatives really did not change much about the employee experience, while others found that employees resented and resisted some EI initiatives. (See Shapiro (2000) and various studies cited in Fincham and Rhodes (2005), including McKinley and Taylor (1996) and Pollert (1996).) One experimental study that found that employees working in autonomous work groups, relative to control groups, had “greater job satisfaction, perceptions of higher job complexity, and

improved leadership style,” (Fincham and Rhodes (2005) p. 428, discussing a study by Kemp, et al (1983)), while others found exactly the opposite.

Some studies found positive impacts from specific EI initiatives, including formal dispute resolution processes (Haines, et al (2010)) and teamworking. For example, West, et al (2002) found a significant decrease in patient mortality associated with an increase in the percentage of employees working in teams. Finally, one large meta-analysis looked at eight studies of the effect on performance from policies that promote teams, and the authors concluded they were “cautiously optimistic about the value of teams,” but not yet confident to recommend the practice wholeheartedly. (Liu, et al, p. 508)

In summary, I think we can say that with EI, “the devil is in the details.” EI may work in some situations, but only if well-designed and well-managed, and if the new working practices are appropriate for the particular organizational context and acceptable to the employees involved. Sometimes EI improves employees’ experience and/or relevant performance outcomes, and sometimes it has the opposite effect, which probably means that implementation of EI should be preceded by careful consideration, planning, and consultation.

9. Other

There are at least two types of innovations that are worth including but did not easily fit in the categories above.

Employment Security

The meta-analysis by Combs, et al (2006) also looked at the effect of employment security, whereby companies make an effort to retain existing employees, even during economic downturns or other times when layoffs may be likely. They find that all studies which look at employment security showed a positive impact (Liu, et al, p. 507), and the magnitude was equivalent to that of training or incentive compensation (Combs, et al, p. 516). “Evidence seems to support the view that employees possess tacit knowledge that is a vital contributor to firm success... [which] is at least partly lost through downsizing and restructuring.”(Liu, et al, p. 507).

Stress Reduction and Employee Support Services

Only one study dealt with this topic and it had an extremely weak design (Van Zyl and Lazenby (2002)). However, there does seem to be a strong argument for why such programs might be important and effective, particularly in high-stress work environments. Psychological and emotional support services, including stress reduction programs, are commonplace in hospitals and other health facilities in developed countries. Arguably, the average CBA must manage even higher-stress work experiences than their colleagues in Europe or the US, due to high mortality rates and limited medical resources available. They also often face unique social pressures due to their relative status in the community, and often are unable to meet the resulting demands placed upon them. In this context, there may well be an argument for psycho-social support for CBAs.²⁰

²⁰ An innovation to provide psychosocial support to health workers to help them cope with stress is currently being implemented in Sierra Leone, as part of the *Innovations for Maternal, Newborn and Child Health* initiative of Concern Worldwide, with which the author was previously affiliated. For more information, see <http://www.innovationsformnch.org/country/SierraLeone.asp> (09/12/10).

Conclusion

This review has covered a wide range of concepts and potential innovations, but only skimmed the surface of the relevant management, business, and human resources literature. INSCALE may wish to consider delving further into specific areas that emerged in this review, particularly those which are under consideration for implementation, in order to benefit more from the depth of management scholarship in those particular areas. In addition, there are many topics which did not receive sufficient treatment in this review, and some that were omitted entirely. These are outlined in Appendix 2 as opportunities for further research.

Overall, based on the sources reviewed here, it seems that there is generally positive but inconclusive evidence that HR practices can have an impact on performance and turnover. There does seem to be a compelling argument that HR practices should be designed and implemented as coherent systems, rather than haphazard patchworks of sometimes contradictory policies. It also seems clear that such systems should be designed to fit the particular organizations and contexts in which they will be put into action. For this reason, I will not recommend any specific HR practices, but instead encourage those who know the project and the context well to consider the practices identified here in relation to employee selection, training and development (including policies to create an internal labor market), performance measurement and rewards, general pay and benefits, supervision and management, employee involvement, and employment security and stress reduction and support.

Appendix 1: Table of Innovations

See separate file.

Appendix 2: Table of Select Further Reading

See separate file.

Appendix 3: Scope of Work

See separate file.

Bibliography

In an effort to balance clarity and comprehensives, I have included three separate reference lists. The first lists works cited in the main text of the report and/or in Appendix 1, the table of innovations. The second lists works cited in Appendix 2, the table of further reading. The third lists additional sources read as part of this literature review but not cited in the text or tables.

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Table of Innovations from Business / Management / Human Resources Literature

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0	1	2	3	4	5	6	7
Category	Innovation	Source	Methodology		Evidence	Issues which may impact feasibility, acceptability and scalability	Moderators of impact
			Approach	Tools			
HRM Practices and Systems	High Performance Work Systems (HPWS) and component practices. High Performance Work Practices (HPWPs) are HR management practices believed to improve performance, and HPWS are systems of such policies. Some experts argue for a systems approach, where we focus not on individual policies and practices but on HR systems overall. They argue that systems should be internally consistent so the practices reinforce each other, and some argue should be aligned with organizational strategy and context. (See the main report for a discussion of the <i>Universal vs. Contingent debate in HRM</i> .) There is no consensus on what counts as an HPWP, but are "generally thought to include rigorous recruitment and selection procedures, performance-contingent incentive compensation systems, and management development and training activities linked to the needs of the business." (Becker et al 1997)	Akhtar, et al (2008) "Strategic HRM Practices and Their Impact on Company Performance in Chinese Enterprises."	Not a very strong research design, but does explicitly examine the question of cultural and national context, and whether strategic HRM is relevant and valid in China, and whether these practices have been modified for implementation in China. Survey (questionnaire) of general managers or their deputies and HR directors at manufacturing and service sector firms in 3 cities. Looks at a large number of HR practices and uses multivariate analysis to examine their relationship with financial performance and "product/service performance". Information on HR practices and performance come from the same point in time.		Practices were widely implemented and had a positive relationship with performance. Found that all HRM practices studied except profit-sharing were related with product/service performance, and that training, participation, results-oriented appraisals, and internal career opportunities, and profit sharing were significantly related to financial performance. <i>Note: study design does not allow any conclusions about causality, though author does conclude that the HRM practices had "impact" on performance.</i>	Cultural factors and structure of the economy.	
		Becker et al (1997), "HR as a Source of Shareholder Value: Research and Recommendations."	No new research, but reviews existing literature and provides a theoretical framework for the impact of "contingent" HRM systems.	N/A	Cites other studies, esp. Huselid and Becker (1995), who created an index of implementation of HPWS; firms with higher values "have economically and statistically significant higher levels of firm performance."	Requires sophistication and HR expertise in the initial design and to ensure HRM practices remain internally consistent and aligned with strategy.	Not discussed here, but an important issue is the extent to which policies are actually implemented as designed.
		Boselie, et al (2005), "Commonalities and contradictions in HRM and performance research." <i>Note: Did not read original paper; this discussion is based on Harris, et al (2007)'s review of this study.</i>	Reviews articles published in a refereed journal in 1994 or later. (Harris, et al (2007), p. 450)	Sample: 104 studies from 1994-2003. (Harris, et al (2007), p. 450). Studies examine 26 different HR policies and practices ((Harris, et al (2007), p. 449), ranging from training and contingent pay and rewards to "symbolic egalitarianism", "job analysis," and family-friendly policies. (Full list in (Harris, et al (2007), p. 450). The studies also use a range of different outcome measures, including intermediate HR outcomes like level of employee commitment.	Summary: "A steady body of empirical evidence has been accumulated since... the 1990s, yet it remains the case that no consistent picture exists on what HRM is or even what it is supposed to do," (Harris, et al (2007), p. 451, citing Boselie, et al (2005), p. 81.) <i>More specific findings:</i> "Empirical studies focus attention on broad areas of policy including careful investment in recruitment and selection, provision of training, flexible job design and performance management." ((Harris, et al (2007), p. 450)	N/A	N/A
		Combs et al (2006), "How Much Do High-Performance Work Practices Matter? A Meta-Analysis of their Effects on Organizational Performance"; and Liu, et al (2007), "The value of human resource management for organizational performance." <i>These two articles are based on the same research but for different audiences. The second is an excellent summary for a practitioner audience.</i>	Meta-analysis of 92 prior studies that examined impact on performance of 13 High Performance Work Practices (HPWPs) (see below). In aggregate, these include data from more than 19,000 organizations. Also studied impact of vertical alignment (whether HR practices are designed to support strategic business objectives); horizontal alignment (whether HR practices reinforce one another); and work context (e.g., sector). <u>Specific practices:</u> 1) Selection; 2) Compensation level; 3) Training; 4) Incentive compensation; 5) Internal promotion; 6) Participation ("employees can influence decisions"); 7) Flextime; 8) Grievance procedures; 9) Employment Security; 10) Teams; 11) Performance appraisal; 12) Information sharing; 13) HR planning	Sample: Extensive search for studies of HPWPs and organizational performance: found 92 studies that met criteria; aggregate sample = 19,319 orgs in service and manufacturing. Identified 22 practices that researchers described as HPWPs but narrowed to 13 mentioned in at least 5 studies. 38 of the studies included measures of "systems" of HPWPs. <u>Performance measures:</u> Six categories, org-level metrics: productivity, retention, accounting returns, growth, market returns, or "multidimensional." <u>Analysis:</u> meta-analytical statistical techniques, see paper for details.	Individual HPWPs (10 of 13 significant) affect org performance, and magnitude is "not only statistically significant, but managerially relevant." (Details of findings for individual practices are included in the relevant section of this table.) "Increasing use of HPWPs by one standard deviation increases performance by 0.20 of a standard deviation." (Combs et al p. 517-518). Found systems of HPWP are more effective than individual practices; "The effect of a coherent HRM system is very strong... twice as large as that of using a single practice." (Liu, et al, p. 509) In fact, this system effect may be even larger because individual HPWP effects may be biased upward by the system in which those individual practices are embedded. (Combs, et al, p. 519) HR planning, which can be seen as linked to vertical alignment, was also significant: size of HR planning-performance relationship was larger than any other practice studied. (Liu et al p. 509) <i>Specific impacts of individual HPWPs are discussed later in table.</i>	Implementing well-aligned HPWS requires careful planning and execution. "This non-trivial task [aligning HPWPs with business strategy] requires careful thought and analysis." (Liu, et al, p. 508-509.) Are such skills available to ICCM projects in developing countries, and in a sustainable manner? The study also showed that context matters (see "Moderators"), and it is unlikely that any of these studies examined a context similar to that of health-related CBAs in developing countries. Most if not all were located in developed economies; most but not all were of for-profit firms (at least one study included nonprofit organizations) though they do represent a diverse sample of firms.	Work context was found to be a significant moderator of impact: specifically, effect size of HPWP was almost twice as large in manufacturing vs. service firms. Authors propose possible reasons for this, including that most of the policies were developed and refined in a manufacturing context, and needs may be different for service firms. (Liu et al p. 510) Individual studies offer other, more "fine grained" contextual differences, such as the number of women and professional workers; role of workers (core vs non-core); and industry-specific variables.

<p>Delaney and Huselid (1996) "The Impact of Human Resource Management Practices on Perceptions of Organizational Performance", <i>Academy of Management Journal</i></p>	<p>This highly-cited study used data from the National Organizations Survey, a representative national sample of US for-profit and non-profit firms, to examine the link with performance of individual HR practices, and to test for complementarities among HR practices (what the authors call "rudimentary tests"). Based on perceptions of HRM practices and of firm performance relative to competitors. Argues that perceptual measures of performance have been found in the past to correlate with objective measures, and also allow for inclusion of non-profit firms in the sample.</p>	<p><u>Sample</u>: A probability sample (i.e., based on number of employees) for 727 for-profit and not-for-profit organizations in the US. <u>Data collection</u>: Telephone interviews. <u>Independent variables</u>: 1) <u>Selectivity of hiring</u> (# considered per position); 2) <u>Employee training</u> (whether it was provided, the number of employees involved, perception of respondent on the effectiveness); 3) <u>Incentive compensation</u> (perceptions of the importance of job performance in determining earnings); 4) <u>Grievance procedure</u> (dummy variable about whether one exists); 5) <u>Decentralized decision-making</u> (a simple measure of who makes key decisions -- this was the only measure available in the NOS survey that related to employee involvement); 6) <u>Internal labor market</u> (opportunities for promotion within); 7) <u>Vertical hierarchy</u> (number of occupation levels, which serves as a proxy for opportunities for promotion - an alternative measure of #6). <u>Analysis</u>: Multiple regressions to examine individual and joint effects of HRM practices, as well as of measures of complementarity.</p>	<p>Found that 11 of 14 individual HR practices were correlated with perceptual performance measures, but the magnitude is small to moderate. "Rudimentary" tests of whether complementarity among HR practices (e.g., a "System" rather than individual practices) was related to performance, but these tests were not significant. There were limitations to the data and methods due to the structure and content of the National Organizations Survey (NOS), including the fact that the authors could not correct for endogeneity and therefore cannot argue causality. The authors argue there is a risk of overestimating the impact of individual HR practices if you look at individual practices rather than systems, because companies that implement some "good HR practices" are likely to implement others, so you may actually be seeing a joint effect.</p>		
<p>Harris, et al (2007), "Human resource management and performance in healthcare organisations."</p>	<p>Reviews evidence from a number of literature reviews and meta-analyses examining the links between human resource management and performance. Also reviews published and unpublished studies of HRM and performance in the UK health sector (NHS). Also discusses policies and human resource management practices in the NHS.</p>	<p>Notes that the review studies use different criteria for selecting articles to include, consider different individual HR practices or "bundles" of practices, and use different types of performance outcomes, therefore making their findings and the studies within them difficult to compare. Discusses each study in detail, including information about methods, which HRM practices were included, and summary findings. Though it was not possible to find and read all of these studies, most of them are listed separately in this table, citing Harris, et al (2007) as the source of information where appropriate.</p>	<p>Concludes that literature review "has illustrated the difficulty of establishing unequivocal links between single or multiple practices and performance outcomes... The majority of findings... remain equivocal." (p. 457) Suggests that this may be because the presence of HR practices is not enough and research needs to look more at the "HR techniques (the means of implementation and local tailoring of HR practices" and at "mental models" of individuals, to understand how the complex process of implementing HR policies affects individual motivation, commitment, and satisfaction. (Ibid.)</p>		<p>Context matters: When discussing Combs, et al -- which found a stronger link between HR practices and performance in the manufacturing than in the service sector -- the authors argue that the health sector probably has more in common with the service sector, including "workflow uncertainty and the role of the patient." (p. 452) This and other characteristics of the health sector, "may mean that the most effective HRM systems are those that are tailored to specific health settings." (Ibid)</p>
<p>Huselid (1995), "The Impact of Human Resource Management Practices on Turnover, Productivity, and Corporate Financial Performance." <i>Note: this is one of the most highly-cited articles in this field.</i></p>	<p>Extensive literature review and original empirical study with very rigorous methods. Looks at systems of human resource management at the firm level, not at individual practices. Tests three hypotheses: 1. Systems of High Performance Work Practices (HPWPs) will decrease turnover and increase productivity and performance; 1b: Turnover and productivity will mediate the relationship between HPWPs and performance; 2. Complementarities or synergies among HPWPs and 3. Alignment between HPWPs and competitive strategy will reduce turnover and improve productivity and performance.</p>	<p><i>(Methods and tools described in great detail in paper.)</i> <u>Sample</u>: Questionnaires mailed to senior HR managers in 3,452 publicly-held US firms with more than 100 employees, representing all major industries. 968 firms responded. <u>Independent Variables</u>: Questionnaire asked for the % of employees covered by each of 13 HPWPs. These were then grouped by factor analysis into two factors believed to describe the HR systems: "Employee skills and organizational structures" (a wide range of practices to improve employees' knowledge skills and attitudes and to give them opportunity to use those in their jobs); and "Employee Motivation" (which includes a narrower set of practices including performance appraisals, performance-based compensation and merit-based promotion.) They also developed measures of the internal and external "fit" of HPWPs (internal coherence and alignment with strategy and external context), but the authors consider these exploratory. <u>Dependent Variables</u>: 1) Average annual rate of turnover (does not distinguish between voluntary and involuntary turnover). 2) Productivity: logarithm of sales per employee. 3) Corporate financial performance: two measures, one market-based and one accounting. <u>Analysis</u>: Uses rigorous statistical techniques, including tests to address possible endogeneity or simultaneity between corporate financial performance and HPWPs, and to test survey response bias. See paper for details.</p>	<p><u>Overall</u>: Found statistically significant impacts from HPWPs, with substantial magnitudes of impact on financial performance. <u>Turnover</u>: Found that the first factor, "Employee Skills and Organizational Structures," (ESOS) had a significant negative impact on turnover. The second factor, "Employee Motivation" (EM) did not have a significant impact on turnover, which may be because performance incentive systems might increase turnover among low-performing employees while decreasing turnover among high-performing employees. <u>Productivity</u>: Both factors were significant when entered separately, but in the model with both, only EM remains significantly related to productivity. <u>Corporate Financial Performance</u>: Found a positive and significant relationship, but it varies according to which measure of financial performance is used. <u>Mechanism</u>: Found that HPWPs affect corporate financial performance largely but not entirely via their impact on turnover and productivity. <u>Internal and external fit</u>: Neither of these measures was found to have a significant effect on the dependent variables above and beyond the effect of HPWPs themselves.</p>	<p>Some of the HPWPs tested here would be costly and administratively challenging to implement, and others may face issues of cultural "fit".</p>	<p>The author does not discuss moderating factors, but does include a number of control variables that suggest possible moderators. These include firm size, capital intensity, union coverage, recent growth in sales, total assets, and dummy variables for industry type, among others.</p>
<p>Hyde, et al (2006), <i>Improving Health through Human Resource Management</i>, CIPD, London. <i>Note: Did not read original paper; this discussion is based on Harris, et al (2007)'s review of this study.</i></p>	<p>Include studies published in refereed journals from 1994 onwards. (Harris, et al (2007), p. 451)</p>	<p><u>Sample</u>: 97 studies from 1994-2004, only a "handful" of which were conducted in the health sector. (Harris, et al (2007), p. 449) The studies cover 10 different types of HR practices (see full list in Harris, et al (2007), p. 451). Hyde, et al consider a range of outcome / performance measures, but also looked specifically for studies that included patient outcomes. (Harris, et al (2007), p. 449).</p>	<p><u>Summary</u>: "...there is insufficient evidence to suggest that any one element of HRM may be superior to another in terms of its impact on performance." (Harris, et al (2007), p. 451, citing Hyde, et al (2006), p. 45.) <u>More specific findings</u>: Training, pay and involvement are the practices most often studied; overall show positive link between training and pay and performance, while involvement usually non-significant. "Bundles of practices had on average more positive associations with performance than single practices." (Harris, et al (2007), p. 451)</p>		<p>Context matters (Harris, et al (2007), p. 451)</p>

<p>Purcell, et al (2003), <i>Understanding the People and Performance Link: Unlocking the Black Box</i>, CIPD, London. <i>Note: did not read this study; discussion is based on Harris, et al (2007)'s review of the</i></p>	<p>Case studies of "the impact of people management on organisational performance, focusing on how and why the relationship exists." (Harris, et al (2007), p. 454.</p>	<p>Sample: One of the case studies is from a clinical department in an NHS Acue Trust.</p>	<p>Found "marked changes in employee attitudes in response to changes in people management practices and policies." A number of HR practices shown to affect staff commitment, satisfaction and motivation: practices related to "career opportunities, job influence, job challenge, training, performance appraisal, team working, involvement in decision making, work life balance and having managers who are good at leadership and who show respect." (Harris, et al (2007) p. 454, cite Purcell, et al (2003) p. x)</p>		<p>Managerial skill as a moderator: "Importance of line manager in 'bringing policies to life'." (Harris et al, (2007), p. 454)</p>
<p>Wall and Wood (2005), "The romance of human resource management and business performance, and the case for big science." <i>Note: Did not read original paper; this discussion is based on Harris, et al (2007)'s</i></p>	<p>Reviews articles that meet the following criteria: published in a refereed journal in 1994 or later, included multiple HR practices, examined economic performance, and were highly cited (Harris, et al, p. 450)</p>	<p>Sample: 25 studies from 1994-2003, which look at "bundles" of HR practices (Harris, et al (2007), p. 449). These bundles are known by a wide range of names: e.g., "Administrative HR", "Human capital-enhancing HR," "Innovative HRM", "High involvement HRM", "Strategic HRM," or "Technical HRM." Focus on economic performance measures.</p>	<p>Summary: "It is premature to assume that HRM initiatives will inevitably result in performance gains either in all situations or even where deemed appropriate by contingency arguments," (Harris, et al (2007), p. 450, citing Wall and Wood (2005), p. 454.) <i>More specific findings:</i> "15 of 25 report statistically significant positive relationships" between HRM and performance. "No compelling evidence of synergy within HRM systems or of any systematic strategic fit effects." "Reliance on cross-sectional evidence could overestimate" and "inadequate measurement of HRM and poor measures of performance could underestimate" the link between HRM and performance. (Harris, et al (2007), p. 450.)</p>	N/A	N/A
<p>West, et al (2006), "Reducing patient mortality in hospitals: the role of human resource management." <i>Note: Did not read original paper; this discussion is based on Harris, et al (2007)'s review of this study.</i></p>	<p>Studied 52 "acute hospitals" in England. HR Directors completed a survey on HR policy in their hospitals in eight areas: "training, performance management, participation, decentralisation, involvement, use of teams, employment security and investor in people (IIP) status." (As explained in Harris, et al (2007), p. 454) Also asked about staffing and compensation but did not find enough variation to merit inclusion in the analysis. Looked at relationships between these HR policies and patient outcomes. (Harris, et al (2007), p. 454)</p>	N/A	<p>Summary: "They conclude that people management systems that emphasize a complementary set of 'high involvement' HRM policies may be successful in contributing to high quality healthcare." (As explained by Harris, et al (2007), p. 454, citing West, et al (2006) p. 994) However, study design involved a small sample and provided "no evidence of causality." (Harris, et al (2007), p. 454)</p>		Does not consider mediators (Harris, et al (2007), p. 454)
<p>Wright, et al (2005) "The Relationship Between HR Practices and Firm Performance: Examining Causal Order." Reviews past studies and reports very rigorous new research and analysis.</p>	<p>Reviews methodology and causal inference in 68 previous studies of HR systems (not individual practices) and org'-level performance measures. Questions the methodological rigor and causal conclusions of these studies. ("This body of work tends to lack sufficient methodological rigor to demonstrate that the relationship is actually causal in the sense that HR practices, when instituted, lead to higher performance." p. 410) Suggests alternative causal models for correlation between performance and HRM systems. New research: collects data at six-month intervals (past, concurrent, early future, late future) on HR practices and on HR, operational, and financial performance. Analyze impact of HRM practices on various performance measures, and control for past and concurrent performance to isolate causality.</p>	<p>(Method and tools described in great detail in paper.) <u>Sample:</u> 45 self-contained units within a single corporation. <u>Method:</u> Surveyed core (non-supervisory, non-managerial) employees in different job categories, every six months for 2 fiscal years. Collect objective performance measures from company records. <u>Surveys:</u> Employees 1) rate whether 9 specific HR practices existed for their job category (<i>note: should measure actual implementation rather than policy/intention</i>); 2) answer five "affective organizational commitment" measures. <u>Archives:</u> Six performance indicators tracked by corporate HQ. <u>Analysis:</u> The HR practice and affective organizational commitment indicators were combined into two aggregate measures. Calculated bivariate correlations between HR practices and performance measures for each time period, and then controls for past and current performance to isolate impact of past HR practices on future performance.</p>	<p>HR practices and affective organizational commitment shown to relate positively and significantly to organizational performance. However, this relationship is reduced "drastically", often to where it is no longer statistically significant, when control for past or concurrent performance. "These results suggest that the proposition that HR practices cause higher organizational performance should be, at best, tentative, and great caution should be exercised in interpreting past HR-performance research." (p. 432)</p>		<p>Also found that level of firm performance seems to moderate the impact of "good" HR practices. High performing units almost universally use "good" HR practices, but there is more variation among low performers. Authors hypothesize that maybe low levels of HR practices are always correlated with low performance, but that high levels of HR are associated with high performance only in certain circumstances – e.g., when there is effective leadership. (p. 435)</p>

Selection	Rigorous employee selection processes (combined effect of various practices) These practices, which should be "systematically designed" and may include "structured interviews, cognitive aptitude and ability tests, and follow-up studies of recruiting sources." (Liu, et al, p. 505-506) Selection should seek a good fit between the individual and his/her job, and with the organization's culture and values. (Ibid.)	Combs, et al (2006) and Liu, et al (2007)	See above (under "High Performance Work Systems") for comprehensive discussion of methods.	<i>(Method and tools described in great detail in paper.) Sample:</i> 45 self-contained units within a single corporation. <i>Method:</i> Surveyed core (non-supervisory, non-managerial) employees in different job categories, every six months for 2 fiscal years. Collect objective performance measures from company records. <i>Surveys:</i> Employees 1) rate whether 9 specific HR practices existed for their job category (<i>note: should measure actual implementation rather than policy /intention</i>); 2) answer five "affective organizational commitment" measures. <i>Archives:</i> Six performance indicators tracked by corporate HQ. <i>Analysis:</i> The HR practice and affective organizational commitment indicators were combined into two aggregate measures. Calculated bivariate correlations between HR practices and performance measures for each time period, and then controls for past and current performance to isolate impact of past HR practices on future performance.	Found selectivity in hiring has approximately the same effect on performance as the average of all HPWPs included in the study: "modest but significant" (Liu, et al, p. 506)	Selection of CBAs has often involved communities, and many argue this increases community commitment to the CBAs. Such involvement runs counter to standardized, systematic selection processes recommended by this research, however. One option would be to combine the approaches: e.g., use standardized selection to identify a pool of qualified candidates, and community endorses or recommends CBAs from among this pool. However, this might dilute the effect of systematic selection processes. Another consideration is cultural: G11one theory about how selection impacts performance is that people have enhanced job satisfaction and organizational commitment if they feel the selection process was comprehensive and fair. This may be very different in a culture where people expect personal relationships and shared characteristics (e.g., tribe and home region) to be linked to job selection.	See contextual moderators discussed above for this study. Successful implementation of many of the employee selection innovations -- particularly structured interviews -- would likely require training for the staff responsible for employee selection, and the skill and expertise of those staff (whether HR staff, managers, or supervisors) will likely be a moderator of the impact of rigorous employee selection methods. Most of these innovations, when tested, were probably designed and executed with the involvement of skilled HR professionals.
Selection	Biodata The use of standardized questionnaires or application scoring systems to select candidates on the basis of biographical characteristics (ranging from concrete to attitudinal) shown to correlate with performance or retention. Companies or industries identify biodata that correlate with job performance or retention for particular positions. This is most effective if characteristics are identified empirically, by testing large numbers of existing employees. Candidates are then scored according to these characteristics, and this score is a factor in employment decisions.	Fincham and Rhodes (2005) , pp. 159-161, and sources cited by them	Describes one example from the UK accounting industry, in which typically one-third of new recruits do not successfully complete their training, at great cost to the industry. A biodata model was developed based on a sample of several organizations and tested on another sample. (Fincham and Rhodes (2005), p. 160, citing Harvey-Cook and Taffler (2000)).	See Harvey-Cook and Taffler (2000), listed in Appendix 2, for more information on their study. Types of biodata information range widely, from concrete characteristics (marital status, type of school attended, length of stay in previous job) to previous accomplishments (e.g., being a "head boy or girl" in school) to attitudes (e.g., toward team work.)	The biodata model in the UK accountancy industry "made it seven times more likely to recruit a success." (Fincham and Rhodes (2005), p. 160, citing Harvey-Cook and Taffler (2000)).	The use of biodata in hiring can result in exclusion or over-representation of certain population groups, which may be supported by the data but not be socially or ethically acceptable. (For instance, the UK accounting test found that attending an independent school and serving as head boy or girl were strongly correlated with success, which led to an elitist bias in recruitment. (Fincham and Rhodes (2005), p. 160) There is also a significant start-up cost if biodata tools are developed empirically, and some question the generalizability of biodata characteristics across organizations, industries, or contexts. For instance, would characteristics identified as predicting success among CBAs in Mozambique be generalizable to Uganda.	
		Schmidt and Hunter (1998) , "The Validity and Utility of Selection Methods in Personnel Psychology: Practical and Theoretical Implications of 85 Years of Research Findings."	Reviews research findings from meta-analytic studies in the last 20 years on the predictive power of 19 different selection methods, and also looks at the predictive validity of combinations of these methods. Reports the mean validity of the most current meta-analysis for each selection method for predicting job performance and success at job-related training.	Provides some minimal details for the studies included.	Finds that biodata have a significant validity for predicting job performance (0.35) but this almost disappears when combined with GMA tests: the incremental validity of biodata over GMA is just .01. This is because biodata correlates strongly with GMA. (Schmidt and Hunter p. 269)	Given the cost and difficulty of developing these measures, and their high correlation with tests of GMA, it would probably be more feasible and sustainable to use tests of GMA instead of biodata.	
Selection	Cognitive Testing Candidates are given tests of General Mental Ability (GMA) -- also known as "general cognitive ability" or "general intelligence" -- prior to employment, and these are a factor in employment decisions. "The most well known conclusion from [85 years of] research is that for hiring employees without previous experience in the job the most valid predictor of future performance and learning is general mental ability." (Schmidt and Hunter (1998), p. 262)	Schmidt and Hunter (1998) , "The Validity and Utility of Selection Methods in Personnel Psychology: Practical and Theoretical Implications of 85 Years of Research Findings."	Reviews research findings from meta-analytic studies in the last 20 years on the predictive power of 19 different selection methods, and also looks at the predictive validity of combinations of these methods. Reports the mean validity of the most current meta-analysis for each selection method for predicting job performance and success at job-related training.	Provides some minimal details for the studies included.	Concludes that GMA has the highest validity for predicting job-related performance and job-related learning success, and the lowest cost, among the selection processes that can be used for all job types. Also says there is stronger evidence for GMA than for other methods, stemming from thousands of studies, and a stronger theoretical foundation. (p. 264) The summary validity reported, 0.51, is from a "very large meta-analytic study conducted for the U.S. Department of Labor." (p. 26) It examined job-related performance and performance in job training programs, and found that the validity of GMA for predicting job performance ranged from .58 or professional-managerial jobs to .23 or completely unskilled jobs. The authors use the validity for medium complexity jobs (.51), which includes 62% of all jobs in the U.S.	It would be important to investigate whether GMA tests have been extensively tested in socio-economic and cultural contexts equivalent to the iCCM program communities, and if not, to question whether this might reduce the expected validity of these tests.	Job complexity is shown to moderate the effectiveness of GMA in predicting performance, with GMA having a much lower validity for less complex jobs. The skill and expertise of those administering and scoring the tests may also moderate impact, although there are tests on the market now that are designed to be relatively straightforward to administer.

Selection	Integrity tests are "used in industry to hire employees with reduced probability of counterproductive job behaviors." (Schmidt and Hunter 1998, p. 267)	Schmidt and Hunter (1998), "The Validity and Utility of Selection Methods in Personnel Psychology: Practical and Theoretical Implications of 85 Years of Research Findings."	Reviews research findings from meta-analytic studies in the last 20 years on the predictive power of 19 different selection methods, and also looks at the predictive validity of combinations of these methods. Reports the mean validity of the most current meta-analysis for each selection method for predicting job performance and success at job-related training.	Provides some minimal details for the studies included.	Integrity tests do predict counterproductive job behaviors, but also predict overall job performance. (Schmidt and Hunter 1998, p. 267) Have a very high validity for predicting job performance (.41) and also the highest incremental validity (.14) of any of the methods when combined with GMA tests. (Schmidt and Hunter, p. 265) They have zero correlation with GMA, unlike many of the other methods. Integrity tests seem to measure, among personality characteristics, mostly conscientiousness but also some aspects of agreeableness and emotional stability. (Schmidt and Hunter, p. 267, citing Ones (1993)).		See above re: skill of those administering the tests.
Selection	Personality Testing Candidates are given tests that measure personality traits prior to employment, and these are a factor in employment decisions.	Barrick and Mount (2005), "Yes, Personality Matters: Moving on to More Important Matters."	Reviews the body of research on personality at work. The authors are not explicit about which publications or findings they include or exclude, or how they selected these, but they do include at least four recent meta-analyses, one published in 2001 by the authors themselves.	N/A	Research, based primarily on the "Big Five" personality traits, "has consistently shown that personality predicts performance across a wide variety of outcomes that organizations value, in jobs ranging from skilled and semiskilled... to executives," but the magnitude of effects "can be characterized as modest at best." (p. 369) Argues that meta-analytic studies (cites at least four) have shown that two of the Big Five traits, "Conscientiousness" and "Emotional Stability," are highly generalizable and validly predict performance across a wide range of jobs. (p. 360) Three other characteristics are valid predictors for specific types of jobs. With relevance for CBAs, both "Extraversion" and "Agreeableness" traits have been found to predict performance for jobs that involve significant amounts of interaction with others; "Agreeableness" where interaction involves "helping, cooperating, and nurturing others," and "Extraversion" in jobs like sales and management, where interaction involves "influencing others or obtaining status and power." (p. 360, cites Barrick et al, 2001a and Mount et al 1998) "If working in a team comprises an important component of the work, Agreeableness may be the single best personality predictor." (p. 360, cites Mount et al, 1998) Also notes that although it is helpful for research purposes to examine the validity of individual personality traits, in the real world people are tested on all five (or however many) traits. The predictive power of the test overall will therefore be higher than that of any one trait. (p. 361) Also discusses one unique longitudinal study (Judge, et al 1999) that showed a strong relationship between personality traits assessed in childhood and various facets of career success later in life, as much as 50 years later. This predictive power remained even after controlling for general mental ability. (p. 362-363) Finally, research has shown personality to be "meaningfully related to many work-related behaviors and outcomes... [including]... turnovers, absenteeism, tardiness... success in groups, job satisfaction... leadership effectiveness, and task performance." (p. 363)		Context: "Strong" situations reduce the link between personality and behavior, leading all people to behave in similar ways regardless of their personality. Organizational fit and team dynamics may also influence the role of personality in behavior. (p. 364) These are new areas for research, about which relatively little is known. "Little is empirically known or even theorized about how different types of situations... influence personality or behavior, particularly at work." (p. 364, cites Barrick, Mitchell, et al 2003) Motivation: Shown to be the key "mediating link between personality and performance." (p. 365-366)
		Schmidt and Hunter (1998), "The Validity and Utility of Selection Methods in Personnel Psychology: Practical and Theoretical Implications of 85 Years of Research Findings."	Reviews research findings from meta-analytic studies in the last 20 years on the predictive power of 19 different selection methods, and also looks at the predictive validity of combinations of these methods. Reports the mean validity of the most current meta-analysis for each selection method for predicting job performance and success at job-related training.	Provides some minimal details for the studies included.	Tests of "conscientiousness," largely considered the best predictor among personality characteristics, had lower overall validity and incremental validity than integrity tests. Note: the findings reported by Schmidt and Hunter for conscientiousness tests comes from an earlier study by Barrick and Mount (1995); an updated study from 2005 is discussed above.		

<p>Selection</p>	<p>Testing (mixed methods) Often companies will use a mix of methods to test knowledge, skills, attitudes and other characteristics (KSAOs) related to job performance and retention.</p>	<p>Van Iddekinge, et al (2009) "Effects of Selection and Training on Unit-Level Performance Over Time: A Latent Growth Modelling Approach."</p>	<p>A longitudinal study on the links between employee selection and training, and changes in employee selection and training, on customer service performance, unit retention, and unit financial performance in a fast-food company. Studied actual implementation of HR practices, rather than intended policies (i.e., capture intra-organizational variation and intra-unit variation over time in how policies are implemented.) Employee selection practices Organization uses a standardized test with a combination of measures: biodata/ past behavior questions, personality measures, situational judgement questions, and questions related to the analysis of information relevant to the job. Tests are computer coded and employees receive a total score. Stores are supposed to hire only employees who score above a pre-determined cutoff score identified through a "predictive validation study" of the link between test scores and job performance. In reality, individual units do sometimes hire employees who score below this cut-off. (Van Iddekinge, et al (2009) p. 834.)</p>	<p>All variables measured monthly for a year for 861 "units" of a fast-food organization. (p. 833) Variables: 1) Selection -Percent of new employees who scored at or above the cutoff score on the selection test, compared to the total number of new employees that month. 2) Training - Percent of people hired each month who passed a mandatory training test (see entry under "training" for more details. 3) Unit Retention Rate, to measure employee turnover. 4) Customer Service Performance - As rated by "mystery shoppers": hired and trained by corporate headquarters, they rate the unit on food quality, customer service, and cleanliness. 5) Unit financial performance - a measure of "controllable profits" (sales minus controllable variable costs) compared to expected profits for each unit as determined by the company's own internal financial analysts. Analysis: Used multiple-indicator latent growth modelling techniques, a sophisticated method for analyzing change. See report for details (p. 834-835).</p>	<p>Summary: This very rigorous longitudinal study found that selection was positively related to performance, but the direction of causality is not clear. Detailed findings: Use of the standardized selection test was positively related to customer service performance and unit financial performance but not to employee retention. Changes in selection practices were also related to changes in customer service but not to retention. Changes in customer service performance was significantly related to a change in unit profit, but changes in retention were not significant. They test mechanisms by which selection effects profit and conclude that changes in selection processes effect unit profit more indirectly than directly. They also test different causal models and find some evidence of reciprocal and reverse causality. In short, "... to the extent that selection and training were causally related to unit performance, the results suggest that training tended to lead to unit performance, whereas unit performance tended to lead to selection." (reverse causality). (Van Iddekinge, et al, p. 839.) (See below for more details findings on the effect of training.)</p>	<p>As with all employment testing, developing the tests requires an up-front investment and the practice of testing may face cultural resistance. The "Mystery Shopper" method of testing customer service could be an interesting innovation to apply to the health sector, but it's difficult to imagine how it would work with CBAs who presumably know all the members of their community. Could some be enlisted and trained to secretly rate CBAs on standardized measures of performance?</p>	<p>Implementation of policies: By examining actual unit-level implementation of HR practices instead of organization-wide policies, the study highlights the importance of utilization or implementation as a moderator of impact between HR policies and performance. Managerial skill: The study did not examine this, but the authors discuss the possibility that the observed relationships between selection and training on the one hand and unit performance on the other might actually be spurious, and caused by a third variable, such as the skill of unit managers. It certainly seems reasonable to think that manager effectiveness might effect both the use of selection and training practices (in this case, adherence to company policy) and the overall unit performance. It is also possible that managerial effectiveness might moderate the impact of selection and training on performance. This is identified as an area for further research.</p>
<p>Selection</p>	<p>Structured Job Interviews Efforts to make interviews more systematic and structured in order to overcome some of the general problems we confront in accurately perceiving and judging others (e.g., impression formation and stereotypes), and other problems specific to interviews (e.g., primacy and recency effects and ethnocentric bias). (Fincham and Rhodes pp. 152-156.) There are two main ways to make interviews more structured: <i>situational interviews and behavior description or past behavior interviews.</i></p>	<p>Fincham and Rhodes (2005), "Assessing individual differences," Chapter 4 in <i>Principles of Organizational Behavior</i>.</p>	<p>Reviews the state of knowledge and practice in this area and cites prominent studies. Some of these are listed separately below.</p>	<p>N/A</p>	<p>"Research seems to suggest that structured interviewing is more effective at predicting future job performance." (p. 156) For instance, cites one study (Anderson 1997, included in list of "further reading") that showed that some unstructured interviews could predict only approximately 4% of the differences in job performance, a structured interview can predict 36%. (As cited in Fincham and Rhodes (2005), p. 156.)</p>	<p>Fincham and Rhodes list a number of "pragmatic reasons" why structured interviews are not used more often, given the evidence supporting them. Some of these might affect the feasibility or acceptability of this approach, such as the observation that "structured formats can be perceived as less fair by both interviewers and candidates". In addition, interviewers need to be skilled in the use of structured interviews, which may require training. (Fincham and Rhodes, p. 157.)</p>	<p>The skill of HR staff or hiring managers may be important for the successful execution of structured job interviews, and therefore may serve as a moderator of the impact of such interviews. Access to training may be necessary to prepare interviewers with the necessary skills. The degree of acceptance of these methods by managers and interviewers may also moderate impact.</p>
		<p>Schmidt and Hunter (1998), "The Validity and Utility of Selection Methods in Personnel Psychology: Practical and Theoretical Implications of 85 Years of Research Findings."</p>	<p>Reviews research findings from meta-analytic studies in the last 20 years on the predictive power of 19 different selection methods, and also looks at the predictive validity of combinations of these methods. Reports the mean validity of the most current meta-analysis for each selection method for predicting job performance and success at job-related training.</p>	<p>Provides some minimal details for the studies included.</p>	<p>"The average validity of a structured interview is .51, versus .38 for the unstructured interview (and undoubtedly lower for carelessly conducted unstructured interviews)". (Schmidt and Hunter p. 267) This is the same as tests of GMA, the second-highest validity of all methods studied. (Table 1, p. 265) The incremental validity when combined with GMA tests is also high, leading the authors to conclude, "Clearly, the combination of a structured interview and a GMA test is an attractive hiring procedure. It achieves 63% of the maximum possible practical value (utility), and does so at reasonable cost." (Schmidt and Hunter, p. 265)</p>		
		<p>Taylor and Small (2002) "Asking applicants what they would do versus what they did do : A meta-analytic comparison of situational and past behaviour employment interview questions."</p>	<p>Reviewed studies of situational and/or past behavior interview questions and their effectiveness in predicting job performance (as opposed to, say, training success). All studies measured job performance in terms of "day-to-day (typical) job performance, rated by others (e.g., supervisor, peers)." (Taylor and Small, p. 282)</p>	<p>(Methods and data are described in great detail in the study.) Sample: 30 situational and 19 past behavior validity coefficients, and 15 situational and 13 past behavior measures of inter-rater reliability. (Taylor and Small p. 282) Also coded studies on the complexity of jobs being filled (p. 284-285) and on whether they used "descriptively anchored rating scales," typically 3- or 5-point scales with descriptive anchors at three points along the scale, for every question (Taylor and Small, p. 283). For analyze the data, used proven meta-analytic techniques (see Taylor and Small, p. 285, for details).</p>	<p>Found that both question types are valid predictors of future job performance, but that studies using past behavior questions have a higher validity than those using situational questions. The use of descriptively-anchored rating scales improves the validity of past behavior interview questions. (All but one of the studies of situational interviews used rating scales.) After controlling for the use of rating scales, question type was found to be a significant moderator to the validity of interviews in predicting performance, with past behavior interviews having significantly higher validity (.63 versus .47) Job complexity was not significant as a moderator for the validity of interview questions. Inter-rater reliability was similar for both types of questions, as long as rating scales were used.</p>	<p>The development of structured interview questions and rating scales requires significant skill and expertise, to ensure the questions actually measure what the organization wants them to measure. This might raise some doubts as to the feasibility of this approach.</p>	<p>Question type was found to moderate the validity of interviews. Job complexity: Based on past research, the authors hypothesized that job complexity will moderate the validity of situational and past behavior questions, and that situational questions would be less valid for more complex jobs. However, the findings did not support this.</p>

Training and Development	Tuition Reimbursement and Off-Site Training	Benson, et al (2004), "You Paid for the Skills, Now Keep Them: Tuition Reimbursement and Voluntary Turnover."	Data from 9,439 permanent, salaried employees of a large manufacturing company that offered 100% tuition reimbursement for any degree or professional development program (even if not related to job or industry); a few hours off each week for study; and a stock bonus for completing a degree(\$5,000 for 2-year junior college or associate's degree, \$10,000 for a bachelor's or graduate degree.) The bonus was not tied to a retention contract, nor was participation in the tuition reimbursement program tied to promotion.	Measures: <u>turnover</u> categorized as voluntary or involuntary; <u>tuition reimbursement</u> : different categories of participation, based on whether they completed a degree and if so, what level; <u>promotion</u> : whether they received an increase in job grade; <u>control variables</u> : tenure, job grade, salary growth. (p. 318-321) <u>Analysis</u> : regression analysis ("Cox proportional hazards regression analysis") p. 321)	<u>Summary</u> : "Participation in tuition reimbursement reduces turnover while employees are in school. Voluntary turnover increases when individuals earn graduate degrees but is significantly reduced if they are subsequently promoted." (Benson, et al, abstract) <u>More detailed findings (some)</u> : Voluntary turnover among employees who participated in tuition reimbursement without earning a degree was 55% less likely than for those who did not participate in the program. (p. 322) Earning a graduate degree was strongly related to voluntary turnover: employees who earned graduate degrees were 76% more likely to quit than employees who participated in tuition reimbursement but did not earn a degree. (p. 323) Promotions moderate voluntary turnover among employees who earned degrees: those promoted after earning degrees were 56% less likely to leave than those who earned degrees but were not promoted; this effect of promotion was greater than the effect of promotion on turnover for those who did not participate in the tuition scheme.	Tuition reimbursement schemes, per se, are probably not very relevant for CBAs. However, it is conceivable that the project could pay for CBAs to take relevant courses. This study provides reason for caution about that approach, particularly if it leads to a formal qualification.	Promotion as a moderator for the relationship between training (specifically tuition reimbursement leading to a degree) and turnover.
Training and Development	Formal Training A combined measure of "formal instruction given to employees" (Liu, et al, p. 506)	Combs, et al (2006) and Liu, et al (2007)	See above (under "High Performance Work Systems") for comprehensive discussion of methods.	See above for details: 29 of the 92 studies included in the meta-analysis examined the relationship between training and performance, and included manufacturing and service firms both in the US and in other countries.	"Most [studies] reported a positive and significant link," (Liu, et al p. 506); Magnitude of effect was equivalent to the impact from incentive compensation or internal promotion ($r_c=0.15$) but less than the average overall effect ($r_c=0.20$). (Combs, et al, Table 3, p. 516.	There is a risk of providing training only to have CBAs use their higher skills to find employment elsewhere. Other HR policies designed to retain skilled employees are therefore important. Providing training that is very specific to the firm or organization, so the KSAs gained are not easily transferable to other organizations, may also help reduce turnover.	See above for general moderators from this study.
Training and Development	Formal Training (non-specific)	West, et al (2002), "The link between the management of employees and patient mortality in acute hospitals."	Reviews past literature on HRM and performance outcomes, and argues that "meta-analyses and reviews of research suggest a stable link between the extensiveness and sophistication of training ... and individual and overall organizational performance" (West, et al, p. 1301). Notes that very little of the HRM literature is based on reserach in hospital settings. This study contributes by looking at HR practices, including training and patient outcomes in acute care hospitals.	<u>Method</u> : HR directors or their reps from 61 acute care hospitals in England completed questionnaires by telephone or paper. These gathered data on "hospital characteristics; ... HRM strategy; employee involvement strategy and practices; and HRM practices and procedures." (West, et al (2002), p. 1302). This article focused on specific HRM policies and procedures: appraisal, training, and teamworking. <u>Independent variables</u> : 1) <u>Training</u> : The anlysis included variables for training needs assessments and the sophistication of the training policy. Also collected data on size of training budget, how much spent on training above statutory requirements, and amount available for training from other sources; "which groups had access to a tailored and formal written statement about training policy and entitlements"; percentage of staff in each occupational group receiving 3 or more days of formal off-the-job training in the previuos year; and estimated percentage of staff working for National Vocational Qualifications. 2) <u>Teamworking</u> 3) <u>Appraisal</u> (See relevant section of the chart for details on teamworking and appraisal variables.) 4) <u>HR Practices (aggregate measure)</u> : a single "HR practices" variable was developed using 6 component variables (West, et al (2002), p. 1303 for a complete list.) <u>Dependent variables</u> : Six health outcome measures: deaths (within a month) after emergency surgery, non-emergency surgery, admission for hip fractures, and admission for heart attacks; re-admission rates; and a mortality index.	A simple regression found that the aggregate measure of HR practices was significantly and negatively related to patient mortality. This was robust to the exclusion of an outlier hospital. When individual HR practices were entered separately, the sophistication of training policies had a significant relationship with patient mortality, as did the other two practices. (Performance appraisal had the strongest relationship.) However, as the authors acknowledge, no causal inferences can be drawn from this analysis given the cross-sectional design. (West, et al, p. 1308)	Although this is a healthcare setting, an NHS acute care hospital is an extremely different context than that of community-based ICCM. The implementation of "sophisticated" training may be challenging to do in a sustainable and easily replicable manner.	

<p>Training and Development</p>	<p>Formal training: Initial (induction) training</p>	<p>Van Iddekinge, et al (2009) "Effects of Selection and Training on Unit-Level Performance Over Time: A Latent Growth Modelling Approach."</p>	<p>A longitudinal study on links between employee selection and training and unit-level performance in a fast-food company. (See above under "Employee selection" for more details) <u>Training practices</u> Newly-hired employees are expected to complete a two-week training program covering both "general orientation topics (e.g., corporate policies and values) and core job responsibilities." (Van Iddekinge, et al (2009) p. 834.) Training involves a comprehensive manual, opportunities to practice job tasks, and coaching and feedback. At the end of training, employees should complete a computer-based objective test and score at least 80%. Though this process was mandatory, in practice many units did not following these steps, and instead provided new hires with just an abbreviated training or no training at all before starting work, at which point they received informal on-the-job training only.</p>	<p><u>Training variable</u> - Percent of people hired each month who passed a mandatory training test compared to the total number of new hires who should have completed the training in that time. (See entry under "Selection" for complete details on tools and methods).</p>	<p><u>Detailed findings</u>: Training was positively related to customer service performance, unit financial performance, and employee retention. Changes in training practices were also related to changes in customer service and retention. Changes in customer service performance were significantly related to changes in unit profit, but changes in retention were not significant. They test mechanisms by which selection effects profit, and conclude that changes in training effect performance almost all directly (rather than indirectly, via retention and customer service). They test different causal models, and conclude that, "... to the extent that selection and training were causally related to unit performance, the results suggest that training tended to lead to unit performance,"(Van Iddekinge, et al, p. 839.) (See above for more detailed findings on the effect of selection</p>	<p>Standardized induction training is likely to be a reasonably feasible practice to implement, sustain, and scale up, and according to this study can have a direct impact on performance. This study also demonstrates, however, the importance of steps to ensure that unit-level managers (or the equivalent staff in an ICCM intervention) are actually implementing training practices as intended.</p>	<p>See above discussion of the same study, under employee selection.</p>
<p>Training and Development</p>	<p>Employer-Provided Training Includes both "classroom" training and "on-the-job" training.</p>	<p>Haines, et al (2010) "The Influence of HR Management Practices on Employee Voluntary Turnover in the Canadian Non Governmental Sector."</p>	<p><u>Theoretical framework</u>: "ease of movement" and "desirability of movement" predict voluntary turnover. Past studies have had mixed results on the relationship between training and turnover. (p. 231) <u>Approach</u>: Look at individual HRM practices, not "bundles" or systems, intended to "1) develop employee skills (training, internal labor markets); 2) elicit motivation and commitment (internal labor markets, relative pay, benefits, variable pay) and 3) enable employee influence and voice (participation-enhancing work designs, formal dispute resolution)." (p. 229, cites Wright and Boswell 2002) Distinguish between voluntary and involuntary turnover (i.e., layoffs, dismissal). <u>Data</u>: Use data from a large, carefully designed, nationwide, multi-industry survey (WES) - including health sector organizations - conducted in 1999 and 2000 by Statistics Canada. General managers or HR managers were interviewed over the phone, and participation in the survey was mandatory.</p>	<p><u>Sample</u>: Organizations surveyed in WES that have complete data for 1999 and 2000 and 10 or more employees. <u>Dependent variable</u>: Voluntary turnover for 2000, based on the number of employees who resigned (p. 235). <u>Independent variables</u>: Training was measured as mean of two ratios: the % of employees receiving either classroom training and the % receiving on-the-job training. (p. 235) (<i>Measures of other HR practices are included elsewhere in this table.</i>) Control variables were also included. <u>Analysis</u>: Identify impact of 1999 HR management practices on 2000 voluntary turnover rates, using a <i>tobit</i> technique and proportional weights. (p. 238)</p>	<p>Found weak relationships among HR practices, so unlikely to suffer from multicollinearity. Bivariate correlations show 10 of the 14 HR practices studied were significantly associated with reduced voluntary turnover in the following year, and that training and two other practices (individual incentives and employee suggestion programs) were associated with higher voluntary turnover the following year. In the multivariate analysis, controlling for various control variables and for other HRM practices, only three practices remained significant: training, internal labor markets, and formal dispute resolution procedures. Of these, only training increased turnover, while the others reduced turnover. This seems to suggest that training increases "ease of movement" and that this outweighs any increase in organizational commitment. (see p. 240) The study did not distinguish by type of training, which could moderate this impact (see "Moderators"). The authors also note that they cannot conclude causality from their two-year panel design; it is also possible that the causal relationship is reversed (i.e., high turnover requires high levels of training to bring new employees up to speed) or spurious.</p>		<p>The type of training -- particularly a distinction between portable or firm-specific skills - may moderate the relationship found here between training and performance. Specifically, the authors suggest that the training provided by Canadian firms may consist primarily of portable technical skills, while in other settings (e.g., Japanese firms) training is an important part of socialization into a particular corporate culture. The authors also include a number of control variables, which point to factors believed to mediate the relationship between HR practices and performance or otherwise influence both practices and performance. Control variables include workplace size; presence of a separate HR unit with at least 2 staff members; union membership; industry type; geographic regions. Other human resource practices can also moderate the relationship between training and turnover (see p. 243), an area for future research.</p>

Training and Development	Informal / On-the-Job Training, Mentoring, Coaching	Liu and Batt (2007) "The Economic Pay-Offs to Informal Training: Evidence from Routine Service Work."	Examined the link between individual-level on-the-job training and job performance in a routine service job. The company provides on average 2.1 weeks of induction training, and then supports ongoing informal training in several ways. One is monthly individual performance reviews, in which supervisors provide feedback from calls they've listened in on. Another is on-the-job training provided by supervisors or peer trainers, which cover "methods (new procedures for call handling or information processing), customer satisfaction (ways to improve service quality), district issues (business-specific information), performance improvement activities, and ergonomics." (p. 81) Study looked at informal training, and calculated both the effects of training and their "depreciation rates" over time. Also looked at how employees with different capabilities respond to training, and at the differences between supervisor-provided and peer-provided training.	Based on longitudinal, individual-level archival data (a computerized monitoring system). <u>Sample:</u> Monthly individual-level training and performance data for 2,803 telephone operators in the U.S. from January - May 2001. By using one occupational group and one company, they aim to remove the effect of confounding factors. <u>Type of training provided</u> The paper includes details on the formal and informal training provided to telephone operators. Frequent changes to the system and job task, and strict performance requirements, mean that staff must utilize informal training in order to succeed and remain in the job. <u>Measures:</u> 1) <u>Training</u> -- A computerized monitoring system tracks the time that operators logged out for training purposes, and also who provided the training. Average training per month ranged from 75 to 94 minutes, and on average 62 minutes of informal training were provided by supervisors and 19 minutes by peer trainers each month. (p. 82) 2) <u>Productivity:</u> Call handling time; 3) <u>Pre-training proficiency</u> -- Employees are categorized into "low" "average" and "high" proficiency groups according to their "objectives met" score, which divides the objective call time (set independently by each call center) by actual call time. The company sets a range of acceptable performance on this measure of 94% to 107%; employees below this are rated unsatisfactory ("low" proficiency) and above this rated excellent ("high proficiency").	<u>Summary:</u> Training led to higher productivity over time; those with lower pre-training job proficiency showed greater gains, and showed higher gains from training provided by supervisors than from training provided by peers. Those with higher pre-training job proficiency benefited more from peer training than from training provided by supervisors. <u>Details:</u> Training was relatively evenly distributed. Almost all workers receive some training each month (92.8%-95.6%). Amounts of training varied by proficiency group: 1hr 44 mins on average for the lowest, 1 hour 28 minutes for average group, and 1 hour 19 minutes for the high proficiency group. Supervisor training represent 71% of training for low proficiency group, 78% for average, and 73% for high. (p. 83) <u>Findings:</u> "Informal training has a strong negative effect on call handling time among all workers." (p. 83) Pre-training proficiency is a significant moderator for the impact of informal training; an increase of 10% in informal training is associated with a 0.16% reduction in call handling time for low proficiency workers, but just 0.06% for average workers and 0.03% in high proficiency workers. (p. 85) Although these benefits may seem small (just fractions of a second), they actually have a significant economic impact for firms; the returns to investments in informal training for the company are nearly 500%. (p. 86) Both supervisor and peer-led trainings have a significant effect on call handling time for all workers overall, but less proficient workers benefit more and more proficient workers benefit less from supervisor training than from peer training. Among the highest proficiency group, peer training has a negative relationship with productivity. (p. 85)		Theory suggests that complexity of task, proficiency of employee, and who delivers the training will all moderate the relationship between training and performance. For example, cites Swanson et al (1990) that low-ability learners gain more from highly structured learning environments.
		Elmadag, et al (2008), "Antecedents and Consequences of Frontline Service Employee Commitment to Service Quality." (Note: These findings should be read with some caution, as the design and methodology of this study are somewhat weak, and key information seems to be missing from the article.)	Study of US firms in the third-party logistics service provider industry. Examines three approaches that might improve frontline service employee commitment to service quality: formal training, managerial coaching, and rewarding. In an abbreviated review of existing studies, the authors argue that all three methods have been shown to improve service quality. (p. 98-99) Does not give much detail about what is entailed in the three approaches, but does later refer to coaching as involving "setting expectations, giving constructive feedback, asking questions rather than providing solutions, and communicating the importance of expectations relative to the broader goals of the firm." (p. 104)	<u>Sample:</u> Non-random survey; sent questionnaire package to 277 units of 119 firms (all same industry: third-party logistics providers); managers were asked to distribute to three frontline service employees (FLEs) and one line manager. Reports demographics of the respondents but does not compare to total employee population. (Notably, respondents have a very long average tenure with their firms -- 5 and a half years, with more than 12 years experience in the customer service industry.) <u>Measures:</u> Use "established scales from previous research" (p. 100), tested and modified slightly for the third-party logistics industry. <u>Independent variables:</u> 1) formal off-the-job training; 2) informal managerial coaching; and 3) rewarding. <u>Dependent variables:</u> 1) "Commitment to Service Quality," (CSQ) which is defined as "the relative propensity of a service employee to engage in continuous improvement and exert effort on the job for the benefit of customers." (Peccei and Rosenthal (1997), p. 69, as quoted in Elmaag, et al (2008) p. 96.) Also examine the consequences of CSQ on 2) job satisfaction; 3) commitment to the firm; 4) job performance; 5) organizational citizenship behaviors. (p. 98)	Concludes that informal managerial coaching is the most effective mechanism for increasing commitment to service quality (CSQ), both for all surveyed employees overall and for both high and low-CSQ groups, and that this improved CSQ also improves outcomes. Coaching has a strong influence on frontline service employee behaviors both directly and indirectly via improved CSQ. In contrast, formal training and rewarding are both insignificant in relation to CSQ for the group overall. Rewarding has a significant positive relationship with CSQ for the low-CSQ group, but "neither formal training nor rewarding has any effect on the higher group". (p. 104) Training has a significant negative influence on CSQ for the lower-CSQ group, to the surprise of the authors. Supervisors' level of CSQ was found to moderate the impact of coaching and other interventions on employees' CSQ.	Managerial coaching and other informal, on-the-job training efforts are relatively cost-effective and therefore can be more feasible and sustainable in resource-constrained settings than other types of employee development initiatives..	Study finds that the manager's level of commitment to service quality moderates the impact of training, coaching, and rewards on employees' commitment to service quality.
Training and Development	Cross-Training / Polyvalent Skills Development	Fincham and Rhodes, p. 683-4	Reviews the practice of job rotation during training to develop "polyvalent" (multi-skilled) workers, as part of the development of flexible specialization in Germany's industrial sector.	N/A	"Polyvalency of skill permits a broad and flexible utilisation of labour across boundaries... Polyvalency of the German type also further co-operation within work-groups across hierarchical divisions and thus provides a natural foundation for the institution of semi-autonomous work groups." (Fincham and Rhodes p. 683-684, citing Lane (1988) p. 144)	Is it feasible to imagine that CBAs be trained in multiple skills that go beyond their specific role, and/or have some experience of job rotation?	
Training and Development	Internal Labour Market These policies provide opportunities for promotion and career development within the firm. They are believed to increase employee motivation to perform and to develop skills that might help them in future positions.	Benson, et al (2004). "You Paid for the Skills, Now Keep Them: Tuition Reimbursement and Voluntary Turnover." Combs, et al (2006) and Liu, et al (2007)	Examined promotion (increase in job grade) as a moderator for turnover among those who benefited from a tuition reimbursement scheme. See above for discussion of methods. See above (under "High Performance Work Systems") for comprehensive discussion of methods.	See above for details. See above for details. 12 of 92 studies examined internal promotion policies in a wide range of sectors, including at least one study of both for-profit and non-profit organizations (Delaney and Huselid (1996)), according to Liu, et al, p. 507.	Promotions moderate voluntary turnover among employees who earned degrees: those promoted after earning degrees were 56% less likely to leave than those who earned degrees but were not promoted; this effect of promotion was greater than the effect of promotion on turnover for those who did not participate in the tuition scheme. Magnitude of effect equivalent to the impact from training ($r_t=0.15$) but less than the average overall effect ($r_c=0.20$). (Combs, et al, Table 3, p. 516.)		

		Haines, et al (2010)	See above (under "Training") for detailed discussion of methods. An internal labor market measured here as the likelihood of hiring from within, is believed to reduce turnover via two mechanisms: 1) by developing skills that are specific to the firm, which gives employees a reason to stay; and 2) opportunity for advancement, which improves job satisfaction. Reviews existing literature, which they say mostly find that internal labor markets reduce turnover.	See above (under "Training") for detailed discussion of methods and tools. <u>Independent variables</u> -- <u>Internal labor market</u> : Surveys asked respondents to choose the most frequently used method for filling vacant positions in different job categories: "From within the workplace," "From another workplace within the same... company ..." or "From outside the company." To measure the presence of internal labor markets, the first two response were coded 1 and the third was coded 0. (p. 235)	<u>Summary</u> : "Organizations wishing to control or reduce voluntary turnover would be well advised to hire from within and offer vertical (promotions) and lateral (transfers) opportunities." (p. 241) <u>Findings related to internal labor markets</u> : (See above under "training" for more information on findings overall). Bivariate correlations show that 10 of the 14 HR practices studied, including Internal Labor Market, were significantly associated with reduced voluntary turnover in the following year. In the multivariate analysis, only three practices remained significant, including internal labor markets, which correlated with reduced turnover. In estimating magnitude, "a one standard deviation increase in hiring from within is associated with a turnover rate that is 1.17 percentage points lower." (p. 240) This finding is consistent with theory and previous research (see studies cited, p. 241) "Staffing policies that emphasize hiring from within provide participants with the opportunity to move into the firm's more desirable jobs and may help build a strong corporate culture that is conducive to employee retention." (p. 241)		The authors include a number of control variables, which point to factors believed to mediate the relationship between HR practices and performance or otherwise influence both practices and performance. Control variables include workplace size; presence of a separate HR unit with at least 2 staff members; union membership; industry type; geographic regions.
Training and Development	Promotion Rate	Nyberg (2010) , "Retaining Your High Performers: Moderators of the Performance - Job Satisfaction - Voluntary Turnover Relationship"	Looks at the quality of employees who stay and leave, something rarely done in studies of turnover. Combines two divergent thoughts about the link between performance and voluntary turnover: equity and expectancy theories say high performers who feel their companies value and reward their contributions will be less likely than lower performers to leave; economic labor market theory says that high performers will be more attractive to other employers and therefore more likely to leave. Overall there seems to be a negative relationship between performance and voluntary turnover (higher performance is related to lower turnover) but there is little evidence about when and why that changes. <u>Promotion Rates</u> can have conflicting effects on the relationship between performance and turnover: can increase organizational commitment and decrease desirability of leaving; and can increase the employees "visibility" to other employers. Past research has had mixed results. (p. 442). Hypothesis: though evidence is mixed, believes that the positive impact of increased organizational commitment should outweigh signalling effect and strengthen negative relationship between performance and voluntary turnover.	<u>Sample</u> : 12,545 insurance employees over a 3-year period. <u>Dependent variable</u> : <u>voluntary turnover</u> each day among all full-time employees. <u>Independent variables</u> : 1) <u>Performance</u> : annual individual performance measure, generated by supervisor along a range of categories (ranging from achievement to daily role behavior and consistency). Very detailed and standardized system; supervisors trained in how to complete it. Bonuses were (supposed to be) tied to these ratings. 2) <u>Pay growth rate</u> ; 3) <u>Perceived pay for performance</u> : measured through employee attitude surveys, administered each year by an outside consulting company.; 4) <u>Promotion rate</u> : taken from employee "activity records"; 5) <u>Relevant unemployment rate</u> ; 6) <u>job satisfaction</u> : measured in the same employee attitude surveys as perceived pay for performance. <u>Analysis</u> : used Cox model (see p. 445 for details).	<u>Summary</u> : The negative relationship between performance and voluntary turnover was stronger when pay growth was high, and when the relevant unemployment rate is low. These relationships are independent of job satisfaction. (p. 449) <u>Promotion rate</u> : Interaction term and improved model fit were both significant. "High promotion rates, when evaluated without other interaction terms, strengthen the negative relationship between performance and voluntary turnover." (p. 448) However, because promotion and pay were closely linked, it is difficult to estimate the influence of promotion exclusive of pay. (p. 451) <u>Other findings</u> : Pay and performance were linked (both "salary plus bonus" and pay growth.) Strong correlation between perceived pay for performance and job satisfaction (0.57). (p. 446) <u>Pay growth</u> : A performance-pay growth interaction term was significant and significantly increased the explained variance for the model. "When pay growth was high, the negative relationship between performance and voluntary turnover was stronger." (p. 446) This was not mediated by job satisfaction. <u>Perceived pay for performance</u> : No significant moderating impact on link between performance and turnover: neither the interaction term between performance and perceived pay for performance nor the change in model fit were significant. (p. 448) <u>Relevant unemployment rate</u> : Significant: when unemployment rate was low, the negative relationship between performance and voluntary turnover was stronger. <u>Analysis by performance group</u> : conducted after the main study and not discussed in detail, this found that none of the variables examined here were statistically related to voluntary turnover amongst the lowest-performing group; this may be because "these lower performing employees place such heavy emphasis on job retention that pay growth, perceptions of pay for performance, and external opportunities do not influence their turnover decisions." (p. 449)		<u>Unemployment rate</u> moderates the relationship between performance and voluntary turnover: when unemployment is low, there are more available jobs and this benefits all employees; but when unemployment is high, high performers will be able to "capture" a higher proportion of the opportunities and the negative relationship between performance and turnover will be weaker. The contexts in which iCCM operates presumably have very high unemployment, much higher than any seen in this study (based in the US skilled labor market). This may mean that high-performing employees are more likely to leave than in an environment with lower unemployment. <u>Importance of job retention</u> : The authors' proposed explanation for why turnover in the the lowest performance category was not statistically related to any of the mediating variables may be very relevant in a high poverty / high unemployment context: that desire to keep the job outweighs all other considerations.
Performance Measurement	"Mystery Shoppers"	Van Iddekinge, et al (2009)	See above for details. Study units of a fast-food company in the US.	To measure customer service performance, the company uses a technique common in service industries: "mystery shoppers": hired and trained by corporate headquarters, who visit each store (unit), purchase a meal, and rate each unit on food quality, customer service, and cleanliness.	See above for details.	The "Mystery Shopper" method of testing customer service could be an interesting innovation to apply to the health sector, but it's difficult to imagine how it would work with CBAs who presumably know all the members of their community. Could some be enlisted and trained to secretly rate CBAs on standardized measures of performance?	See above.

<p>Performance Measurement</p>	<p>Balanced Scorecard (BSC) This popular technique for measuring and reporting firm performance, also sometimes known as a "dashboard report", delivers a quick and accessible report of both financial and operational (hence "balanced") macro-level indicators. First introduced in the early 1990s, it has been extremely influential; in 1997 it was named "one of the most influential management instruments of the 20th century" and a study in 2007 by consulting firm Bain & Company found that 66% of 1,221 global companies were using BSC. (As reported in deGueser, et al (2009), p. 93-94) Some argue, however, that empirical evidence of the impact (if any) of BSC has lagged far behind the spread of the practice.</p>	<p>Curtright, et al (1999), "Strategic Performance Management: Development of a Performance Measurement System at the Mayo Clinic"</p>	<p>Reports on the process of developing a comprehensive performance measurement and management system for the Mayo Clinic's outpatient operations, building on the "balanced scorecard" or "dashboard report" systems for reporting macrolevel indicators. Conducted a comprehensive research process before developing a framework, including: studies of leading healthcare centers; studies of leading organizations in different industries; and frameworks developed by business school academics. (p. 63) Integrated these with the Mayo Clinic's "vision, primary value, and core principles." Once identifying core concepts, they identified indicators for each concept (see details on process, p. 64) and communicated this throughout the unit</p>		<p>Lists key elements of performance measurement frameworks from other healthcare institutions and other sectors, namely: "customer satisfaction (internal and external customers); internal business processes (efficiency of operations); quality of service or products; continuous improvement efforts; public responsibility and social commitment; financial performance." (p. 63) Also lists the specifics of the framework and indicators developed by Mayo (p. 64-65). Cites benefits, primarily in terms of improved / streamlined flow and use of information and data. Also the leadership of the Mayo Clinic overall is now showing more interest in measuring performance "beyond the traditional financial and clinical productivity indicators", possibly as a result of the operations group's efforts to develop and implement a more comprehensive and "balanced" performance measurement system. (p. 66)</p>	<p>It seems that the process of developing and implementing a comprehensive performance framework of this time can be very costly and complex. It also requires relatively high capacity to collect, manage, and use data. These factors may make such systems difficult to implement, scale, or replicate in a low-resource setting.</p>	
		<p>De Geuser, et al (2009), "Does the Balanced Scorecard Add Value? Empirical Evidence on its Effect on Performance"</p>	<p>Extensive literature review and original empirical study of 76 business units in 24 European companies. Examines both the effect of BSC ("how much") and the sources of this effect ("how"). Some studies, for instance, have argued that the value of BSC comes primarily from the interactive process of developing and implemented BSCs. (Mooraj, et al (1999) cited in De Gueser, et al, p. 99)</p>	<p>Sent survey questionnaires in 2000 to European companies that had participated in recent BSC conferences, and asked them to forward questionnaires to up to five business unit managers in their companies. Questions were designed to test the effect of BSC on unit performance and the sources of this impact (based on self-reported perceptions). Used methodologies developed for testing other management innovations, which may reduce their effectiveness in this specific question.</p>	<p>Findings of limited relevance for this review. Concludes that BSC does have a positive contribution to organization performance. None of the performance measures the authors use are directly related to staff performance or retention. They do test the involvement of employees in implementing BSC as one possible source of value from BSC, but find (to their surprise) that this is not significant.</p>		
		<p>Hawk and Sheridan (1999), "The Right Staff"</p>	<p>Not a formal study; based on authors' experience as "Human Capital" consultants, with expertise in improving individual and organizational performance. Reports case studies of five practices they argue will increase commitment and thereby performance of core workers. Also draws selectively on other publications, surveys, etc.</p>	<p>N/A</p>	<p>Reports two case studies, including Telecom Eireann in Ireland which combined incentive compensation (employees get 14.9% of company shares) with clear performance targets. It is also "engaging all 11,000 employees to help rethink the business from a balanced scorecard approach that looks at customer satisfaction, financial performance, employee satisfaction, and operational performance," (emphasis added) and is running training sessions and workshops to help improve the "business literacy" of employees. No specific evidence of impact is reported.</p>		
		<p>Kaplan (2001), "Balanced Scorecards and Non-profits"</p>	<p>"Action research" results from applying the BSC approach to non-profits, including three detailed case studies. In two of these, the author (a professor at Harvard Business School and one of the two creators of the BSC approach) approached the organization and worked with them to implement the BSC.</p>	<p>No formal research tools. Does provide detailed examples of how organizations implemented the BSC (e.g., by using "Mission" rather than the financial / shareholder objectives used by for-profit companies).</p>	<p>Reports significant positive impacts for some case studies, but there is little to no empirical basis for tying these specifically to the BSC. For instance, in the Duke Children's Hospital, cost per case and average length of stay both dropped by 25%, the hospital's financial health improved dramatically, and patient outcomes and family satisfaction also improved (p. 365). However, the BSC was only one factor, a tool used to help design and implement a much larger organizational change effort. It is impossible from the evidence provided to isolate the impact of BSC over and above those other changes. Specific to HR, Kaplan argues in another case that BSCs helps individuals to "align their day-to-day actions with helping the organization achieve its strategic objectives." (p. 363)</p>	<p>If the ICCM initiatives are already collecting aggregate performance data on a regular basis, it would be relatively low-cost to share that information systematically with CBAs. However, to be successful this would have to be paired with training to help CBAs understand the information provided.</p>	<p>See above for general moderators (e.g., work context) in this study.</p>

Performance Measurement (and Employee Involvement)	Information Sharing re: Organizational Performance Sometimes known as "business literacy" and linked to performance measurement innovations such as the "balanced scorecard," this involves widespread sharing of information about firm and unit performance with employees throughout the organization. This is believed to improve performance and retention by building greater employee commitment and involvement, in part by allowing employees to understand the core business and to see clearly how their work relates to the larger firm strategy and how they can help improve firm performance.	Combs, et al (2006) and Liu, et al (2007)	See above (under "High Performance Work Systems") for comprehensive discussion of methods.	See above for details. Just 6 of 92 studies included information sharing.	As with teams, the evidence is promising but not significant (Liu, et al, p. 508; Combs, et al p. 516).	Presumably the relevant organizational-level performance measures in the case of iCCM would be primarily health-related outcomes measures, as well as some intermediate measures of productivity (e.g., number of patients served). It seems that there could be benefits from helping CBAs to understand these measures and keeping them informed about the goals and progress, so they can see how their work relates to those overall goals	
		Hawk and Sheridan (1999), "The Right Staff"	Not a formal study; based on authors' experience as "Human Capital" consultants, with expertise in improving individual and organizational performance. Reports case studies of five practices they argue will increase commitment and thereby performance of core workers. Also draws selectively on other publications, surveys, etc.	N/A	Reports four case studies where companies actively shared business information with core workers, and helped them understand the measures' meaning and importance. [Does not report any formal data on impact, but does report positive anecdotal reports.] These include: a "Productivity Plus" scorecard system; a participatory process for developing a performance incentive system, which gave employees a chance to learn about the business metrics used to measure firm performance; a company that used "multi-media communications, electronic and printed displays and new, eye-catching bulletin boards to make sure all team members know the goals and progress toward meeting them" (p. 45-46); and monthly meetings with management and employees to share information about the state of the business.		
Performance Measurement	Performance Appraisal in healthcare setting	West, et al (2002), "The link between the management of employees and patient mortality in acute hospitals."	Reviews past literature on HRM and performance outcomes, and argues that is "considerable evidence that the extensiveness and sophistication of appraisal are linked to changes in individual performance." (p. 1301, cite Fletcher and Williams, 1985) Notes that very little of the HRM literature is based on research in hospital settings. This new study contributes by looking at HR practices, including appraisal, and patient outcomes in acute care hospitals.	[See section above on training for more details about the methodology, and the relevant sections for details on teamworking and training.] Independent variables: 1) Training. 2) Teamworking 3) Appraisal: Developed a single combined measure of the sophistication and extensiveness of appraisal systems. This included the following data: Respondents rated the degree to which the hospital prioritized appraisals for all staff, and reported the percentage of staff in each group who received an appraisal in the previous 12 months; the frequency of appraisals; the % of staff conducting appraisals who were trained to do so; and what methods were used to evaluate the appraisal system and process. These were combined to create 4) HR Practices (aggregate measure) Dependent variables: Six health outcome measures: deaths (within a month) after emergency surgery, non-emergency surgery, admission for hip fractures, and admission for heart attacks; re-admission rates; and a mortality index.	Found that the sophistication of performance appraisal systems had the strongest negative relationship with patient mortality of the three HR practices studied. See above, under training, for more detailed findings. However, as the authors acknowledge, no causal inferences can be drawn from this analysis given the cross-sectional design. (West, et al, p. 1308)	See above	
Performance Incentives	Non-Financial Rewards (various)	Ulrich and Brockbank (2005) "The work of HR part one: people and performance"	Not an evidence-based study, but a framework of important concepts and practices from two prominent business school professors who have done research and consulting in this area.	N/A	Discuss a range of non-financial rewards, many of which could / should be allocated according to performance, though now they are often allocated randomly or to all staff: 1) Vision: "A strong vision gives employees pride in the company"; 2) Opportunity: "The chance to shine": e.g., to give presentations to senior managers, or attend training usually reserved for more senior staff; 3) Incentive: including recognition, praise, gratitude; 4) Impact: "People like to make a difference": e.g., decentralizing decision-making, encouraging and rewarding employee suggestions, and allowing employees to represent the company externally; 5) Community: activities outside of work, or allowing teams to participate in selecting future members, can help build community; 6) Communication: "Access to information may be a reward" - e.g., some communication open first or only to high-performing employees; 7) Experimentation: e.g., flexibility in hours, working place, and working conditions. (Ulrich and Brockbank, p. 22)		

Performance Incentives	"Rewards" (Author provides no information about what is entailed.)	Elmadag, et al (2008), (Note: These findings should be read with some caution, as the design and methodology of this study are somewhat weak, and key details not provided.)	See above under "Managerial Coaching" for details	See above for details.	"Rewarding" is not significant in relation to Commitment to Service Quality (CSQ) for the group overall, but does have a significant positive relationship with CSQ for the low-CSQ group, but "neither formal training nor rewarding has any effect on the higher group". (p. 104)		Study finds that the manager's level of commitment to service quality moderates the impact of training, coaching, and rewards on employees' commitment to service quality.
Performance Incentives	Financial Rewards (various)	Ulrich and Brockbank (2005) "The work of HR part one: people and performance"	Not an evidence-based study, but a framework of important concepts and practices from two prominent business school professors who have done research and consulting in this area.	N/A	Discuss four "clusters" of financial rewards that companies can use: 1) <u>Short-term cash</u> : "Base salary or on-the-spot cash compensation", "should be equitable internally and externally", in relation to market rates; 2) <u>Short-term equity</u> : stock grants; 3) <u>Long-term cash</u> : performance pay "based on continuing performance" (often 3 years); 4) <u>Long-term equity</u> : stock options. (Ulrich and Brockbank, p. 22)	What would be the equivalent in a community health / non-profit setting to "equity"-based rewards? Is there a way that employees can be given long-term investment in the organization's success?	
Performance Incentives	Perceived Pay for Performance	Nyberg (2010), "Retaining Your High Performers: Moderators of the Performance - Job Satisfaction - Voluntary Turnover Relationship"	See above, under "Promotion Rates" for details about study overall. <u>Perceived Pay for Performance</u> : Past studies show that contingent pay "influences the performance-voluntary turnover relationship." (p. 442) Theory says that high performers will prefer a stronger link between pay and performance than will low performers. Cites a 1994 meta-analysis (Williams and Livingstone) that showed that "contingent pay is associated with greater turnover for lower performers than for higher performers and speculated that higher performing employees lose confidence in systems that do not strongly correlate performance and pay." (p. 442).	See above, under "Promotion Rates" for details about study overall. <u>Sample</u> : 12,545 insurance employees over a 3-year period. <u>Independent variables</u> : 3) <u>Perceived pay for performance</u> : measured through employee attitude surveys, administered each year by an outside consulting company.	See above, under "Promotion Rates" for details about study overall. <u>Perceived pay for performance</u> : No significant moderating impact on link between performance and turnover: neither the interaction term between performance and perceived pay for performance nor the change in model fit were significant. (p. 448)		See above for details.
Performance Incentives	Incentive Compensation Financial incentives such as stock options, performance bonuses (individual or group), and profit sharing.	Combs, et al (2006) and Liu, et al (2007)	See above (under "High Performance Work Systems") for comprehensive discussion of methods.	See above for details. 31 of the 92 studies included in the meta-analysis examined incentive compensation, the most of any individual HR practice.	Incentive compensation was the "most frequently studied HR practice, with 31 relevant studies found... most of which reported a positive link between incentive compensation and performance," (Liu, et al (2007), p. 506). Magnitude of effect was equivalent to the impact from training or internal promotion ($r_t=0.15$) but less than the average overall effect ($r_c=0.20$). (Combs, et al, Table 3, p. 516.)	This is not discussed in the study, but it seems there may be cultural resistance to performance-based pay in contexts where people are accustomed to pay being linked to length of tenure and possibly qualifications (e.g., educational).	Needs to fit within overall HRM system and with business strategy (horizontal and vertical alignment) – e.g., if you want to promote cooperation, you may not want to give bonuses based on individual performance. (Liu, et al., p. 506)
Performance Incentives	Variable Pay, via one or more of the following: individual incentives, group incentives, profit-sharing, and merit or skill-based pay.	Haines, et al (2010)	See above (under "Training") for detailed discussion of methods. Review of existing theory and methods concludes that "the influence of variable pay on turnover rates is not clearly established." (p. 232) In theory, should increase turnover for low performers and decrease turnover for high performers. The impact is also often complicated by the fact that variable pay is often tied to other high performance work practices that reduce turnover. The research design for this study does not distinguish between "functional" (low performers) and "dysfunctional" (high performers) turnover.	See above (under "Training") for detailed discussion of methods. <u>Independent variable -- Variable pay</u> : Dummy variable for the presence or absence of 1) Individual incentives (bonuses, piece rates, commissions and stock options); 2) productive / quality gain-sharing and other group incentives; 3) profit-sharing; or 4) merit-and skill-based pay. (p. 236) These were included both as individual variables and as a composite variable for all four types of variable pay.	Summary: there is not much evidence for, but no evidence against, the hypothesis that variable pay will decrease voluntary turnover. It may be necessary to look separately at functional and dysfunctional turnover, and/or at the effect of financial insecurity, to better understand this relationship. (p. 240) Details: All were negatively related to turnover in the following year in a bivariate correlation except individual incentives, which were positively related (i.e., presence of individual incentives was linked to higher turnover in the following year). In the regression model, the composite variable was not significant, but merit- and skill-based pay had a marginally significant negative relationship with voluntary turnover.	Variable pay may be less acceptable in contexts of high poverty, where the financial insecurity associated with (some) variable pay programs might have a negative impact on employee motivation, satisfaction, or even standards of living.	Employee performance may moderate the link between performance-related pay (and other performance incentives) and turnover. Performance pay may increase turnover among low-performing employees ("functional turnover") while decreasing turnover among high performers.
Performance Incentives	Gainsharing: Similar to profit-sharing, this is a bonus structure that rewards employees for gains that result from cost savings, improved productivity, etc.	Hawk and Sheridan (1999), "The Right Staff"	Not a formal study; based on authors' experience as "Human Capital" consultants, with expertise in improving individual and organizational performance. Reports case studies of five practices they argue will increase commitment and thereby performance of core workers. Also draws selectively on other publications, surveys, etc.	N/A	Not a formal study, but recounts the case of Meritor, which implemented a gainsharing plan in 1997, and experienced sufficient improvements in the first two years to reward employees with bonuses that averaged 6% of pay. These were based both on the performance of employees' own units and on the company's performance overall.		

General Pay and Benefits	Compensation Level (Relative Pay) Paying more influences the job choices of desirable candidates and may help organizations get employees with high levels of the Knowledge, Skills, and Attitudes (KSAs) they need to succeed.	Combs, et al (2006) and Liu, et al (2007)	See above (under "High Performance Work Systems") for comprehensive discussion of methods.	See above for details. 18 of the 92 studies included in the meta-analysis examined the effect of compensation on performance.	Overall, the effect of compensation level on performance was slightly higher than average for HPWPs studied, but 7 studies showed a small but significant negative relationship between compensation level and performance.(Liu, et al, p. 506)	
		Haines, et al (2010)	See above (under "Training") for detailed discussion of methods. Past studies demonstrate a strong and consistent negative relationship between pay and turnover. (They cite 8 firm-level studies with this finding.) p. 232	See above (under "Training") for detailed discussion of methods. Independent variable -- Relative pay: Difference between workplace pay and industry pay. (p. 236)	Negatively related to turnover in the following year in a bivariate correlation, but not significant in regression model that included control variables and also controlled for other HR practices.	
General Pay and Benefits	Pay Growth	Nyberg (2010). "Retaining Your High Performers: Moderators of the Performance - Job Satisfaction - Voluntary Turnover Relationship"	See above, under "Promotion Rates" for details about study overall. According to theory and past research, Pay Growth is "arguably as important as base pay" in motivating employees, but "there is minimal research regarding the influence of pay growth on employee attitudes and actions." (p 441) Two previous studies found a negative relationship between pay growth and turnover.	See above, under "Promotion Rates" for details about study overall. Independent variables: 2) Pay growth rate;	See above, under "Promotion Rates" for details about study overall. Summary: The negative relationship between performance and voluntary turnover was stronger when pay growth was high, and when the relevant unemployment rate is low. These relationships are independent of job satisfaction. (p. 449) Pay growth: A performance-pay growth interaction term was significant and significantly increased the explained variance for the model. "When pay growth was high, the negative relationship between performance and voluntary turnover was stronger." (p. 446) This was not mediated by job satisfaction.	See above for details.
General Pay and Benefits	Generous Benefits	Haines, et al (2010)	See above (under "Training") for detailed discussion of methods. Says previous studies are mixed on the relationship between the generosity of benefits and turnover. Three studies show that higher benefits are related to lower turnover, and three that don't show this (i.e., non-significant.)	See above (under "Training") for detailed discussion of methods. Independent variable -- Benefits: "Availability of seven non-wage benefits and how they are funded. " (0="not available or available but not funded by employer"; 1="available and funded by both the employee and the employer;" and 2="available and fully funded by employer". (p. 236)	Negatively related to turnover in the following year in a bivariate correlation. In the regression model, the relationship is negative but only marginally significant (p. 240)	
Supervisors and Managers	Frontline Supervisors / Supervisory Management Frontline supervisors, which includes employees with supervisory responsibilities, is the first line of supervision for core workers, and can effect the performance of individual employees and of the institution as a whole. One review argued that past studies "seemed to agree that supervisory management is the crucial link between human capital and high performance in the public sector." (Brewer (2005), p. 506)	Brewer (2005), "In the Eye of the Storm: Frontline Supervisors and Federal Agency Performance," <i>Journal of Public Administration Research and Theory</i> .	Studies frontline supervisors in the 22 largest U.S. federal government agencies, and the relationship between supervisors and perceptual measures of overall organizational performance and effectiveness. Develops a measure of organizational performance in federal agencies and a model for predicting performance, with supervisory management prominent in that model, and tests it on these agencies. Reviews recent literature on the "problem" of (weak) supervisory management in the federal government, and also recent research that attempts to develop a model of public sector performance, in which management variables seem to matter. However, public management scholars have not paid much attention to frontline supervisors, despite their large numbers and theoretical importance.	Methods: Uses data from a 2000 survey of the attitudes and behaviors of 17,250 civilian employees of the largest federal agencies (excluding the Postal Service and intelligence agencies) randomly selected from the total workforce of more than 1.5 million and stratified to allow for cross-agency comparisons. Respondents answered questions on a range of topics related to human resource policies, motivation and job satisfaction, work quality and productivity, etc. Dependent variable: A combined index for organizational performance is developed using eight perceptual survey questions, including such concepts as effectiveness and fairness. Independent variables: 1) Supervisory status (is the respondent a supervisor), used as a control variable and to measure the number of frontline supervisors across agencies; 2) Supervisory proficiency (a combination of eight survey items addressing different components of supervisor competency -- these are highly correlated, such that supervisors tend to be strong or weak on all); 3) Satisfaction with higher management; 4) Support for workforce diversity; and 5-6) two measures of organizational culture: meaningful/engaging work and efficacy. They also included a number of controls for resources, organization, and regulation, and three individual-level measures: individual performance, pay satisfaction and job satisfaction. Analysis: Uses a straightforward, Ordinary Least Squares (OLS) multivariate regression. Details of the survey items used and statistical findings are included in the paper.	Reports that "management-related variables exert the strongest influence" on federal agency performance and effectiveness." (p. 517). (Note: The claims made seem to overstate the empirical findings in some cases.) Variables measuring organizational culture (meaningful/engaged work and efficacy), frontline supervisory status, supervisory proficiency, performance management, satisfaction with higher management, and support for diversity are all significant. In summary, the study argues that frontline supervisors are important to performance, and "supervisory management is an important factor affecting federal agency performance" (p. 506) In addition, a number of other characteristics seem to be related to organizational performance. Though the author seems to be trying to draw a causal conclusion, it is very likely that some or all of these relationships are not causal, or reflect reverse or simultaneous causality -- e.g., that high-performing agencies cause employees to be very satisfied with higher management, rather than that good management causes high performance. In addition, results are based on perceptual measures (how employees rate the performance of their own organization) which may introduce a bias, although the author argues that past studies have confirmed a strong correlation between subjective and objective performance measures.	A major question is, if supervisors matter, how can organizations improve frontline supervision? The paper's literature review includes studies that suggest many U.S. public sector supervisors have strong technical skills but weak management skills. The author cites recommendations from various experts that agencies could increase the quality of their supervisor cadre by selecting employees based in part on managerial / leadership competencies, rather than just technical skills as can sometimes occur, as well as other efforts to Batter develop and manage supervisors. (p. 508) This may be worth considering in the context of CBAs.
Supervisors and Managers	Supervisor Competencies and Leadership Style. The "competencies" needed to be an effective manager or supervisor, in relation to such outcomes as staff retention, satisfaction, or performance.	DeOnna (2006). <i>Developing and Validating an Instrument to Measure the Perceived JobCompetencies Linked to Performance and Staff Retention fo First-Line Nurse Managers Employed in a Hospital Setting</i> . A Thesis in Worforce Education and Development, Pennsylvania State University, Graduate	Examines the role of frontline nurse managers in the retention of nursing staff, and develops and validates a "Nurse Manager Competency Inventory" (a self-assessment tool) with specific relevance to staff retention in a hospital setting.	Detailed account of the process of developing and validating a competency framework for nurse managers. The items on the instrument are developed from a literature review, job analysis, and interviews with "exemplary" nurse managers, and are selected and finalized with the help of an expert panel. They are then tested for validity and reliability.	Eleven "competency domains" (e.g., "Perform Supervisory Responsibilities" and "Conduct Daily Unit Operations") were found to be important to overall performance of nurse managers. Twelve competencies were found to be important to staff retention: "Maintain an 'open-door' policy"; "Value work-family balance"; "Serve as advocate for staff"; "Support staff attendance at educational opportunities"; "Identify strengths of staff members and capitalize on those"; "Recognize and reward staff."; "Support flexible staff schedule," "Model egalitarian management style"; "Identify staff dissatisfiers"; "Measure staff satisfaction;" "Develop staff satisfaction action plans;" and "Create programs to reduce mandator overtime." The author does not present evidence that these predict nurse manager performance or staff retention or any other outcome measure.	The specific measures were developed for nurse managers in a hospital setting and would not be relevant to CBAs or CBA supervisors; however, the process of developing a competency framework could be applied to the CBA or CBA supervisor role and then used to select, train, and/or promote staff with those competencies. It is technically demanding and time-consuming to develop, which could threaten feasibility and/or replication by organizations that lack the necessary expertise or resources. However, a valid competency framework, once developed, could be easily applied to the same jobs across different programs or contexts.

		Hackman (2003) , "Learning more by crossing levels: evidence from airplanes, hospitals, and orchestras," <i>Journal of Organizational Behavior</i> .	This article has a broader purpose, but includes a discussion of a study of patient care teams as part of a larger research project on the causes of medication errors in hospitals. The authors hypothesized based on previous research that "well-managed teams whose members shared a clear sense of direction and who work together well would make fewer medication errors." (p. 912) When they found that the opposite was true (see Evidence column) they revisited their model and examined whether the management style of nurse managers might – e.g., more authoritarian or more open – effected reporting rates for medication errors.	The research team studied eight patient care teams at two hospitals, each team headed by a nurse manager. (p. 912) Methods used include interviews and observation. (For more details on the methodology and findings, see Edmondson (1996), included in Appendix 2.) They analysed the correlation between detected medication error rates and four predictive variables: "nurse manager coaching, nurse manager direction-setting, quality of unit relationships, and perceived unit performance." (p. 912) When they got a surprising result, they also studied nurse managers' management styles and the "climate" they created amongst their teams. This was done through observations and interviews to assess the "social climates" of the units (especially with regard to social norms about reporting errors) and rank them on level of "openness." (p. 913)	Summary: Nurse managers matter to team social climate and reporting rates for medication errors. Findings: When the researchers first examined the correlation between reported error rates and the four predictive variables, they found to their surprise a strong correlation, but in the opposite direction than they had expected. "Units that were especially well structured and managed had significantly <i>more</i> medication errors than other units." (p. 912) They revised their hypothesis and after studying the social climate of each unit, found "nearly a perfect match between social climate and medication errors," such that more open units had higher error rates and more "closed" or authoritarian units had lower error rates. They concluded that "nurse managers who preferred a more open climate have created self-correcting teams whose members were actively encouraged to report and discuss medication errors without fear of recrimination." (p. 913)	It might be feasible to identify or promote supervisors who create a more open work culture in which CBAs are more likely to report errors or other problems, which then allows the team to avoid or minimize those errors in the future ("self-correcting teams"), or to encourage all supervisors to promote "open" social norms among their team. Culture and context: this study was done in large western hospitals -- would the impact be the same in the context of community-based care in poor African countries?	Culture and context: this study was conducted in large western hospitals -- how will the dynamics differ in the context of community-based care in poor African countries?
Employee Involvement	Employee Involvement programs (various) There are a wide range of policies and programmes that attempt to encourage greater employee involvement, either in order to improve employee performance, retention, etc., or to use employee contributions to address problems and improve the performance of the organization overall.	Fincham and Rhodes (2005)	Reviews select studies of the impact of "employee involvement" (EI) programs. These programs range from suggestion schemes and employee attitude surveys, to team briefing (where employees are divided into groups and meet periodically to received briefings on news related to the company), to quality circles, total quality initiatives, and teamworking. (from Marchington, et al 1992, cited in Fincham and Rhodes, p. 431)	N/A	Cites several studies that find EI initiatives do not shift the power relationships / traditional hierarchy of workplaces, and instead function as another "control" mechanism. For example, Marchington, et al (1992) argue that EI initiatives are led by management and are really about "enhancing employee contribution." (As cited in Fincham & Rhodes, p. 431) A survey of 71 manufacturing plants in 9 countries found that "under lean production - ... characterized by teamworking - workers had little autonomy in the management of production issues," and team leaders functioned much like traditional foreman, with control over the vast majority of any devolved powers. (Delbridge et al, 2000, as cited in Fincham and Rhodes, p. 435) Some studies find positive employee attitudes toward EI (e.g., Marchington et al 1992 and McKinlay & Taylor 1996, as cited in Fincham & Rhodes p. 435). One study of an electric plant found "employees ... consistently reported more job satisfaction and relished the new ways of working, despite the added responsibility and intensification" of work. (McArdle et al, 1995, as cited in Fincham & Rhodes, p. 435.) Also see Pollert (1996) discussed below under "teamworking".		Mentions a few contextual factors that may effect how successfully an EI program can be implemented, such as labor market factors (risk of job cuts or firm closure) and the employee selection process (are employees selected in part based on whether they will "fit" with firm image or culture, including the level of EI. (See Fincham and Rhodes p. 435)
Employee Involvement	Participation Includes a range of policies that give employees the opportunity to influence decisions, increasing employees' "sense of ownership over their work" and allowing them to "identify and correct problems." (Liu, et al, p. 507)	Combs, et al (2006) and Liu, et al (2007)	See above (under "High Performance Work Systems") for comprehensive discussion of methods.	See above for details. 18 of 92 studies included the impact of participation.	The relationship was significant but smaller than for most HR practices studied (Liu, et al, p. 507); magnitude: $r_c = 0.13$ (Combs, et al p. 516)	It seems likely that team work would be well-received culturally in African community settings, making this intervention highly acceptable and possibly more sustainable.	
Employee Involvement	Participation-Enhancing Work Designs: Various HR practices meant to promote greater employee involvement.	Haines, et al (2010)	See above (under "Training") for detailed discussion of methods. Also reviews past literature on the link between participation-enhancing work designs and turnover, and deems them inconclusive, citing 4 studies with a negative correlation and 4 that found the relationship was not significant.	See above (under "Training") for detailed discussion of methods. Independent variable – Participation-enhancing work designs: Dummy variable for the presence or absence of 5 different employee involvement initiatives: "an employee suggestion program; information sharing with employees; problem-solving teams; self-directed work groups; and flexible job designs." (p. 236) These were included both as individual variables and as a composite variable for all four types of variable pay.	In a simple bivariate correlation, all were negatively related to turnover in the following year <u>except</u> employee suggestion programs, which were positively related (i.e., presence of employee suggestion programs was linked to higher turnover in the following year). In the multivariate analysis, the composite variable was not significant and of the individual variables, only information sharing had a significant impact on turnover (a negative relationship), and this was only marginally significant.		
Employee Involvement	Formal Grievance and Dispute Resolution Procedures (general) These formal avenues for employee "voice" can help resolve disputes and provide an avenue for employees to raise issues with lead	Combs, et al (2006) and Liu, et al (2007)	See above (under "High Performance Work Systems") for comprehensive discussion of methods.	See above for details. Just 8 of 92 studies reviewed grievance procedures.	The relationship was significant but smaller than the average for the HR practices studied (Liu, et al, p. 507); magnitude: $r_c = 0.13$, the same as "participation" practices (Combs, et al p. 516)	Employees in poor countries, where unemployment is extremely high, are likely to value employment security even more highly than do employees in a wealthy countries. This does not necessarily mean, however, that the value to organizations would be equivalent.	See above for general moderators (e.g., work context) in this study.

	raise issues with (and solutions to) working conditions or other concerns.	Haines, et al (2010)	See above (under "Training") for detailed discussion of methods. The idea is that these mechanisms allow employees to voice their concerns and problems, rather than leaving the organization. Reviews past literature, which he argues is inconclusive about the link between dispute resolution procedures and turnover, possibly due to difficulty in measuring.	See above (under "Training") for detailed discussion of methods. Independent variable -- Dispute Resolution Procedure: Surveys asked respondents "Does this workplace have a dispute, complaint, or grievance system for employees?" (p. 236)	Findings related to dispute resolution: (See above under "Training" for discussion of full findings.) Bivariate correlations show that 10 of the 14 HR practices studied, including Dispute Resolution system, were significantly associated with reduced voluntary turnover in the following year. In the multivariate analysis, only three practices remained significant, including formal dispute resolution procedures. This was associated with reduced turnover. In estimating magnitude, "a one standard deviation increase in the presence of a formal dispute resolution procedure is associated with a turnover rate that is 1.07 percentage points lower." (p. 240) This finding is consistent with theory but contradicts at least one previous study that found presence of formal grievance procedures were not significantly related to turnover when regressions controlled for unionization; in this study, the factor remained significant even when controlling for union density. (p. 242)		The authors include a number of control variables, which point to factors believed to mediate the relationship between HR practices and performance or otherwise influence both practices and performance. Control variables include workplace size; presence of a separate HR unit with at least 2 staff members; union membership; industry type; geographic regions.
Employee Involvement	Peer Review. Employees (team members) monitor and rate their colleagues' work and behavior. Sometimes they are also empowered to take disciplinary action.	McKinley and Taylor (1996), "Power, surveillance and resistance inside the 'factory of the future'", as discussed in Fincham and Rhodes (2005) p. 434-435. Note: could not access this study, discussion is based on the discussion in Fincham and Rhodes.	Studied a manufacturing plant which organized workers into self-managing teams. At the heart of this system was a peer review process, a "disciplinary and policing function" that used the groups to regulate individual behavior.	N/A	Employees developed a "deep and pervasive distrust of peer review", though they were positive in general about the group working arrangements. (cited in Fincham and Rhodes, p. 435) Peer review became more and more punitive, and workers hated it more and more, until eventually they found ways to "trade" and "equalize" scores. "Hence the group processes unleashed by management were gradually tamed." (Ibid)		
Employee Involvement	Teams (general) A range of policies and practices designed to encourage employees to work in teams, and/or a measure of how much team work actually goes on in an organization.	Combs, et al (2006) and Liu, et al (2007)	See above (under "High Performance Work Systems") for comprehensive discussion of methods.	See above for details. Only 8 of 92 studies dealt with teams, and two of these "used large databases that were designed for other purposes." (Liu, et al, p. 508)	If all eight studies are included, there is no significant effect on performance from policies that promote teams. If two studies using large datasets "designed for other purposes" are removed, the remaining six support a positive impact on performance equivalent to the other practices included in this study. The authors are therefore "cautiously optimistic about the value of teams," though not yet confident to recommend the practice wholeheartedly. (Liu, et al, p. 508)		
		West, et al (2002), "The link between the management of employees and patient mortality in acute hospitals."	Reviews past literature on teams and performance outcomes in healthcare settings, and says that it "shows that working in teams in health services is associated with lower levels of stress," and that the quality of teamworking processes and multi-disciplinarity of teams are both linked to greater innovation in patient care. (West, et al (2002), p. 1301) This study contributes by looking at HR practices, including team working, and patient outcomes in acute care hospitals.	(See section above on training for more details about the methodology, and the relevant sections for details on appraisal and training.) Independent variables: 1) Training. 2) Teamworking: percentage of staff in the hospital working in teams 3) Appraisal 4) HR Practices (aggregate measure) Dependent variables: Six health outcome measures: deaths (within a month) after emergency surgery, non-emergency surgery, admission for hip fractures, and admission for heart attacks; re-admission rates; and a mortality index.	Found that the percentage of employees working in teams had a significant negative relationship with patient mortality, as did the other two variables. (Performance appraisal was the strongest).	See above	
		Pollert (1996), "Team work' on the assembly line: contradiction and the dynamics of union resistance," as cited in Fincham and Rhodes (2005) Note: Could not access original paper; this discussion is based on Fincham and Rhodes's review of this study.	Studied the introduction of teamworking to the food industry, part of a larger shift to an "empowerment culture" in the context of mechanized, assembly-line production, in which the old supervisory hierarchy was flattened and team leaders put in charge of motivation and team building. (As cited in Fincham & Rhodes, p. 434)	N/A	Pollert found that teamworking had not changed much about the "old divisive forms of work," and that for most employees teamworking meant only a few more tasks, exposure to job rotation, and an intensification of work overall. Pollert also found that workers were "generally cynical about the teams, seeing them as an excuse for cost-cutting and team briefing as a form of brainwashing." (As cited in Fincham & Rhodes p. 434.)	This study highlights the dangers if teamworking is not implemented in a "meaningful" way, and is perceived by workers as superficial or manipulative.	

Employee Involvement	Total Quality Management (TQM) is focused on improving the quality of production, particularly by reducing errors, and is often achieved by involving workers in suggesting improvements. Though the primary goal is to improve production quality, some have argued there are positive benefits as well for employee attitudes, performance, and retention.	Shapiro (2000) "Employee involvement: opening the diversity Pandora's Box?" <i>Note: This study does not include much detail about the research methodology.</i>	Two-phase qualitative study (semi-structured interviews and case studies) of six (6) European telecommunications companies (phase 1) and eight (8) companies from other sectors, including one NHS Trust. Study looked at issues of equality and employee diversity in the context of employee involvement programmes, especially "Total Quality Management" (TQM)	15 to 25 interviews were conducted with each firm regarding "experiences with equality and quality management". (p. 312) Article provides virtually no details about: sampling methodology, interview content, or analytic techniques. The article is also vague about definitions of terms like "Total Quality Management," and the specific structure of each firm's employee involvement or TQM programmes.	Found "virtually all organisations which had adopted TQM were experiencing problems with sustaining high levels of employee involvement." (p. 312) Specifically, they found a number of ways in which the companies' TQM efforts failed to take into account employees' diverse needs - e.g., no attempt to ensure TQM training materials were appropriate for different employee groups, or whether specific processes or components of TQM for appropriate for motivating different groups of employees. Overall, the authors find 1) that companies often fail to ensure that all employees can participate equally, leading to what they call an "involvement gap" between groups of employees (p. 312); 2) that employee involvement efforts like TQM actually "highlights the differences that exist between staff, for example... functional specialism,... educational background, or gender." (p. 307)	TQM and other EI efforts require skilled management and careful planning to ensure they meet the needs of employees and do not have unintended negative consequences v.a.v. diversity.	Diversity of staff (e.g., in terms of gender, age, education, job type and level, etc.) may moderate the effectiveness of employee involvement programs.
Employee Involvement	Kaizen / Continuous Improvement - An element of Japanese production management, widely studied and replicated in Western companies, which encourages employees to suggest changes to improve the production process.	Fincham and Rhodes (2005)	Kaizen encourages employees to question every step in a production process and offer suggestions for improvement. "Installing the kaizen principle means encouraging all employees... to ask why production faults occur and to trace them to their root cause" - a complete cultural shift for most companies. (p. 688). To achieve this, companies typically encourage teamworking; assign employees a wide range of tasks which they perform in "self-supervised groups"; and shorten assembly lines to promote communication. Companies may also use "quality circles" and/or "cellular manufacturing", in which each "production cell" includes the entire production process. (p. 688)	N/A. No evidence reported; just explains the Kaizen approach.	N/A	For people not familiar with this type of working may not immediately embrace the practice or the cultural values that underlie its success -- e.g., a willingness among employees to raise problems and solutions and an openness by managers to these suggestions; a pragmatism and a push for incremental improvements to productivity and quality.	
Employee Involvement	Quality improvement groups (e.g., Quality Circles). There are a number of different names used to describe these programmes in which employees form or are formed into groups for the purpose of improving productivity and/or the quality of production or services.	Hawk and Sheridan (1999), "The Right Staff"	Not a formal study; based on authors' experience as "Human Capital" consultants, with expertise in improving individual and organizational performance. Reports case studies of five practices they argue will increase commitment and thereby performance of core workers. Also draws selectively on other publications, surveys, etc.	N/A	Reports on one company, Atlantic Aviation, which instituted GITS (Growth and Improvement Teams) which breaks hourly employees into teams led by technicians, rather than supervisors. These teams are expected to make "specific recommendations" to "address performance issues in areas such as training, facility management, customer service, quality control, and inventory management," and then to oversee the implementation of their own recommendations. The authors claim these efforts have significantly decreased turnover, "by up to fifty percent for some jobs," and also saved the company money in "quality and production costs." No details are offered about the evidence for these claims, which are likely anecdotal.		
Employee Involvement	Autonomous work groups are a specific type of self-regulating employee group, distinguished from externally-controlled "co-acting" groups. (Fincham and Rhodes, p. 427)	Kemp, et al (1983) "Autonomous work groups in a greenfield site: a comparative study," <i>Journal of Occupational Psychology</i> , 56, 271-288, as cited in Fincham and Rhodes p. 427. <i>Note: Did not read this original study, discussion is based on Fincham and Rhodes.</i>	Used an experimental design to investigate the impact of autonomous work groups in a greenfield site. Groups of 8-12 employees were given responsibility for "job allocation, the resolution of local production problems, organizing work breaks, contacting other departments, and trianing new recruits." (Fincham and Rhodes p. 428)	N/A. See original study for details.	Autonomous work groups, relative to control groups, had "greater job satisfaction, perceptions of higher job complexity, and improved leadership style," but organizational commitment and motivation did not change. (Fincham and Rhodes p. 428)		
Other	Employment Security Efforts to retain employees, even during economic downturns. Believed to help align employee interests with the company's long-term interests, and build greater employee commitment and a long-term perspective.	Combs, et al (2006) and Liu, et al (2007)	See above (under "High Performance Work Systems") for comprehensive discussion of methods.	See above for details. Just 6 of 92 studies reviewed the impact of employment security, though those were from a variety of contexts.	All studies showed a positive impact (Liu, et al, p. 507); magnitude was equivalent to that of training or incentive compensation (Combs, et al, p. 516). "Evidence seems to support the view that employees possess tacit knowledge that is a vital contributor to firm success... [which] is at least partly lost through downsizing and restructuring." (Liu, et al, p. 507.)		
Other	Stress-reduction employee support programs. These may take many different forms, but the basic goal is to help employees manage stress.	VanZyl and Lazenby (2002). <i>Note: these findings should be considered with caution, as the research design and analysis leave much to be desired.</i>	Studies the relationship (if any) between stress and (un)ethical behavior in a South African company.	Method: Self-evaluation surveys of 43 managers in a financial service company, including one questionnaire about their experiences with stress, an "ethical behavior questionnaire," and a biographical questionnaire. <u>Independent variables</u> : Stress level. <u>Dependent variables</u> : 28 specific "unethical behaviors"	Of the 28 behaviors tested, only 4 are correlated with high stress, and there is no theoretical explanation for why these should be correlated while the others are not. The authors present this as a finding of significance but it should probably be understood as a non-finding.		

Select Areas for Further Research from Business / Management / Human Resources Literature

DRAFT 18 September 2010

This list was compiled in an ad-hoc manner, based on topics and resources encountered during the preparation of the literature review, and should not be considered in any way comprehensive.

	1	2	3	4
Grouping	Innovation (and/or Relevant Concepts)	Rationale for not including at this stage	Comments, issues, and summary of impact (if known)	Sources / Where to find more information (if available)
Stable Individual Differences	Employee Diversity There is extensive literature on gender, race, and other socio-economic and demographic characteristics and how these relate to performance and retention.	This literature is likely very context-specific, and not very relevant to community-based workers.		
Job-Specific Individual Differences (e.g., Attitudes)	See discussion in the "macro concepts" section of the report.	Agreed with Daniel Strachen and Karin Källander. Many will be covered by "motivation" literature review.		See, for example, sources cited in Wright, et al (2005) p. 416-418 : Studies on the link between attitudes and unit-level performance (as opposed to individual performance); according to Wright, "significant uncertainty exists as to the extent to which attitudes at a unit level impact unit performance," or if the causal relationship is the reverse or some other alternative.
Organizational Context	See discussion in the "macro concepts" section of the report.	Agreed with Daniel Strachen and Karin Källander. Did review key concepts in the "Macro Concepts" discussion in the narrative report. Interventions that relate to organizational context may be very complex to implement and may require quite sophisticated management systems.	This area may be worth exploring further, to see if the theoretical concepts and/or examples from other sectors spark ideas about how to design ICCM programs.	

<p>Organizational Context</p>	<p>Job Design/Redesign These are ideas for how to redesign jobs to make them more satisfying, rewarding, or motivating for employees, and thereby to improve retention and performance. For example, are jobs structured to give employees an appropriate level of variety, autonomy, and “completeness” of tasks? Do employees work in groups, and if so are groups autonomous and/or self-governing?</p>	<p>Agreed with Daniel Strachen and Karin Källander. Discussed in brief in “Macro Concepts” section. Some innovations related to redesigning jobs into working groups or teams are discussed in Appendix 1.</p>	<p>This area may be worth exploring further, to see if the theoretical concepts and/or examples from other sectors spark ideas about how to redesign the CBA job to improve performance and retention.</p>	<p>See Fincham and Rhodes (2005) p. 423 for a review of the most important concepts.</p>
<p>Organizational Context</p>	<p>Organizational Culture Many argue that developing a strong corporate culture – e.g., of “excellence”, “success”, “innovation”, “results” – can help improve employee commitment and motivation, and thereby performance and retention.</p>	<p>Agreed with Daniel Strachen and Karin Källander. Discussed in brief in “Macro Concepts” section.</p>	<p>Although the concept of organizational culture can seem somewhat amorphous and may be difficult to study empirically, it also may be a very powerful influence, and may well be an area worth exploring further.</p>	<p>See Fincham and Rhodes (2005) p. 530-533 for an overview of research in this area, and for a case study on Johnson and Johnson (p. 531).</p>
				<p>Wright, et al (2005) p. 420 cites studies that he says argue for a positive effect of organizational culture on organizational performance: Barney (1986), Collins and Porras (1994), Kotter and Heskett (1992), Siehl and Martin (1990).</p>
				<p>Schein (1996), "Culture: The Missing Concept in Organization Studies," <i>Administrative Sciences Quarterly</i></p> <p>Collins and Porras (2002), Built to last: successful habits of visionary companies, a new edition of their 1994 book cited by Wright, et al (2005).</p>
<p>HRM Systems</p>	<p>HR Department / Staff</p>	<p>It was assumed unlikely that</p>	<p>As with the other literature on</p>	<p>Huselid and Becker (1995)</p>

	<p>Capabilities Some researchers have attempted to define the capabilities that make HR staff more effective, and to test the relationship between these capabilities and organizational performance.</p>	<p>project resources would allow for staffing a dedicated HR department to manage CBAs. However, if such resources are available</p>	<p>HR Systems reviewed in Appendix 1, it is important to treat with caution any claims of causality between HR staff capabilities and firm performance, as alternative causal relationships are also</p>	<p>Huselid, et al (1997), "Tehcnical and Strategic Human Resource Management Effectiveness as Determinants of Firm Performance." This frequently-cited article examined 293 firms and had consistent findings of a link between the capabilities of the HR manager and corporate financial performance.</p>
HRM Systems	<p>High Performance Work Systems (HPWS) and related concepts</p>			<p>There are many more articles on this issue than could be covered here. Below are some suggestions for additional reading.</p> <p>Becker and Huselid (1999): HRM in Five Leading Firms.</p> <p>Paul Boselie. (2010). High performance work practices in the health care sector: a Dutch case study. <i>International Journal of Manpower</i> , 31(1), 42-58. Retrieved August 24, 2010, from ABI/INFORM Global. (Document ID: 2017486911).</p>
HRM Systems	<p>HRM systems and health sector institutions</p>	<p>Many of these fall in the medical / health literature rather than the management / business literature, which was beyond the scope of this review.</p>		<p>Arah, et al (2003). "Conceptual frameworks for health systems performance: a quest for effectiveness, quality, and improvement", <i>International Journal of Quality in Health Care</i>, Vol 5 No 3 pp 377-98</p> <p>NHS, "A National Framework to Support Local Workforce Strategy Development" (2005)</p> <p>NHS, "Standards for Better Health (2005) performance management system</p>
HRM Systems	<p>Magnet Hospitals. These hospitals use a number of management and organizational design innovations.</p>	<p>Much of the literature on magnet hospitals falls in the medical literature.</p>		<p>There are numerous studies of the magnet hospital approach. This is just one author who came up in my research, and would be a place to start if this topic is of interest.</p> <p>McClure, et al (2002) <i>Magnet Hospitals Revisited: Attraction and Retention of Professional Nurses</i></p> <p>McClure, et al (1983) <i>Magnet Hospitals: Attraction, Retention of Professional Nurses</i>, American Academy of Nursing, Kansas City, MO</p>

Measurement / Methods	There are a wide range of measurement options and methodological designs used in research on employee performance and retention. Some of the problems and issues with these designs are addressed in the report, but here are some areas for further reading.		Debate over possible measurement bias in “single respondent organizational survey” methods (e.g., HR manager or CEO is asked to report HR practices across the organization):	Huselid and Becker (2000) , "Comment on 'Measurement Error in Research on Human Resources and Firm Performance,'" and the article by Gerhart, et al (2000) that they are commenting on.
			Discussion of possible issues with existing empirical work on HRM and performance, including omitted variable bias, measurement error, and mutual causation and simultaneity:	Becker and Huselid (2006) , "Strategic Human Resources Management: Where Do We Go From Here?"
			Non-random selection into training	Bartel (1995) , "Training, wage growth, and job performance"; Liu and Batt (2007) , p. 83
Selection	Recruitment / Attracting Job Candidates There are a range of proven and/or innovative approaches to improving the pool of candidates for a particular organization or job.	Attracting quality candidates is a greater challenge in a tight labour market and/or where there are attractive employment alternatives. It was assumed that this would be less of an issue when hiring / selecting community-based-agents in a context of very high unemployment.		
Selection	Biodata Use of standardized questionnaires or application scoring systems to select candidates on the basis of biographical characteristics shown to correlate with performance or retention.	Biodata methods were discussed in Appendix 1, but this is further reading if interested.		Harvey-Cook and Taffler (2000) , "Biodata in professional entry-level selection: statistical scoring of common format applications", <i>Journal of Occupational and Organizational Psychology</i> , 73/1, 103-18.

<p>Selection</p>	<p>Work Sample Tests and Job Knowledge Tests Used for hiring skilled workers, these tests include "hands-on simulations" of job-related tasks (work sample) or tests of knowledge required for the job..</p>	<p>These tests are only valid for skilled workers, so would only be helpful if CBA candidates already had the requisite skills and training, which is unlikely.</p>	<p>Work sample tests have the highest validity for predicting job performance, higher even than GMA tests, at 0.54. (Schmidt and Hunter p. 265) They also have a high incremental validity when combined with GMA tests. Job knowledge tests, when tailored to the specific job, have a validity of 0.48. (Schmidt and Hunter p. 267) Concludes that, "especially for higher level jobs, the behavioral consistency method may be well worth the cost and effort." (Schmidt and Hunter p. 286)</p>	<p>Schmidt and Hunter (1998), "The Validity and Utility of Selection Methods in Personnel Psychology: Practical and Theoretical Implications of 85 Years of Research Findings."</p>
<p>Selection</p>	<p>Behavioral Consistency Method is used to evaluate previous training and experience, based on a previous determination of which characteristics are tied to performance in a particular job.</p>	<p>These are time-consuming and costly to construct and have less validity than other more straightforward methods. They also may not work well for candidates with very limited previous experience, which may be the case for many CBAs.</p>	<p>Found a validity of .45 in predicting job performance. (Schmidt and Hunter, p. 265)</p>	<p>Schmidt and Hunter (1998), "The Validity and Utility of Selection Methods in Personnel Psychology: Practical and Theoretical Implications of 85 Years of Research Findings." p. 268.</p>
<p>Selection</p>	<p>Personality Tests</p>	<p>These were discussed in detail in the report and in Appendix 1, but there is a huge body of additional reading on this topic</p>		<p>Longitudinal study by Judge, et al (1999), "The big five personality traits, general mental ability, and career success across the life span," and other sources cited by Barrick and Mount (2005).</p>
<p>Training and Development</p>	<p>Training (general)</p>			<p>Bartel (1995), "Training, wage growth, and job performance".</p>

<p>Training and Development</p>	<p>Training methods: what makes workplace training more effective?</p>	<p>This may be covered more effectively by education or training-specific literature than in the general management literature. Mostly it was not explored in depth because of time constraints and because the articles found in initial searches and those frequently cited by other authors did not seem to address this question.</p>	<p>According to a citation in Liu and Batt (2007), Swanson et al discuss the interaction between employee capability and effectiveness of training and conclude that low-ability learners gain more from highly structured learning environments.</p>	<p>Swanson, et al (1990), "An information processing analysis...", cited in Liu and Batt (2007)</p>
<p>Training and Development</p>	<p>Coaching work teams</p>	<p>Primarily time constraints, but also the same reasons discussed below for why the question of how to make teams more effective was not discussed in greater depth.</p>	<p>Reviews a theory of team coaching under development by the author (a professor at Harvard and accomplished scholar of groups and teams) and Ruth Wageman. They cite three types of coaching interventions and predict when these will be most effective: "motivationally focused" interventions are helpful early in the life of a team (as when a sports coach hypes a team before a game); "consultive interventions," which are most effective "around the mid-point of a team's work"; and "educational" (e.g., a post-game review to examine performance and draw lessons for next time) which are most helpful "after a significant task cycle has been completed." (Hackman 2003, p. 916)</p>	<p>Hackman (2003), "Learning more by crossing levels: evidence from airplanes, hospitals, and orchestras," <i>Journal of Organizational Behavior</i> 24, 904-922, p. 915 and sources cited therein.</p>

Performance Measurement and Appraisal	Balanced Scorecard (BSC)	<p>The topic is discussed but not in great depth, because the BSC verges away from the intended focus on HR policies and practices and on staff performance and retention, and into the realm of business strategy more broadly.</p>	<p>See sources in Appendix 1 and discussion in the narrative report.</p>	<p>There are many more articles on the BSC approach than could ever be covered here. See, for instance, sources cited in De Geuser, et al (2009), including Mooraj, et al (1999), "The balanced scorecard: a necessary good or an unnecessary evil?", <i>European Management Journals</i> . For more information about the approach and how to implemented a BSC, see www.balancedscorecard.org and assorted writings by Robert Kaplan and David Norton, the creators of the BSC approach.</p>
Performance Incentives	Non-financial incentives	<p>To my surprise, the literature review did not uncover many articles about the impact of non-financial incentives. However, I am certain that such studies do exist, and it may be worth contacting experts in the field and/or doing a more exhaustive search to find key related literature.</p>		
Supervisors and Managers	Supervision and management (general)	<p>This was discussed in the report, but was not explored in as much detail because there was another literature review commissioned to look specifically at this topic.</p>		<p>For more information on the nurse manager study cited in Hackman (2003), see Edmondson (1996), "Learning from mistakes is easier said than done: group and organizatioanl influences on the detection and correction of human error, <i>Journal of Applied Behavioral Science</i>, 32, 5-28.</p>

Supervisors and Managers	Supervisory support , as moderator for development of employee beliefs regarding self-efficacy.	As mentioned above, I did not look at psychological antecedents to job performance (attitudes, etc.), of which self-efficacy is one. Those attitudes may be covered by the literature review on motivation, and this particular interaction may have relevance for the literature review on supervision.		Anyster, et al (2006) , "The formation of self-efficacy beliefs of skilled professional employees in a South African fruit export organisation."
Employee Involvement	Employee Involvement (various)	This was discussed, but these are additional sources.		Marchington, et al (1991) , "New developments in employee involvement."
	Teams and teamworking: How to make teams more effective	I focused on research on whether teamwork (versus more individual or hierarchical forms of working) improved performance or retention. If there is a decision to implement innovations that restructure the CBAs' work into teams and/or otherwise encourage teamwork, this literature on how to maximize team performance would be very relevant and worth exploring.		There is a vast and emerging literature on what makes teams work, and how to make teams more effective, productive, or more able to learn and adopt new practices. Among the most esteemed academics in this area are Amy Edmondson and Richard Hackman, both of whom are cited elsewhere in this study.
	Teamworking in health sector			Borri, et al (2000) , "Team working and effectiveness in health care", <i>British Journal of Health Care</i> , Vol. 6, pp. 364-71; Lemieux-Charles, et al (2006) , "What do we know about health care team effectiveness? A review of the literature."

<p>Flexible Working Conditions</p>	<p>Flextime: Flexible working arrangements that include “part-time work, job sharing, compressed work weeks, and telecommuting.” (Liu, et al p. 507)</p>	<p>It was assumed that the CBA role already involves a much higher degree of flexibility (part-time, flexible working hours) than a traditional 9-5 job. Some of the flextime arrangements (e.g., telecommuting) are not relevant to the CBA role. Flextime can also be costly and challenging to administer.</p>	<p>Liu, et al and Combs, et al report on eight studies that evaluated the link between flextime and performance, and found a significant positive impact but smaller than that of other HRM practices. They hypothesize that this may be because coordinating flextime is administratively burdensome and therefore costly. (Liu, et al, p. 507). One study included in the Combs, et al review found that “work-life practices” had a greater impact in firms with a larger number of women, which could argue for inclusion of these innovations if a large number of CBAs are women.</p>	<p>Liu, et al (2007) and Combs, et al (2006) include this among 13 HR practices in their meta-analysis of 92 studies of HPWPs.</p>
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