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Developing Management: An expanded evaluation tool for developing countries

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Abstract In recent years new striking evidence emerged showing a large tail of badly managed schools and hospitals in developing countries across a number of management areas such as operations management, performance monitoring, target setting and people management. But where exactly along the process of setting their management structures are these organizations failing? This paper describes the development of an expanded survey tool based on the existing World Management Survey (WMS) instrument, but tailored to research in the public sector of developing countries (Development WMS). We collected detailed data from pilots in India, Mexico, and Colombia using face-to-face interviews in settings where weak management practices prevail and observe more variation in the left tail of the distribution. Using this data, we present a brief discussion of the type of data that can be collected and explored with the expanded tool, including three new processes used to systematically measure the strength of each management area in the WMS: (1) process implementation, (2) process usage, (3) process monitoring.[1]

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"If the system does not add up to a functional whole, the causal impact of augmenting individual elements is completely unpredictable."

— Lant Pritchett, *RISE Working Paper 15/005*

1 Introduction

Although there has been much progress in improving school *enrolment* around the world, there is still striking heterogeneity in the distribution of student learning outcomes across countries. This is particularly true for the developing world, and researchers and policy makers are paying increasing attention to addressing this "learning crisis" (Pritchett 2015). The traditional economics literature that considers the effect of an individual input on output has provided us with great insights into the individual effect of inputs such as teacher salaries, school infrastructure, school financing, extra teachers, different curriculums, and more textbooks, among many. However, variation in these inputs has not been able to explain a substantial share of the variation in student learning (Glewwe & Muralidharan 2015). Thus, a new research agenda is urging a more holistic view of education systems in a "systems framework" that includes a series of interconnected types of relationships between different actors and stakeholders, outlined in Pritchett (2015), and at the core of the new programme *Research on Improving Systems of Education* (RISE).[2]

This paper makes a methodological contribution to the literature by developing a feasible tool to measure management practices in schools in developing countries, based on the well-established World Management Survey tool. Since 2008, we have worked alongside Nicholas Bloom, Raffaella Sadun and John Van Reenen to significantly expand the original WMS data collection project and systematically measure management practices within and across countries.[3] Here we describe the "Devel-

[2]For more information also see the Research on Improving Systems of Education (RISE) programme at `www.riseprogramme.org`.

[3]The WMS project started in 2002 and in 2004 had its first wave, collecting 700 data points on management practices for the first time across four developed countries: US, UK, Germany and

opment WMS", a survey tool based on the original WMS but tailored to measuring management practices in the public sector of developing countries. Although this paper focuses on the tool for the education sector, we also developed a version of this tool for the healthcare sector and include both in the Appendix. We will discuss each innovation in detail below, but in short:

1. We identified three management *processes* - implementation, usage, and monitoring - taken into consideration when measuring the *strength of each management practice* covered by the WMS but which could not be extricated ex-post from a score in the original methodology.[4]

2. We expanded the survey "vertically" by disentangling and mapping these processes to each question of the 20 management practices.[5] In this new model, however, the responsibility of weighting the importance of each process does not lie with the enumerator conducting the interview, thereby both reducing measurement error and allowing the data user to know precisely what led the score for a particular practice to be higher or lower.

3. We expanded the survey "horizontally" to allow for greater variation of scores and allow interviewers to differentiate at a finer level between the strength of processes in place at these schools and hospitals.

While we have strived to keep the essence of the WMS in terms of the questions and

France. The results were first published in Bloom & Van Reenen (2007). To date, the project has collected data for several countries in its current manufacturing sample across multiple waves, expanded the number of countries to 35 and expanded the range of sectors where it measured management, going beyond the manufacturing sector and into retail, education and healthcare.

[4]In 2008 the WMS project extended into the public sector and was employed in schools offering education to 15 year-olds in six countries - Canada, Germany, Italy, Sweden, the US and the UK - and hospitals offering acute care and with either an Orthopeadics or a Cardiology department in seven countries - Canada, Germany, France, Italy, Sweden, the US and the UK. The instruments consist of a set of 20 basic management practices on a grid from one ("worst practice") to five ("best practice"), in increments of one point. A high score indicates that a school or a hospital that adopts the practice is likely to improve its performance such as pupil or patient outcomes. For a recent review, see Bloom et al. (2014).

[5]We did this based on our seven years of training interviewers to conduct the WMS interviews, such that the questions asked related to types of processes are comparable to previous years of surveys.

practices being measured and the spirit of the scoring grid, we also ensured that the adapted version was applicable in the development setting by addressing three main challenges to using the original WMS in developing countries.

First, the distribution of scores in the education sector in the two developing countries surveyed in the original WMS, India and Brazil, was tight around the scores for weak management practices. Although the global context of the WMS project allows for a very useful comparison of world-class and poorly managed organizations across a number of countries, the very thick (almost truncated) left tail for developing countries makes it harder to explore the variation of managerial practices in the less well managed organizations. For example, Lemos & Scur (2012) points out the thick left tail in both schools and hospitals in India. Bloom et al. (2015) show that there is evidence of truncation at the lower bound score of 1, with 82% of the schools in the WMS Indian sample having an overall management score between 1 and 2 that and no schools have a score above 3 on the WMS 1 to 5 scale with a delta of 1. During the data collection for these countries, we often heard analysts evaluating their given scores after an interview, wishing they could "give a 0" to those schools and hospitals that had no process whatsoever to differentiate those from schools and hospitals that had minimal processes, but not enough of an informal process to warrant a score of 2 in the scoring grid.[6]

Second, in terms of implementation, the WMS original methodology uses available sampling frames from established organizations and phone calls to carry out the interviews. Although this was less of a barrier in the manufacturing survey, it was a massive barrier in the public sector surveys in developing countries. For instance, sampling frames in India were difficult to acquire and build, and, when available, they often had names of schools and hospitals but no phone numbers. Unfortunately a common reason for the lack of phone number was that schools simply did not have a physical phone line available.[7] We often ran interviews through managers' cell

[6]The reason we refrained from stretching the scoring grid to 0 and instead added half points was to preserve comparability of the ordinal scale and increase specificity equally across all score categories.

[7]We encountered a similar problem with reaching hospital managers.

phones, and a handful of times through payphones located near these organizations as cellphones or landlines were not available. When we were able to reach them, the connection itself was sometimes problematic and several calls had to be placed to complete the interview.[8]

Finally, when thinking about policy implications, we did not have much information in the WMS to pinpoint *precisely what part of the process of developing management practice* organizations were failing the most. Although very useful experiments such as Bloom et al. (2013) and Fryer (2014) have tremendously helped us learn about the large effect that improvements in whole sets of management practices can afford, we do not yet have a systematic picture of what particular *types of processes* matter the most across different settings in developing countries.[9] The 20 management practices covered by the WMS are scored based on a set of processes which are systematically triangulated by the skilled interviewer and facts are evaluated based on the survey grid to determine higher or lower scores. However, it becomes important to understand the marginal importance of each type of process when considering the type of policy interventions that are feasible, especially in the context of countries facing limited budgets and institutional constraints.

We have also developed accompanying field paper forms to facilitate the interview process as the Development WMS is meant to be run face-to-face by enumerators who visit the schools and hospitals. These forms were carefully designed to ensure that the information collected during the interviews would be sufficient for the post-interview scoring. In the phone interviews, the enumerators are able to consult the grid to ensure they have enough information, but in the face-to-face interviews they are not allowed to take the grid along as it would undermine the double-blind exercise.[10]

[8]The higher the number of calls that have to be made, the lower the probability of completing an interview.

[9]Focusing on charter schools in the US, Dobbie & Fryer (2013) run a similar exercise where they collect a large amount of information on the inner-workings of 35 charter schools to investigate the practices that matter the most for school effectiveness.

[10]The importance of providing a useful field-friendly data collection tool is often underestimated. The enumerators are often not researchers by training and may fail to record important information or even record wrong information during survey interviews if not properly prompted by their field

We are in the process of building a website with instructional videos and interactive calibration tools to minimize the fixed costs of training and implementation, and hope this will be made freely available to the research community before the end of 2016.

With a set of individual project partners,[11] we are in the process of collecting data using this new expanded survey tool in schools in Andhra Pradesh-India (completed), Mexican schools (ongoing, pilot completed), Colombian schools (completed),[12] Chinese hospitals (ongoing) and Indian hospitals (pilot completed). Thus far this survey tool has been used as an additional module in larger projects.[13] This means that the sampling frames of these projects were not always necessarily representative random samples and thus are not directly comparable. While these samples were not formally designed to be representative of all schools in these countries, collectively they paint a useful picture of selected public sector organizations in low- and middle-income countries.[14]

This short paper describes our expanded survey tool in Section 2 including the methodology used to collect data and the innovations in the survey, and briefly reviews the patterns we have found in the data thus far in Section 3.

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tool.

[11]We have partnered with Karthik Muralidharan and the APSC project for Indian schools, Arturo Harker Roa and the Colombian Ministry of Education for Colombian schools, Rafael de Hoyos and Ciro Avitabile from the World Bank and the Mexican Ministry of Education for Mexican schools, Winnie Yip and the Ministry of Health for Chinese hospitals and Raffaella Sadun for Indian hospitals. We are immensely thankful to Raissa Ebner and Kerenssa Kay for training the Mexican school pilot teams, Raissa Ebner for training the Mexican and Colombian school teams, and Kerenssa Kay for running the Indian hospital pilot.

[12]For an initial look at the data, see Bermudez & Harker (2016).

[13]In fact, the survey tool is also included in the large-scale RISE Country Research Team proposals from India and Tanzania.

[14]The samples are as follows: the Andhra Pradesh data is a random sample of public and private primary schools in 5 districts from the APREStt project; the Mexican data is a combination of samples from primary schools that are part of PEC (Programa Escuelas de Calidad) in Durango, Guanajuato, Estado de Mexico and Tabasca, marginalized primary schools in Puebla, and primary and junior high schools in Tlaxcala and Morelos; the Colombian data is a random sample from the lowest performing public schools in the country (approximately 4,000 of the 22,000 schools in Colombia); the Chinese hospital data is a random sample of hospitals and the Indian hospital data is from a pilot of 25 hospitals in Andhra Pradesh.

2 Measuring processes in developing countries

The original public sector WMS covers 20 questions across two main areas: operations management and people management. We can sub-divide operations management into lean operations, monitoring and target management, as follows:

1. *Operations management*
   (a) *Lean operations* in schools covers practices including whether the school has meaningful processes that allow pupils to learn over time; teaching methods that ensure all pupils can master the learning objectives; whether the school uses assessment to verify learning outcomes at critical stages and makes data easily available and adapts pupil strategies accordingly.[15]
   (b) *Monitoring management* covers practices of continuous improvement, performance tracking, review and dialogue, and consequence management. It measures whether the school has processes towards continuous improvement and lessons are captured and documented, whether school performance is regularly tracked with useful metrics, reviewed with appropriate frequency, quality, and follow-up, and communicated to staff.[16]
   (c) *Target management* covers practices in the balance and interconnection of targets, the time-horizon and difficulty of the targets, as well as their clarity and comparability. It measures whether the school, department, and individual targets cover a sufficiently broad set of metrics; whether these targets are aligned with each other and the overall goals.[17]
2. *People management* covers practices in handling good and bad performance, measuring whether there is a systematic approach to identifying good and bad performance, rewarding school teachers proportionately, dealing with underperformers, and promoting and retaining good performers.[18]

[15]Lean operations in hospitals covers practices including how well the patient pathway is configured and whether staff pro-actively improve their own work-place organization; the motivation behind changes to operation; whether integrated clinical pathways are standardized and well monitored; whether processes are documented and there is an attitude towards continuous improvement; and how staff allocation is carried out.

[16]Although, of course, the types of indicators tracked are different, the *processes* measured here are the same for hospitals (and indeed manufacturing and retail) and the questions are identical.

[17]The hospital questions are the same.

[18]The hospital questions are the same, but deal with hospital nurses and doctors rather than teachers.

As mentioned before, we preserve the practices and areas covered in the original WMS. To adapt the instrument to the developing country context, however, we identify three key processes used to systematically measure these practices, and expand it both "vertically," by further dividing each of the 20 practices into the three key processes we are looking to measure and "horizontally," by increasing the granularity of scores by allowing half points.

2.1 Identifying processes behind management practices

In the Development WMS, we identify three key processes that are captured to systematically measure the strength of each management practice within an organization. Each process consists of a series of steps:

1. Process implementation: formulating, adopting and putting into effect management practices;
2. Process usage: carrying out and using management practices frequently and efficiently;
3. Process monitoring: monitoring the appropriateness and efficient use of management practices.

More specifically, in the original WMS, each of the overall management, operations and people management indices is made up of a set of the 20 practices, and each practice is measured through several structured questions. Each one of the 20 management practices contains a large amount of information about how that specific practice being carried out at the establishment. For example, when measuring "Performance Tracking" at a school, the WMS interviewer evaluates the practice based on three processes: (1) types of parameters used for tracking (such as student marks, attendance regularity, behaviour, teacher absenteeism, enrolment rates, dropout rates, teacher professional development, budgets etc.), (2) tracking frequency (such as once a year, twice a year, bi-monthly etc), (3) to whom and how the tracking is communicated (such as head of departments, teachers, parents, students, and through

meetings, newsletters, boards, etc). The combined responses to this practice are scored against a grid which goes from 1 - defined as "Measures tracked do not indicate directly if overall objectives are being met. Tracking is an ad-hoc process (certain processes aren't tracked at all)." up to 5 - defined as "Performance is continuously tracked and communicated, both formally and informally, to all staff using a range of visual management tools."

In the original WMS instrument, the interviewer triangulates the processes herself and assigns one single score taking all the processes into account. This task requires a high cognitive ability from the interviewer as well as consistent monitoring of the interviewing process by supervisors.[19] It is not possible, however, to extricate from the final data ex-post how each process weighed in the interviewer decision. In the Development WMS, each process is evaluated separately and ex-post averaged out to get the practice's score, thereby removing the "triangulation responsibility" from the interviewer.

2.2 Expanding the instrument vertically

We map the three key processes identified back to the questions asked for measuring each WMS practice. Process implementation is related to question 1, process usage is related to question 2, and process monitoring is related to question 3 in each management practice.

Thus, beyond looking at the average score of each practice, we can also dig deeper to understand what part of the process is driving the results. This increases the number of scores from 20 to 60. Furthermore, we expanded the survey horizontally by adding increments of 0.5 to the scoring grid and more finely defining the scores along those lines.[20]

[19]This is one of the reasons for the high per-interview cost of the WMS. Interviewers are generally masters students from top UK schools and experienced supervisors monitor over 80% of the interviews.

[20]The Development WMS scoring grid is presented in the Appendix. The original WMS grid is available on the project's website: `www.worldmanagementsurvey.org`

We construct four sets of indices. For the first set, we follow a similar methodology to the original WMS and use the information referring to all three processes by first taking a simple average of them to build a single score for each of the 20 practices, analogous to how a WMS interviewer would assign a single score to each practice. We then take the z-score of each practice and creating indices for overall management (average of all 20 practices), operations management (average of lean, monitoring and target practices) and people management (average of people management practices). This can be interpreted in the same way as the original WMS, but with less measurement error.

The main innovation in our survey is in the second, third and fourth set of indices. To build these, we skip the first step of averaging across the three processes for each practice and re-organize the dataset into three new sets of 20 practices along the lines of each process. We take the z-score of each of the 60 processes and build average indices for overall management, operations management and people management for each of the process types.

In short, we first produce a set of overall management, operations management and people management indices using a similar methodology to the original WMS (ie. using all the information given for a particular question), and also produce three "finer" sets of indices, broadly referring to (1) process implementation of overall, operations and people management, (2) process usage of overall, operations and people management, and (3) process monitoring of overall, operations and people management.

While we broadly follow the original WMS convention for building the comparable indices (overall management, operations and people management), we have conducted a factor analysis of our new school survey tool with the data from the pilot in Andhra Pradesh to validate this. We find that factor analysis on the 20 management practices as well as the more granular 60 processes yields similar results to those found in the manufacturing sector in Bloom et al. (2014). There is one principal factor that explains over half of the variance and loads positively on all questions, and a second factor that explains about one fifth of the variance and loads positively on

nearly all of the operations, monitoring and targets questions (generally, operations), but negatively on all the people questions. Much like the result in manufacturing, this suggests that there is a "common factor of good management," (Bloom et al. 2014) leading schools that are well managed on one practice to be well managed on all practices more generally. The second factor also mirrors the previous results, suggesting that some schools specialize more in operations (in a general sense) while others specialize in people management.

2.3 Expanding the instrument horizontally

The horizontal expansion of the instrument is more straight-forward. In the original WMS, interviewers are allowed to score values of 1, 2, 3, 4 or 5. No half points are allowed and no "2 or 3" values are accepted. If interviewers are unsure of whether the practice warrants a 2 or a 3, they discuss it with their colleagues and their supervisors to make a final decision. This scoring guideline worked well in developed countries as there was wide range of scores, with some schools or hospitals being very well managed and some being very badly managed, but most schools or hospitals had at least *some* practice in place, even if rudimentary. In the India and Brazil waves, however, we found several schools that had absolutely no practices in place and some that had very minimal practices in place. To score a 2 in the WMS, there must be a reasonable practice in place that is informal (if it were a formal practice it would be awarded a 3 or higher). Thus, both schools with no practices and minimal practices were awarded 1, whereas in the Development WMS the interviewer would be able to distinguish and score 1 for no practices and 1.5 for minimal practices.

Figures 1 and 2 show an example of a question to illustrate the survey expansion. Figure 1 shows the practice on "performance tracking"' from the original WMS. The interviewer always asks - ad minimum - the questions shown in the survey tool, and may ask extra follow up questions. The questions suggested are generally enough to elicit the necessary information from the manager, but, from the training session, the interviewer knows what the practice is testing and will probe for further information

if needed. Once the interviewer is satisfied that she has enough information, she will then score based on the grid provided. Figure 2 shows the Development WMS and illustrates the expansion. The first dimension is the separation of the overall practice into three components, following each of the three processes the instrument is looking to measure. The questions asked are still the same, and scores of 1, 2, 3, 4 and 5 will still be equivalent in both surveys. The Development WMS, however, allows interviewers to score each process individually and also allows them to award half-point scores. As a result of the double disaggregation, the scoring more accurately reflects the strength of management practices in each school and helps reduce measurement error.

2.4 Collecting data using the Development WMS

In order to collect the data in developing countries, rigorous training on the Development WMS for schools was provided to 15 interviewers in India, 30 interviewers in Colombia, 70 interviewers in Mexico, and training on the Development WMS for hospitals was provided to 40 interviewers in China.

The training consists of thorough explanations of the scoring grid in an interactive environment, and multiple group scoring sessions of mock interviews to correct any inconsistent interpretation of responses and to ensure consistency across interviewers.[21] This one-week training session and subsequent routine data and calibration checks are crucial for data quality, and we have developed a process to standardize both the training and the supervisory follow up.

The Development WMS uses the same open-ended questions used in the original WMS methodology, seeking both comparability and to follow best practices in eliciting truthful responses from respondents. Continuing with the example on the

[21]During the training week for the school survey in India, we also piloted the Development WMS in 5 schools (a mix of private and public) to ensure the detailed questions and scoring grid appropriately captured the information provided during the interview. Travel expenses were generously covered by J-PAL.

management practice of "Performance Tracking," the interviewer starts by asking the open question "What kind of main indicators do you use to track school performance?", rather than a closed ended question such as "Do you use class-room level test scores indicators [yes/no]." The first question is then usually followed up by further open-ended questions such as "how frequently are these indicators measured?", "Who gets to see this data?" and "If I were to walk through your school what could I tell about how you are doing against your indicators?" Such open-ended questions avoid leading responders towards a particular answer and produce higher quality data. As mentioned above, the interviewer knows the information she is seeking and will continue to ask follow up questions if necessary.

In order to ensure the interviews are consistent within interviewer groups and non-biased, all interviews were "double-scored" and "double-blind," following the WMS methodology but adapting it to face-to-face interviews. Double scored means that the first interviewer was accompanied by a second interviewer whose main role was to monitoring the quality of the interview being conducted by taking notes and separately scoring the responses after the interviews had ended. The first and second interviewers would then discuss their individual scores to correct for any misinterpretation of responses. We mixed pairs of interviewers as much as possible throughout the survey, conditional on geographic limitations. Double-blind means that, at one end, interviewers conducted the face-to-face interview without informing school principals or hospital managers that their answers would be evaluated against a scoring grid.[22] At the other end, our interviewers did not know in advance anything about the school or hospital's performance.

As detailed in Bloom et al. (2014), the original WMS is an expensive survey to run and requires highly skilled interviewers to conduct the interviews and consistently score establishment practices. The WMS has primarily employed masters and PhD students from top European and North American universities to conduct the inter-

[22]None of the forms used by both the first and the second interviewers contained the detailed scoring grid. The interviewers would score the interviews based on their notes after the interviews had been completed and, therefore, the scoring grid was not shared with the principal.

views over the past 10 years of the project. With the Development WMS instrument the level of skill of the interviewers is relatively lower considering that the decision of "weighting" the quality of the processes to decide on a single score for each practice is taken away. To be sure, the interviewers still need to be skilled enough to understand the training session and the practices being measured, but in general the new tool allows for greater flexibility in recruitment of interviewers and facilitates local capacity building by hiring from local institutions.

2.5 Interpreting the management index and sub-indices measures

Before we move on to providing a brief overview of the data collected thus far, it is important to emphasise a few key points when interpreting the management index and sub-indices.

The D-WMS (as well as the WMS) does not measure the skills of the *manager* but rather measures the *processes embedded in each managerial practice* in place within the establishment. Thus, the methodology requires that interviews be conducted with managers who have been in the establishment long enough to become acquainted with the practices in place *at that establishment*. If the interview is conducted with a manager who has recently taken a post in the establishment in question (that is, less than one year), the manager might refer to practices that were in place in her previous post rather than the particular establishment she is currently working in.[23] For example, a principal who has been at a school for only 2 months might not have gone through a review process with their teachers and cannot speak directly about the appraisal systems in place in that particular school. Although they possibly bring in new and different managerial practices into the school, it becomes difficult to discern whether these practices have truly been implemented in the new school or

[23]In fact, this does happen during interviews and those conducting the interviews are instructed to continuously check that the examples provided are from the current establishment rather than any previous post.

whether it is a current "wish list" of the new principal.

Considering that we are measuring the *management practices currently in use*, in general the management indices can be interpreted as follows:

- A score from 1 to 2 refers to an establishment with practically no structured management practices or very weak management practices implemented;
- A score from 2 to 3 refers to an establishment with some informal practices implemented, but these practices consist mostly of a reactive approach to managing the organization;
- A score from 3 to 4 refers to an establishment that a good, formal management process in place (though not yet often or consistent enough) and these practices consist mostly a proactive approach to managing the organization;
- A score from 4 to 5 refers to well-defined strong practices in place which are often seen as best practices in the sector.

3 Does D-WMS provide any new meaningful variation for data analysis?

3.1 Observing within-practices and between-practice variation

As mentioned in the previous section, the expanded D-WMS instrument allows us to improve the quality of data collection in a number of ways. But is this new way of collecting data also helpful in terms of data analysis, that is, do we observe any *within-practice* and *between-practice* variations in the data which can be further explored?

Within-practice variation indicates whether organizations emphasize one process over the other within each management practices such as scoring highly in process imple-

mentation but poorly in process usage or process monitoring. For example, in order to track their performance, schools may formulate and put into effect a system of metrics to monitor performance but not use this system frequently and efficiently. Alternatively, some schools may define perhaps only one or two indicators to monitor performance but use this indicators appropriately and frequently. *Between-practice variation* indicates if the scores for the three types of processes vary systematically across all management practices. For example, schools may be able to formulate and put into effect systems for performance monitoring, target setting as well as people management. But while process implementation scores may be high across the board for some organizations, they might not be able to effectively use or monitor all systems in place.

We present the correlation matrix for processes within each practice in Figure 4. We observe that all correlations are positive and significant at the 1% level but of varying coefficients, ranging from 0.04 to 0.66: 14.1% of correlated pairs present a coefficient of equal or lower than 0.25, 65.0% present a coefficient between 0.25 and 0.50, while 21% present a coefficient of equal or above 0.50.

3.2 Understanding management practices and processes data in more detail

In this section we illustrate the different types of data outputs that are possible with the D-WMS data versus the original WMS. Summary statistics for the data for India (Andhra Pradesh), Mexico and Colombia are presented in Table 2.[24] Although we present the data in this section side by side, we are not drawing any direct comparisons as the underlying samples are not comparable. The figures in this section have four panels: the first panel shows the distribution of scores for the management practice referring to the practice being illustrated. The solid line is

[24]School characteristics data for Andhra Pradesh comes from the AP School Choice Project in Muralidharan & Sundararaman (2015). The sampling frame for the D-WMS data for AP is from this project and the data was collected immediately following their last wave of data collection. We thank the authors for use of the school characteristics data in this paper.

the average of the three processes from the Development WMS while the dashed line is the average of the three processes re-cast into the comparable scores to the original WMS (that is, without the ability of scoring with half points). Each of the three panels in the second column show the distribution of each process pertaining to the management practice. Figure 5 refers to the practice "performance dialogue." The practice measures whether meetings relating to performance review are well-structured, and evaluates the quality of the dialogue and root cause analysis of problems. The comparable WMS distribution is, as expected, slightly shifted to the left as the limitation on "integer scores" led to lower scores on average.

More interestingly, however, is that now we are able to see what processes led to the average scores. The first process measured in this practice is " implementation": does the performance tracking meeting follow a clear agenda? How is the meeting structured? The second process is related to "usage" and measures whether the meeting has enough data to inform the discussion and whether it is used appropriately. The third process measured is "monitoring" and in this practice we measure whether feedback is constructive, leads to the root cause of problems and a plan of action. Panels P4.1, P4.2 and P4.3 of Figure 5 show the distributions of each of the processes of "performance dialogue." Figure 5a, for example, shows that schools in AP seem to be very bad at following a clear agenda and building a culture of constructive feedback focussed on root cause analysis, but they are relatively better at ensuring that data is present and that the data is useful. Thus, this suggests a much more targeted approach to the type of intervention that could be useful considering they have good data, but are not using it effectively to target problems and solve them in a structured meeting setting. Figures 5b and 5c show the equivalent measures but using the data collected in Mexican and Colombian schools.

Figure 6 shows a similar figure for management practice topic 12 on the survey, relating to the interconnection of targets and goals. The practice is measuring how well connected the targets of the school are, both between different school targets and with individual targets. The three processes measure the "implementation," or how the principal learns about the targets that are expected of them and how

clear those are; "usage," or how the targets broken down between members of staff such that everyone is accountable; and "monitoring," or communication of targets to staff and keeping track of progress. Figure 6a shows the distribution for AP schools, which suggest they have some targets that they receive or develop, but are less able to break them down across staff to ensure accountability, and in turn do not have a system to keep track of how well people understand their role in target achievement. Figures 6b and 6c show the distributions for Mexico and Colombia.

Figure 7 presents the distributions for management practice topic 19 in the survey, which measures the effectiveness of the processes for dealing with poor performers in the school. It is on average a fairly poor-scoring question, particularly in AP, where Figure 7a shows that largest share of the mass of the distribution is under a score of 2. Looking at the detailed processes, however, we see that the distributions for process implementation, which deals with the ability to identify the poor performers with a systematic criteria, and for usage, which deals with the method of assessing performance are both strictly equal or under a score of 3. This means that no school in the sample had a good, formalized process to identify and deal with poor performers, though some had a flawed process. However, in terms of monitoring the process, here the time-scale of action once a problem is identified, some schools scored very well in contrast with the other two processes. Figures 7b and 7c show the distributions for Mexico and Colombia respectively.

4 Closing remarks

Over the past decade the research agenda on the economics of management practices has been moving forward in exciting ways. As development economists, we see and hear about the missed opportunities in our field visits and in hundreds of interviews when it comes to "good management" practices. As suggested in Pritchett (2015), management practices are important facet in understanding public service delivery from a systems framework view. This new measurement tool is only the first

step. We are currently working with colleagues on starting to build the Development WMS dataset and also merging the new dataset with performance data to begin the policy-relevant work that motivates the effort in first place. We hope that this extended survey tool will be useful to the research community in itself as a way to systematically measure management practices in schools and hospitals in developing countries.[25]

[25]Please feel free to contact us if you are considering using the tool and we can discuss the training required and logistics on how to administer the survey.

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Tables

Table 1: Summary statistics

	Panel A: Andhra Pradesh Private Schools							
	Mean	Median	SD	Min	25th p	75th p	Max	N
School Characteristics								
Number of Students	352.07	300.00	(264.17)	18.00	192.00	450.00	1780.00	182
Number of Teachers	14.78	13.00	(8.43)	3.00	9.00	18.00	52.00	182
Student/Teacher Ratio	23.31	22.22	(8.99)	4.60	17.50	27.50	57.14	180
Management Scores								
Management	2.15	2.17	(0.26)	1.43	2.03	2.33	2.62	182
—M1: implementation	2.10	2.14	(0.26)	1.50	1.95	2.28	2.60	182
—M2: usage	2.13	2.17	(0.27)	1.30	1.98	2.35	2.72	182
—M3: monitoring	2.20	2.22	(0.29)	1.40	2.05	2.38	2.97	182
–Operations Management	2.15	2.17	(0.28)	1.43	2.01	2.36	2.69	182
—O1: implementation	2.11	2.18	(0.28)	1.36	1.96	2.29	2.64	182
—O2: usage	2.15	2.18	(0.30)	1.36	2.00	2.36	2.96	182
—O3: monitoring	2.20	2.21	(0.32)	1.43	2.04	2.43	2.96	182
–People Management	2.13	2.11	(0.25)	1.36	2.00	2.33	2.69	182
—P1: implementation	2.10	2.08	(0.29)	1.42	1.92	2.33	2.83	182
—P2: usage	2.09	2.08	(0.29)	1.17	1.92	2.33	2.75	182
—P3: monitoring	2.21	2.17	(0.35)	1.33	2.00	2.42	3.42	182

	Panel B: Andhra Pradesh Public Schools							
	Mean	Median	SD	Min	25th p	75th p	Max	N
School Characteristics								
Number of Students	70.35	60.00	(47.92)	15.00	35.00	90.00	306.00	107
Number of Teachers	4.28	2.00	(9.64)	1.00	2.00	4.00	89.00	107
Student/Teacher Ratio	21.84	20.50	(8.06)	0.88	16.50	26.67	43.00	107
Management Scores								
Management	1.81	1.84	(0.25)	1.17	1.65	1.97	2.24	107
—M1: implementation	1.84	1.83	(0.31)	1.17	1.62	2.08	2.45	107
—M2: usage	1.74	1.75	(0.21)	1.20	1.65	1.90	2.22	107
—M3: monitoring	1.83	1.88	(0.28)	1.12	1.70	2.03	2.38	107
–Operations Management	2.04	2.10	(0.31)	1.21	1.85	2.26	2.52	107
—O1: implementation	2.06	2.11	(0.36)	1.25	1.82	2.36	2.75	107
—O2: usage	1.97	2.00	(0.28)	1.21	1.86	2.18	2.46	107
—O3: monitoring	2.08	2.14	(0.35)	1.18	1.86	2.32	2.64	107
–People Management	1.26	1.25	(0.18)	1.00	1.14	1.33	1.81	107
—P1: implementation	1.34	1.33	(0.29)	1.00	1.08	1.58	2.08	107
—P2: usage	1.19	1.17	(0.17)	1.00	1.08	1.25	1.92	107
—P3: monitoring	1.26	1.17	(0.23)	1.00	1.08	1.42	1.92	107

Notes: **School Infrastructure Index** is the sum of 4 questions on whether the school has available drinking water, functional toilets, functional electricity, and functional library. The Andhra Pradesh data is a random sample of public and private primary schools in 5 districts from the APREStt project.

Table 2: Summary statistics

	Panel C: Mexico Public Schools							
	Mean	Median	SD	Min	25th p	75th p	Max	N
School Characteristics								
Number of Students	288.81	232.50	(202.17)	6.00	147.00	399.50	2692.00	1080
Number of Teachers	11.16	9.00	(8.67)	1.00	6.00	13.00	130.00	1080
Student/Teacher Ratio	26.41	26.67	(8.24)	1.74	21.00	32.00	108.00	1080
Management Scores								
Management	2.54	2.48	(0.50)	1.38	2.23	2.82	4.82	1084
—M1: implementation	2.52	2.47	(0.54)	1.21	2.16	2.84	4.95	1084
—M2: usage	2.56	2.50	(0.51)	1.26	2.25	2.84	4.84	1084
—M3: monitoring	2.53	2.47	(0.49)	1.16	2.24	2.82	4.68	1084
–Operations Management	2.73	2.68	(0.53)	1.35	2.39	3.06	4.88	1084
—O1: implementation	2.66	2.64	(0.57)	1.25	2.25	3.04	4.93	1084
—O2: usage	2.77	2.71	(0.54)	1.29	2.43	3.07	4.86	1084
—O3: monitoring	2.76	2.71	(0.56)	1.21	2.39	3.07	4.93	1084
–People Management	2.00	1.90	(0.50)	1.00	1.67	2.20	4.67	1084
—P1: implementation	2.13	2.00	(0.65)	1.00	1.70	2.40	5.00	1084
—P2: usage	1.99	1.90	(0.57)	1.00	1.60	2.20	4.80	1084
—P3: monitoring	1.89	1.80	(0.46)	1.00	1.60	2.10	4.20	1084
	Panel D: Colombia Public Schools							
	Mean	Median	SD	Min	25th p	75th p	Max	N
Number of students	787.84	560.00	(718.35)	5.00	286.00	1122.00	4190.00	439
Number of teachers	32.17	26.00	(34.26)	1.00	14.00	41.00	527.00	443
Student-teacher ratio	24.20	23.34	(10.72)	1.66	18.43	28.05	115.78	438
Management Scores								
Management	2.28	2.25	(0.40)	1.00	2.03	2.51	3.41	450
—M1: implementation	2.26	2.21	(0.40)	1.00	2.00	2.45	3.40	450
—M2: usage	2.28	2.22	(0.43)	1.00	1.98	2.50	3.65	450
—M3: monitoring	2.32	2.28	(0.43)	1.00	2.05	2.55	3.60	450
–Operations Management	2.46	2.40	(0.46)	1.00	2.15	2.75	3.69	450
—O1: implementation	2.43	2.39	(0.44)	1.00	2.14	2.68	3.93	450
—O2: usage	2.41	2.36	(0.51)	1.00	2.04	2.71	3.93	450
—O3: monitoring	2.53	2.50	(0.52)	1.00	2.21	2.86	4.07	450
–People Management	1.88	1.81	(0.35)	1.00	1.64	2.06	3.17	450
—P1: implementation	1.82	1.70	(0.42)	1.00	1.50	2.10	3.40	450
—P2: usage	1.78	1.70	(0.33)	1.00	1.60	2.00	3.20	450
—P3: monitoring	1.77	1.70	(0.38)	1.00	1.50	1.90	4.20	450

Notes: The Mexican data is a combination of samples from primary schools that are part of PEC (Programa Escuelas de Calidad) in Durango, Guanajuato, Estado de Mexico and Tabasca, marginalized primary schools in Puebla, and primary and junior high schools in Tlaxcala and Morelos. The Colombian data is a sample from the lowest performing public schools in the country (approximately 4,000 of the 22,000 schools in Colombia).

Figure 1: Original WMS survey: example question and scoring grid

6) Performance Tracking ***Tests whether school performance is measured with the right methods and frequency*** Score: 1☐ 2☐ 3☐ 4☐ 5☐ -99☐	a) What kind of main indicators do you use to track school performance? What sources of information are used to inform this tracking? b) How frequently are these measured? Who gets to see this performance data? c) If I were to walk through your school, how could I tell how it was doing against these main indicators?		
	Score 1: Measures tracked do not indicate directly if overall objectives are being met; tracking is an ad-hoc process (certain processes are not tracked at all)	Score 3: Most performance indicators are tracked formally; tracking is overseen by the school leadership only	Score 5: Performance is continuously tracked and communicated, both formally and informally, to all staff using a range of visual management tools

Figure 2: Development WMS survey: example question and scoring grid

ITEM	Possible questions	1	1.5	2	2.5	3	5
7. Performance Tracking							
7.1: Types of parameters (such as student marks, attendance (regularity), behaviour, teacher absenteeism, enrolment rates, dropout rates, teacher professional development, budgets	a) What kind of main parameters do you use to track school performance? b) What documents are you using to inform this tracking?	Only student marks are tracked.	One main parameter in addition to student marks is tracked, but it does not show how well the school is doing overall.	Two main parameters in addition to student marks are tracked, but it does not show how well the school is doing overall.	Three main parameters in addition to student marks are tracked, but it does not show how well the school is doing overall.	A set of at least 4 or more parameters are tracked, and they should be a range of types of parameters to show how the school is doing overall (ie. grades, behaviour, teachers, enrolment/dropout rates and budgets)	Performance is continuously tracked and communicated, both formally and informally, to all staff using a range of visual management tools
7.2: Tracking frequency	c) How often are these measured?	Only student marks are tracked once per year	Most parameters are tracked once per year	Most parameters are tracked twice a year	Most parameters are tracked three times per year	Most parameters are tracked more than three times per year (ie. Once per term plus a final exam).	All parameters are tracked continuously throughout the year.
7.3: Communicated to whom and how	d) Who gets to see this data? e) If I were to walk through your school, how could I tell how it is doing compared to its main parameters?	Officially, only the principal sees the overall class grades, and does not communicate to the teachers if their classes are doing well or not. (ie. teachers may see individual student marks, but don't get to see a holistic view of the whole class and how it is doing across time)	Officially, only the principal sees the overall class grades, and only communicates to the teachers if their classes are doing well or not. (ie. teachers may see individual student marks, but don't get to see a holistic view of the whole class and how it is doing across time)	The principal knows how well classes are doing, but informally communicates this to teachers in an ad-hoc manner. Parents know of their own children but not of school-wide results.	The principal knows how well classes are doing, and informally communicates this to teachers during regular meetings. Parents know of their own children but not of school-wide results.	The principal knows how well classes are doing, and informally as well as formally communicates this to teachers during meetings and regular reports. Parents know of their own children but not of school-wide results as results are not published.	A range of visual methods is used to communicate with those involved in the school matters. Information about how well the classes are doing is diplayed online for teachers, students, and parents. The principal also communicates this to teachers informally as well as formally during meetings and regular reports.

Figure 3: Management process: correlations

		Andhra Pradesh Schools			Mexico Schools			Colombia Schools		
		implementation	usage	monitoring	implementation	usage	monitoring	implementation	usage	monitoring
2. Standardization of Instructional Planning Processes	implementation	1.00			1.00			1.00		
	usage	0.52	1.00		0.37	1.00		0.44	1.00	
	monitoring	0.42	0.37	1.00	0.45	0.38	1.00	0.42	0.44	1.00
3. Personalization of Instruction and Learning	implementation	1.00			1.00			1.00		
	usage	0.11	1.00		0.36	1.00		0.26	1.00	
	monitoring	0.04	0.52	1.00	0.52	0.57	1.00	0.45	0.39	1.00
4. Data-driven Planning and Student Transitions	implementation	1.00			1.00			1.00		
	usage	0.34	1.00		0.44	1.00		0.39	1.00	
	monitoring	0.39	0.38	1.00	0.42	0.43	1.00	0.37	0.45	1.00
5. Adopting Educational Best Practices	implementation	1.00			1.00			1.00		
	usage	0.47	1.00		0.47	1.00		0.56	1.00	
	monitoring	0.43	0.32	1.00	0.48	0.55	1.00	0.48	0.53	1.00
6. Continuous Improvement	implementation	1.00			1.00			1.00		
	usage	0.41	1.00		0.42	1.00		0.44	1.00	
	monitoring	0.30	0.57	1.00	0.42	0.56	1.00	0.52	0.61	1.00
7. Performance Tracking	implementation	1.00			1.00			1.00		
	usage	0.26	1.00		0.25	1.00		0.28	1.00	
	monitoring	0.12	0.26	1.00	0.44	0.27	1.00	0.32	0.35	1.00
8. Performance Review	implementation	1.00			1.00			1.00		
	usage	0.29	1.00		0.21	1.00		0.30	1.00	
	monitoring	0.32	0.41	1.00	0.26	0.44	1.00	0.34	0.41	1.00
9. Performance Dialogue	implementation	1.00			1.00			1.00		
	usage	0.36	1.00		0.46	1.00		0.48	1.00	
	monitoring	0.33	0.31	1.00	0.43	0.52	1.00	0.57	0.56	1.00
10. Consequence Management	implementation	1.00			1.00			1.00		
	usage	0.26	1.00		0.16	1.00		0.32	1.00	
	monitoring	0.18	0.23	1.00	0.47	0.17	1.00	0.33	0.34	1.00
11. Balance of Targets/Goal Metrics	implementation	1.00			1.00			1.00		
	usage	0.35	1.00		0.60	1.00		0.54	1.00	
	monitoring	0.48	0.41	1.00	0.54	0.59	1.00	0.26	0.46	1.00

equal or below 0.25
equal or above 0.50

Note: All correlations are significant at the 1% level.

Figure 4: Management process: correlations

		Andhra Pradesh			Mexico			Colombia		
		implementation	usage	monitoring	implementation	usage	monitoring	implementation	usage	monitoring
12. Interconnection of Targets/Goals	implementation	1.00			1.00			1.00		
	usage	0.40	1.00		0.31	1.00		0.29	1.00	
	monitoring	0.31	0.47	1.00	0.31	0.54	1.00	0.34	0.52	1.00
13. Time Horizon of Targets/Goals	implementation	1.00			1.00			1.00		
	usage	0.08	1.00		0.58	1.00		0.64	1.00	
	monitoring	0.18	0.20	1.00	0.42	0.50	1.00	0.48	0.35	1.00
14. Stretch of Targets/Goals	implementation	1.00			1.00			1.00		
	usage	0.15	1.00		0.36	1.00		0.29	1.00	
	monitoring	0.11	0.14	1.00	0.28	0.34	1.00	0.14	0.32	1.00
17. Clarity and Comparability of Goals	implementation	1.00			1.00			1.00		
	usage	0.30	1.00		0.49	1.00		0.47	1.00	
	monitoring	0.40	0.30	1.00	0.47	0.41	1.00	0.39	0.38	1.00
18. Building a High Performance Culture/ Rewarding High Performers	implementation	1.00			n.a.			1.00		
	usage	0.46	1.00		n.a.	n.a		0.34	1.00	
	monitoring	0.57	0.66	1.00	n.a.	n.a	n.a	0.36	0.26	1.00
19. Making Room for Talent/ Removing Poor Performers	implementation	1.00			1.00			1.00		
	usage	0.27	1.00		0.51	1.00		0.13	1.00	
	monitoring	0.07	0.12	1.00	0.34	0.37	1.00	0.36	0.30	1.00
20. Promoting High Performers	implementation	1.00			1.00			1.00		
	usage	0.57	1.00		0.42	1.00		0.41	1.00	
	monitoring	0.42	0.57	1.00	0.24	0.38	1.00	0.10	0.20	1.00
21. Managing Talent	implementation	1.00			1.00			1.00		
	usage	0.10	1.00		0.35	1.00		0.52	1.00	
	monitoring	0.27	0.07	1.00	0.15	0.02	1.00	0.45	0.65	1.00
22. Retaining talent	implementation	1.00			1.00			1.00		
	usage	0.44	1.00		0.43	1.00		0.43	1.00	
	monitoring	0.36	0.57	1.00	0.42	0.56	1.00	0.32	0.40	1.00
23. Creating a Distinctive Employee Value Proposition	implementation	1.00			1.00			1.00		
	usage	0.55	1.00		0.44	1.00		0.39	1.00	
	monitoring	0.45	0.53	1.00	0.52	0.37	1.00	0.33	0.35	1.00

equal or below 0.25
equal or above 0.50

Note: All correlations are significant at the 1% level.

Figure 5: Management practice: Performance Dialogue

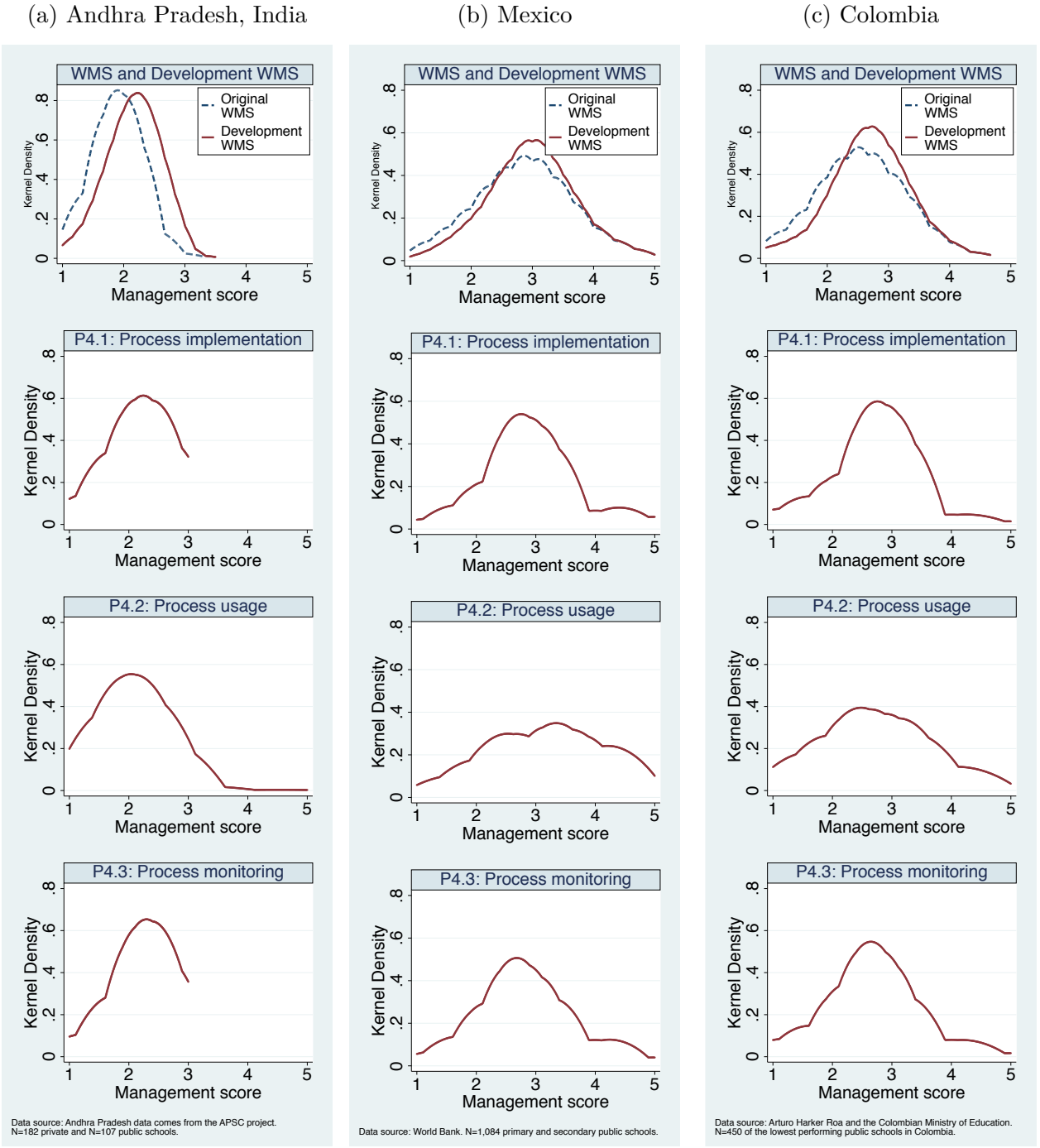


Figure 6: Management practice: Interconnection of targets and goals

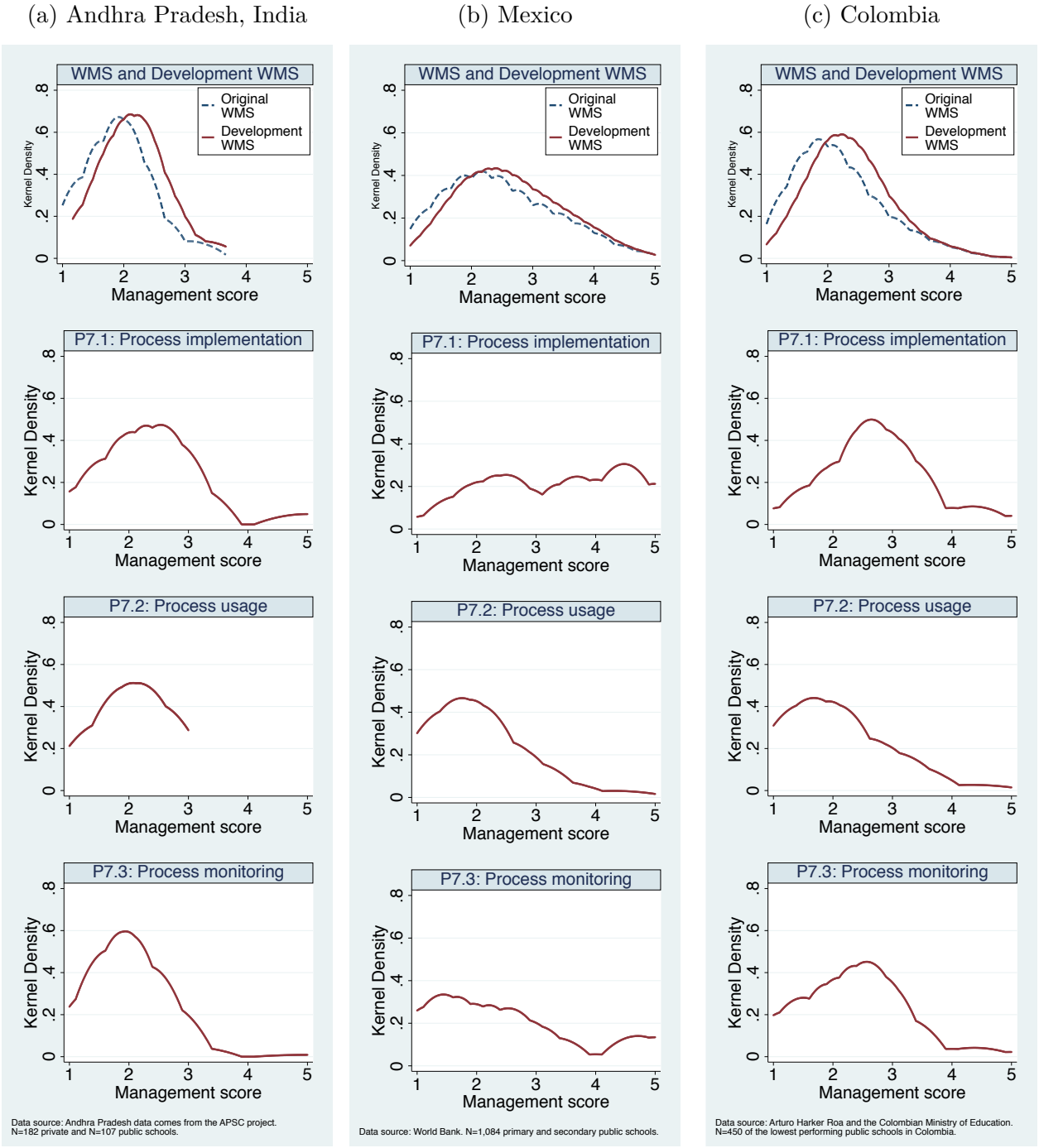
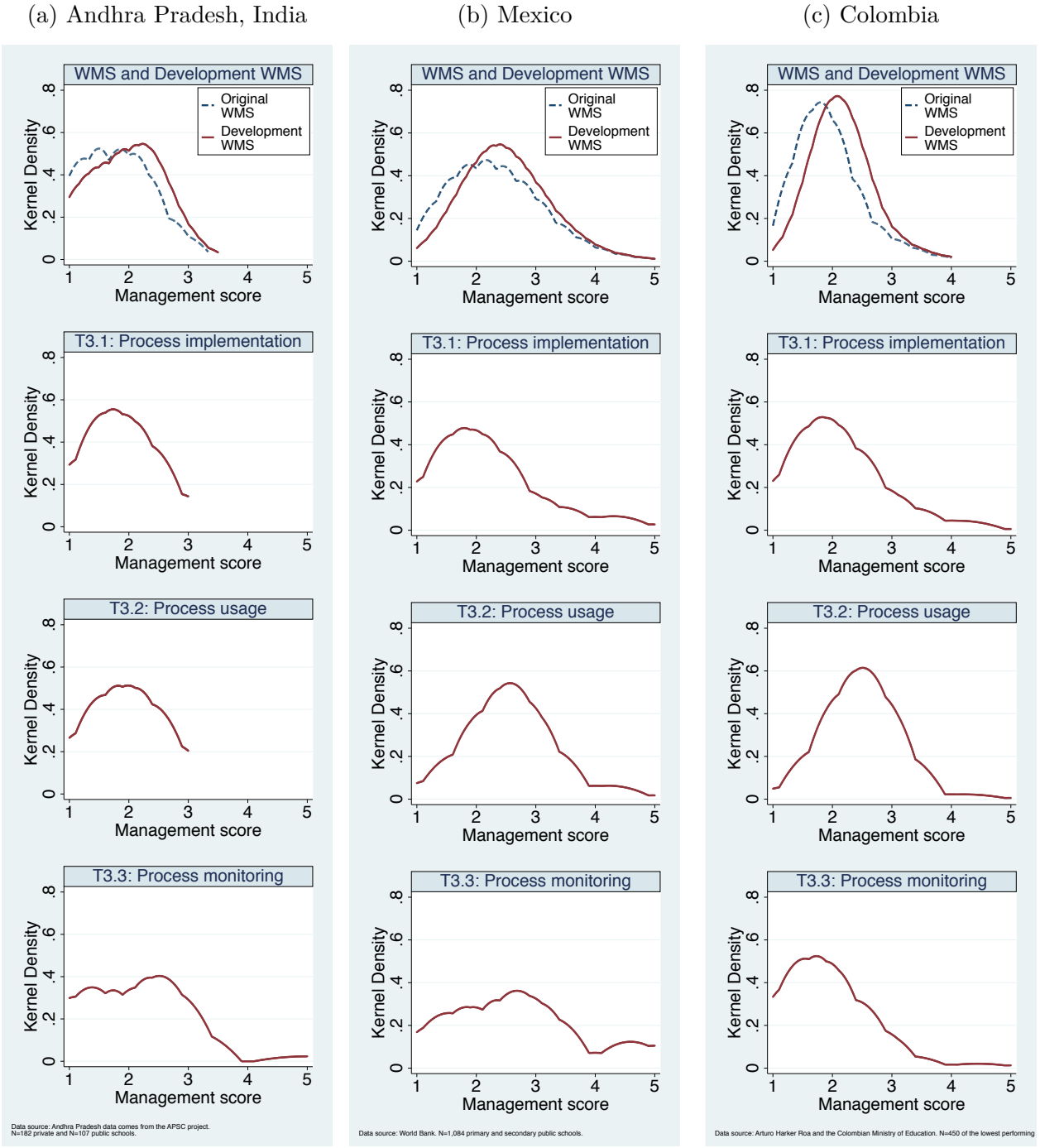


Figure 7: Management practice: managing poor performers



5 Appendix A - Development WMS Schools Tool

5.1 20 management practices

ITEM	Possible questions	1	1.5	2	2.5	3	4	5
2. Standardization of Instructional Planning Processes								
2.1: Well-defined and Standardized Planning Processes and Materials: curriculum, textbooks and other classroom materials, and lesson plans	a) How do you ensure that all students of a given grade are learning the same topics in the same way within a similar timeframe?	School does not follow a curriculum, does not use textbooks or other materials in the classroom, and does not prepare lesson plans.	School follows a standardized curriculum based on state and national mandates (without flexibility or initiative to take into account local contexts and adapt the curriculum to their needs), and uses only textbooks provided by the government or educational system but no other materials. Teachers teach straight from the textbook without preparing lesson plans.	School follows a standardized curriculum based on state and national mandates (without flexibility or initiative to take into account local contexts and adapt the curriculum to their needs), and uses up-to-date textbooks but no other materials. Teachers individualy prepare lesson plans and never check with other teachers to see if they are all teaching in the same manner across classes/grades and aligned with past years (i.e., two teachers will have different lesson plans for a grade 1 class at different points in time).	School follows a standardized curriculum based on state and national mandates (without flexibility or initiative to take into account local contexts and adapt the curriculum to their needs), and uses up-to-date textbooks and may use other materials. Teachers individualy prepare lesson plans and sometimes have informal conversations with other teachers to see if they are teaching in the same manner across classes/grades and aligned with past grades (i.e., two teachers will have different lesson plans for a grade 1 class at different points in time).	School follows a standardized curriculum based on state and national mandates (without flexibility or initiative to take into account local contexts and adapt the curriculum to their needs), and uses up-to-date textbooks and other useful resources. School teachers teaching the same subjects prepare daily lesson plans together based on a range of resources available to them at the school (not only textbooks) to ensure that there is consistency/standardization across grades and years.	School follows a standardized curriculum based on state and national mandates (with some flexibility or initiative to take into account local contexts and adapt the curriculum to their needs), and uses up-to-date textbooks and other useful resources. School teachers teaching the same subjects prepare daily lesson plans together based on a range of resources available to them at the school (not only textbooks) to ensure that there is consistency/standardization across grades and years.	School follows a standardized curriculum, which may be based on state and national mandates but takes into account local contexts and adapt the curriculum to their needs. The school uses up-to-date textbooks and other useful resources. School teachers teaching the same subjects prepare daily lesson plans together based on a range of resources available to them at the school (not only textbooks) to ensure that there is consistency/standardization across grades and years. Teachers use a newly acquired online resource to plan lesson plans, which are available to student and parents online beforehand.
2.2: Implementation and Monitoring Note: CCTV with only video (not audio) is not considered a monitoring tool in this question	b) How do you keep track of what teachers are doing in the classrooms?	There is no implementation/monitoring of standard processes because the school does not follow a curriculum, does not use textbooks or other materials in the classroom, and does not prepare lesson plans.	Principal sporadically conducts rounds or classroom observations and verifies lesson plans when he/she believes the teacher is performing badly. He/she says it can be done regularly but only does it when a problem arises and does not keep track OR does regurlarly but does not keep track.	Principal randomly conducts rounds or classroom observations and verifies lesson plans when he feels like it (it may be due to a problem or not). He says it can be done regularly but only does it twice or three times a year per teacher and does not keep track as he/she does not have time.	Principal randomly conducts rounds or classroom observations and verifies lesson plans when he feels appropriate. He says it can be done regularly but only does it twice or three times a year per teacher and keeps track.	Principal actively conducts scheduled rounds (though without telling teachers about it so it is unexpected) for classroom observations and takes time of his day to verify lesson plans to ensure quality across classrooms once a month for every teacher and keeps track of his observations.	Principal actively conducts scheduled rounds (though without telling teachers about it so it is unexpected) for classroom observations and takes time of his day to verify lesson plans to ensure quality across classrooms once a month for every teacher and keeps track of his observations. In certain ocasions, heads of departments and other school leaders are involved in checking the implementation and monitoring of instructional planning processes.	Principal actively conducts scheduled rounds (though without telling teachers about it so it is unexpected) for classroom observations and takes time of his day to verify lesson plans to ensure quality across classrooms at least once a month for every teacher and keeps track of his observations. Heads of departments and other school leaders are involved in checking the implementation and monitoring of instructional planning processes in a consistent and comprehensive manner.
2.3: Aligned with learning expectations	c) Why did you and the teachers decide on the current curriculum, textbooks and other materials and lesson plans used throughout the year?	No decision was made because school does not follow a curriculum, does not use textbooks or other materials in the classroom, and does not prepare lesson plans.	Principal states that the current curriculum, textbooks and other materials are used because the government/school board sets it as such, but he/she is not able to explain why they were chosen. There is not a particular reason for chosing these materials.	Principal states that the current curriculum, textbooks and other materials are used because the government/school board sets it as such, and is able to vaguely justify why he/she thinks these were chosen, though not very specifically	Principal cannot pinpoint why the current curriculum, textbooks and other materials used in the classroom, and lesson plans were chosen. But Principal vaguely mentions that it is linked to improving education in general but does not directly links it to speficic student outcomes.	Principal explains that the current curriculum, textbooks and other materials used in the classroom, and lesson plans are aligned with defined learning expectations (which are ultimately linked to student achievement in state/national examinations)	Principal explains that the current curriculum, textbooks and other materials used in the classroom, and lesson plans are aligned with defined learning expectations (which are ultimately linked to student achievement in state/national examinations) and, in certain ocasions, incorporate some flexibility to meet student and community needs.	Principal explains that the current curriculum, textbooks and other materials used in the classroom, and lesson plans are specifically designed to align instructional strategies and materials with learning expectations (which are ultimately linked to student achievement in state/national examinations) and incorporate flexibility to meet student needs

ITEM	Possible questions	1	1.5	2	2.5	3	4	5
3. Personalization of Instruction and Learning								
3.1: Identifying and addressing individual student needs through a range of student methods Common alternative teaching methods: participation, demonstration, recitation, memorization, collaborating (group work), and learn by teaching	a) How much does the school try to identify individual student needs? b) How do teachers accommodate student needs within in the classroom? (for example, if a few children are visual learners, how do they deal with that in a class of 30 board learners?)	Individual student needs are not identified. Traditional teaching methods are the only method used.	There isn't any process for the teacher to identify individual student needs but the teacher generally knows what types of different learning needs students have (but not based on any data, this is just a feeling!). Usually one alternative teaching method (in addition to traditional teaching) is used in the classroom.	There is an informal process which indirectly helps the teacher identify individual student needs (i.e., progress cards for each student which will reflect what types of learning needs the student has) but teacher does not tailor their teaching to address the needs of each student. Usually two alternative teaching methods (in addition to traditional teaching) are used in the classroom.	There is an informal process which indirectly helps the teacher identify individual student needs (i.e., progress cards for each student which will reflect what types of learning needs the student has). Teacher may try to tailor their teaching to address the needs of each student, but this is not done in a systematically manner. Usually three alternative teaching methods (in addition to traditional teaching) are used in the classroom.	There is an process (computerized or on paper) to track student records which helps teachers identify individual student progress and possible special needs. Usually four or more alternative teaching methods (in addition to traditional teaching) are used in the classroom to encourage student engagement in their own learning.	There is an process (computerized or on paper) to track student records which helps teachers identify individual student progress and possible special needs. A wide range of alternative teaching methods (in addition to traditional teaching) are used in the classroom to encourage student engagement in their own learning.	A school assigns student advisors who are committed to identify and assess student needs and create an individualized learning program for every student. There is a computerized process to track student records which helps teachers identify individual student progress and possible special needs. Several alternative teaching methods (in addition to traditional teaching) are used in the classroom to address individual student needs and to encourage student engagement in their own learning.
3.2: Student/parent engagement in student learning	c) How do you make sure students are engaged in learning? And how are parents incorporated in the this?	Neither students nor parents are engaged in student learning.	Student have very little influence of their own learning through individual or group projects, and don't know they're expected to be creative and engaged. Parents are not engaged in student learning at all.	Student have some influence of their own learning through individual or group projects, but this is rather random and not structured within the class plans so the students don't know they're expected to engage in this way. Despite being informed about student progress, parents are not engaged in student learning.	Student have some influence of their own learning through individual or group projects, and it is structured within the class plans so they know they're expected to engage. Despite being informed about student progress, parents are not engaged in student learning.	Student have some influence of their own learning through individual or group projects, and it is structured within the class plans so they know they're expected to engage. Parents are still not engaged (such as helping in homework), but they do come to PTA meetings and seem somewhat engaged.	Student have some influence of their own learning through individual or group projects, and it is structured within the class plans so they know they're expected to engage. Parents are still not engaged (such as helping in homework), but they do come to PTA meetings and seem somewhat engaged. Parents have access to some online reports and are able to observe their children's progress throughout the year.	Student have influence of their own learning through individual or group projects, and it is structured within the class plans so they know they're expected to engage. Parents have access to these online reports and the individualized learning program for every student and are able to observe their children's progress throughout the year.
3.3: Implementation and Monitoring Note: CCTV with only video (not audio) is not considered a monitoring tool in this question	d) How do you keep track of what teachers are doing in the classrooms to ensure that different student needs are taken care of?	There is no implementation/monitoring of standard processes because the school does identify or address individual student needs.	Principal sporadically conducts rounds or classroom observations when he/she believes the teacher is performing badly. He/she says it can be done regularly but only does it when a problem arises and does not keep track OR does regurlarly but does not keep track.	Principal randomly conducts rounds or classroom observations when he feels like it (it may be due to a problem or not). He says it can be done regularly but only does it twice or three times a year per teacher and does not keep track as he/she does not have time.	Principal randomly conducts rounds or classroom observations when he feels appropriate. He says it can be done regularly but only does it twice or three times a year per teacher and keeps track.	Principal actively conducts scheduled rounds (though without telling teachers about it so it is unexpected) for classroom observations to ensure individual student needs are being addressed once a month for every teacher and keeps track of his observations.	Principal actively conducts scheduled rounds (though without telling teachers about it so it is unexpected) for classroom observations to ensure individual student needs are being addressed once a month for every teacher and keeps track of his observations. In certain ocasions, heads of departments and other school leaders are involved in checking the implementation and monitoring of the personalization of instruction.	Principal actively conducts scheduled rounds (though without telling teachers about it so it is unexpected) for classroom observations to ensure individual student needs are being addressed at least once a month for every teacher and keeps track of his observations. Heads of departments and other school leaders are involved in checking the implementation and monitoring of the personalization of instruction in a consistent and comprehensive manner.

ITEM	Possible questions	1	1.5	2	2.5	3	4	5
4. Data-driven Planning and Student Transitions								
4.1: Individual student data availability	a) What type of information about the individual students is available to teachers at the beginning of the academic year?	No data is available.	Little data is available such as only an overall mark for the student at the end of the year but it is not integrated or easy to use (i.e., teachers give an overall mark to students based on their impressions throughout the year without providing much comments about students behavior, performance in examinations, etc. and impressions are recorded in a progress card which is returned to the parents at the end of the year)	Some data is available such as end-of-year examinations and teacher impressions but it is not recorded systematically and it is not integrated or easy to use (i.e., student performance is recorded in a progress card which is returned to the parents at the end of the year)	Data is available at the end of the year, such as a range of academic data and behaviour data, although not necessarily in an integrated or easy to use (i.e. a larger set of data is recorded but not in way which will allow a new teacher to fully understand the strengths and weaknesses of the students)	Data is available (such as results for quarterly, mid-year and end-of-the year examinations plus health information, teacher impressions, baseline tests...) although not necessarily in an integrated or easy to use manner (i.e. data is recorded frequently, but on paper, and not in way which will allow a new teacher to fully understand the strengths and weaknesses of the students)	Data is available (such as results for quarterly, mid-year and end-of-the year examinations plus health information, teacher impressions, baseline tests...). Data is recorded frequently and presented in an easy way which allows a new teacher to fully understand the strengths and weaknesses of the students).	Data is available from formative assessements and from several different sources such as weekly quizzes, student participation, student involvement in student associations, and the use of tutoring available after class, standardized tests and placement testing. Data is recorded frequently and is computerized and presented in an easy way which allows a new teacher to fully understand the strengths and weaknesses of the students).
4.2: School awereness of critical student transitions "Critical transitions" can be student mark promotions, or perhaps quarterly unit by unit progress, or primary to secondary promotion.	b) What do you think are the main points of transition/promotion for students? How is this communicated to your teachers?	Principal does not understand/ is not aware of main points or "critical transitions" for students.	Principal vaguely understands the main points of transition for students to be the transition from primary to secondary, but he/she does not communicate this to heads of departments and teachers.	Principal does understand the main points of transition for students to be the transition from primary to secondary, and he/she may communicate this to heads of departments and teachers from time to time in informal conversations.	Principal does understand the main points of transition for students to be the transition from grade to grade (grade promotion), and he/she may communicate this to heads of departments and teachers from time to time in informal conversations.	Principal does understand the main points of transition for students to be the transition across quarters and semesters throughout the academic year, and he/she may communicate this to heads of departments and teachers from time to time in informal conversations.	Principal does understand the main points of transition for students to be the transition across quarters and semesters throughout the academic year, and he/she formally communicates this to heads of departments. He/she also communicates this to teachers but in more informal ways or with less frequency.	Principal, heads of departments, other school leaders and teachers fully understand the main points of transition for students as this is often a focus point during meetings to discuss instructional strategies.
4.3: School management of critical student transitions "Critical transitions" can be student mark promotions, or perhaps quarterly unit by unit progress, or primary to secondary promotion.	c) Does the school use any data to consider student promotions through critical transitions (such as grade promotions or unit progressions)?	Teachers are not made aware of past student performance at any point during the new academic year.	Teachers are given progress cards to check on past student performance before the beginning of the year but rarely revise the documentation given and make very little effort to address any issues.	Teachers are made aware of past student performance before the beginning of the year byt having informal conversations with other teachers in order to be able to address any issues raised in the past. They make some effort to address issues but in an unstructured way.	Principal and teachers are made aware of past student performance before the beginning of the year in order to be able to address any issues raised in the past. They also talk to the previous teachers to get feedback about students, and pass on their own feedback to the next grade. They make some effort to address issues but in an unstructured way.	School verifies student outcomes at critical stages (that is, across quarters, semesters and academic years). Teachers observe academic results every quarter to try to determine where the weaknesses are in instruction and make a good effort to address identified weaknesses but in an unstructured way.	School verifies student outcomes at critical stages (that is, across quarters, semesters and academic years). Teachers observe academic results every quarter to try to determine where the weaknesses are in instruction and make a good effort to address identified weaknesses in a structured and coherent way.	School verifies student outcomes at critical stages and conducts data-based meetings across disciplines with the aim to address any areas that need attention throughout the year in order to ease student transition through grades and levels.

ITEM	Possible questions	1	1.5	2	2.5	3	4	5
5. Adopting Educational Best Practices								
5.1: Where the school finds out about education best practices	a) How do you encourage the teachers to incorporate new teaching practices into the classroom?	The principal does not encourage teachers to learn new teaching techniques. Same teaching practices have been used for a long time. The principal believes the practices they use are good enough and no change is needed.	The principal somewhat acknowledges they could use some new teaching practices but does not encourage teachers to learn new techniques.	The principal acknowledges that new teaching practices are necessary and somewhat encourages teachers to learn new techniques but in an unstructured way (i.e., principal has informal conversations with teachers once in a while and asks them to come up with new ways to incorporate other teaching practices into the classroom, in practice this rarely happens).	The principal fully understands that new teaching practices are necessary and often encourages teachers to learn new techniques through formal training and shadowing within the school. However, in practice the initiative actually comes from the teachers.	The principal fully understands that new teaching practices are necessary and actively encourages teachers to learn new techniques through some formal training and shadowing within the school.	The principal fully understands that new teaching practices are necessary and actively encourages teachers to learn new techniques through some formal training and shadowing within the school. Teachers are sent to conferences, but this doesn't happen very often.	School systematically provides staff with opportunities to collaborate and share best practice techniques and learnings. They have quarterly in-service days, teachers are often sent to conferences and have additional professional development opportunities to learn about best teaching practices used in other schools.
5.2: How are these best practices shared within the school	b) How are these learnings shared across teachers and subjects? b) How often are these practices shared?	No sharing of learnings happens.	Teachers sometimes collaborate to share learnings or “best practice” techniques during their lunch breaks or grading times, but this is ad-hoc and inconsistent.	Once a year in an annual meeting teachers are asked to talk about the methods they use, but this is not in the spirit of spreading practices (ie. Teachers all think their method is good enough and nobody pushes them to learn/adopt new techniques)	Teachers often collaborate to share learnings or “best practice” techniques in their regular meetings, but the principal does not initiate these discussions	The principal reviews the new best practices being adopted in the school during quarterly teacher-staff meetings, but does this in an unstructured way (ie. It is "formal" in that it is part of the meeting, but the principal does little more than just talk about the practices)	The principal reviews the new best practices being adopted in the school during annual meetings in an structured way and specifically arranged for sharing best practices within the school.	The principal reviews the new best practices being adopted in the school in a structured way during regular meetings specifically arranged for sharing best practices within the school.
5.3: How is the adoption of these techniques monitored	c) How do you make sure the teachers are using the new techniques you are trying to introduce?	Since there are no learning of new techniques, there is also no monitoring of these non-existent new techniques	The principal has some informal chats with teachers about how the practices are going in hallways or during random class visits, but does not ask specifically or record this progress in written form.	The principal checks once per academic year during their annual meeting on any new techniques that were used, but does not do much with this information.	The principal has no systematic way of monitoring the adoption of these practices within the classrooms, though he/she does this at least quarterly in an ad-hoc manner. The principal does not record in any way the progress on the adoption of these techniques.	The principal has no systematic way of monitoring the adoption of these practices within the classrooms, though he/she does this at least quarterly in an ad-hoc manner. The principal takes some notes regarding the new practices to maybe bring up in an annual meeting.	The principal has a systematic way of monitoring the adoption of these practices within the classrooms. He/she does this at least quarterly. The principal takes notes regarding the new practices to bring up in an annual meeting.	The principal has a systematic way of monitoring the adoption of these practices within the classrooms. The principal ensures that these techniques have been incorporated by revising lesson plans and conducting regular observations in the classrooms.

ITEM	Possible questions	1	1.5	2	2.5	3	4	5
6. Continuous Improvement								
6.1: Finding and documenting problems	a) When you have a problem in the school, how do you come to know about them? (ie. If a teaching method is not being applied correclty) b) What are the steps you go through to fix them?	Problems are never exposed. The principal is not aware of any problems (or they say they haven't had problems for years - means they just didn't know!).	The principal rarely finds out about issues within the school. He/She thinks all is well most of the time, when in reality it is not.	The principal is often informed about problems when they are happening, but never documents the issues after the fact.	The principal is often (but not always) informed about problems when they are happening, and sometimes documents the issues after the fact. The principal does not look back at these notes to try and prevent further issues.	The principal is always informed about problems when they are happening, and always documents the issues after the fact. The principal does not look back at these notes to try and prevent further issues.	The principal is always informed about problems when they are happening, and always documents the issues after the fact. The principal will sometimes look back at these notes to try and prevent further issues.	Exposing and solving problems (for the school, individual students, teachers, and staff) in a structured way is integral to individual's responsibilities. There is an online reporting system which all teachers and staff have access to and follow up on a daily basis.
6.2: Who resolves problems	c) Who is involved in resolving these issues, that is, in deciding what course of action will be taken to resolve the issue?	Nobody gets involved as there are no issues to be solved.	There is no set person/staff group who follows up with problems. This is done by whoever wants to see the issue resolved, very ad-hoc.	There is only one staff group involved in solving the issue, usually just the principal or correspondent/superintendent. Principal might ask a third party to perform a task so the problem can be fixed, but ultimately, the principal decides how the problem will be solved.	Only one staff group (ie. The principal) gets involved in solving the issue, but he/she does ask for informal feedback from other staff groups (such as teachers)	Most of the appropriate staff groups are involved in solving the issues (ie. The principal and the cleaning staff get together to solve an issue of the black boards never being cleaned after classes)	Most of the appropriate staff groups are involved in solving the issues (ie. The principal and the cleaning staff get together to solve an issue of the black boards never being cleaned after classes). In certain ocasions, students are also involved.	All of the appropriate staff groups are involved in solving the issues. There is also an advisory committee composed of different representatives (teachers/staff/students) to address problems within the school.
6.3: Who improves processes	d) Who is involved in improving/suggesting improvements to the process so these issues do not happen again?	No process improvements are ever made.	There is no set person/staff group who suggests improvements. If there are any improvements, these are done by whoever wants to see the issue resolved (very ad-hoc).The principal rarely implements suggestions to improve processes.	Only one staff group (ie. The principal) gets involved in improving processes, but this is done in a unstructured way (only when the principal feels the need to improve it).No feedback is asked from other staff groups.	Only one staff group (ie. The principal) gets involved improving processes, but he/she does ask for informal feedback from other staff groups (such as teachers)	Only one staff group (ie. The principal) gets involved improving processes, but he/she does ask for formal feedback from appropriate staff groups during meetings and other formal functions.	Only one staff group (ie. The principal) gets involved improving processes, but he/she does ask for formal feedback from appropriate staff groups during meetings and other formal functions. Students are also encouraged to participate and give suggestions, but they not always do that.	Improvements are performed as part of regular management processes. Teachers are encouraged to discuss process improvements with their peers and dept. heads during dept. meetings and to implement process improvements previously discussed and share more effective processes with the school in regular meetings. There is also an advisory committee composed of different representatives (teachers/staff/students) to address problems and suggest improvements within the school.

ITEM	Possible questions	1	1.5	2	2.5	3	4	5
7. Performance Tracking								
7.1: Types of parameters (such as student marks, attendance (regularity), behaviour, teacher absenteeism, enrolment rates, dropout rates, teacher professional development, budgets etc.)	a) What kind of main parameters do you use to track school performance? b) What documents are you using to inform this tracking?	Only student marks are tracked.	One main parameter in addition to student marks is tracked, but it does not show how well the school is doing overall.	Two main parameters in addition to student marks are tracked, but it does not show how well the school is doing overall.	Three main parameters in addition to student marks are tracked, but it does not show how well the school is doing overall.	A set of at least 4 or more parameters are tracked, and they should be a range of types of parameters to show how the school is doing overall (ie. grades, behaviour, teachers, enrolment/dropout rates and budgets)	A set of at least 5 or more parameters are tracked, and they should be a range of types of parameters to show how the school is doing overall (ie. grades, behaviour, teachers, enrolment/dropout rates and budgets).	Performance is continuously tracked and communicated, both formally and informally, to all staff using a range of visual management tools
7.2: Tracking frequency	c) How often are these measured?	Only student marks are tracked once per year	Most parameters are tracked once per year	Most parameters are tracked twice a year	Most parameters are tracked three times per year	Most parameters are tracked more than three times per year (ie. Once per term plus a final exam).	Most parameters are tracked every two months.	All parameters are tracked continuously throughout the year.
7.3: Communicated to whom and how	d) Who gets to see this data? e) If I were to walk through your school, how could I tell how it is doing compared to its main parameters?	Officially, only the principal sees the overall class grades, and does not communicate to the teachers if their classes are doing well or not. (ie. teachers may see individual student marks, but don't get to see a holistic view of the whole class and how it is doing across time)	Officially, only the principal sees the overall class grades, and only communicates to the teachers if their classes are doing well or not. (ie. teachers may see individual student marks, but don't get to see a holistic view of the whole class and how it is doing across time)	The principal knows how well classes are doing, but informally communicates this to teachers in an ad-hoc manner. Parents know of their own children but not of school-wide results.	The principal knows how well classes are doing, and informally communicates this to teachers during regular meetings. Parents know of their own children but not of school-wide results.	The principal knows how well classes are doing, and informally as well as formally communicates this to teachers during meetings and regular reports. Parents know of their own children but not of school-wide results as results are not published.	The principal knows how well classes are doing, and informally as well as formally communicates this to teachers during meetings and regular reports. Parents know of their own children through weekly and monthly reports and are aware of the school-wide results through informal conversations with the teachers and principal.	A range of visual methods is used to communicate with those involved in the school matters. Information about how well the classes are doing is diplayed online for teachers, students, and parents. The principal also communicates this to teachers informally as well as formally during meetings and regular reports.

ITEM	Possible questions	1	1.5	2	2.5	3	4	5
8. Performance Review								
8.1: Frequent discussions	a) How often do you have meetings to review the parameters?	School reviews only student marks once a year	School reviews their set of parameters once per year	School reviews their set of parameters twice a year	School reviews their set of parameters three times per year	School reviews their set of parameters more than three times per year.	School reviews their set of parameters every two months.	School reviews their set of parameters continuously/frenquently.
8.2: Who is involved in these meetings and how are results communicated to the school	b) Who is involved in these meetings? c) Who gets to see the results of these meetings? Are details of the meeting shared with other staff?	There is no meeting, only the principal reviews the parameters on his own. The only communication is of the end of year results, nothing else.	Only the principal and some senior teachers are involved in reviewing the parameters, no results of the meeting are recorded.	Only the principal and some senior teachers are involved in review meetings. Nobody takes meaningful notes of the results to communicate to others, or notes are taken but not shared.	The principal and senior teachers are involved in review meetings. Some teachers take notes and these notes are shared with others, but this is done in an unstructured way.	Only the principal and senior teachers are involved in review meetings. School progress report are sent to parents noting the results of the reviews following the meetings and are widely available.	The principal, other school leaders and teachers are involved in review meetings. School progress report are sent to parents noting the results of the reviews following the meetings and are widely available and parent's are encouraged to provide feedback.	All those involved in the school matters such as principals, head of departments, teachers, parents and other community members are involved in formal review meetings regarding school performance. Results of formal meetings are communicated to all in the monthly internal newsletter.
8.3: Action plan follows the meeting	d) After reviewing these parameters, what is the action plan you leave these meetings with? e) What steps would people take after? f) Who is responsible for carrying out the action plan?	There is no follow up plan. Principal does not think any action needs to be taken as any review meetings just serve the purpose of informing the staff about the the school performance compares to its main parameters.	There is a general sense of what needs to be done, but nobody is clear on who should take charge of what.	The principal notes there are some follow up steps to be followed, but nobody is clear on who should take charge of what.	The principal notes there are some follow up steps to be followed, but only informally suggests who could take care of what.	The principal notes there are some follow up steps to be followed and formally assigns responsibility	There is a clear follow up plan with assigned tasks, timeframe and responsibilities. The principal follows up and keeps informed those involved in the follow up plan during review meetings.	There is a clear follow up plan with assigned tasks, timeframe and responsibilities. The results of follow up plans are reported in a systematic away using their online student/teacher records before the next review meeting.

ITEM	Possible questions	1	1.5	2	2.5	3	4	5
9. Performance Dialogue								
9.1: Follow a clear agenda	a) Can you tell me about a recent review meeting you have had? What topics did you discuss in this meeting? Was there an agenda?	There is no set agenda for the meeting.	There is a list of topics to talk about that the principal brings along, but he/she does not share it with others previously and it is not clear what the discussion will be about and people do not know what to expect.	There is no formal agenda for the meeting, but the principal tends to always follow the same topics in the meetings so people know what to expect.	There is a formal agenda for the meeting, but it is not always clear what the topics are and it only sometimes gets circulated to staff before the meeting.	The principal holds set meetings with a clear agenda. The principal circulates the agenda before hand so all know what will be discussed and can come prepared.	The principal holds set meetings with a clear agenda. The principal circulates the agenda before hand so all know what will be discussed and can come prepared. Staff can add items to the agenda if they wish to do so, but do not do so often.	The principal holds set meetings with a clear agenda. The principal circulates the agenda before hand so all know what will be discussed and can come prepared. All staff is encouraged to add relevant items to the agenda and often do so.
9.2: Meetings have appropriate data present	b) What kind of data or information about the parameters do you normally have with you?	There is no data available for the meeting.	The principal brings some basic student marks data to the meeting.	The principal brings some detailed student marks data, but no other type of data.	The principal brings a small set of good data to the meeting, but it is limited and only helps in part of the discussions.	There is an appropriate set of data available for the meeting, though not in a very easy format to read. (ie. No charts/graphs, just numbers/comments)	There is an appropriate set of data available for the meeting. One or two paremeters/ indicators are displayed in an easy format to read such a charts/graphs, summarizing the parameters collected which reflect the performance of the school. Other parameters/indicators are only mentioned briefly during the meeting.	There is an appropriate set of data available for the meeting, and it is displayed in a very easy format to read such as in charts/graphs, summarizing the parameters collected which reflect the performance of the school.
9.3: Get people involved in constructive feedback	c) What type of feedback do you get during these meetings? d) How do you get to solving the problems raised in the meetings?	The principal only tells staff about the issues and does not expect or encourage feedback on how to solve the issues. It feels more like a lecture rather than an interactive meeting. Since there is very little interaction, so no conversations lead to root causes of issues.	The meeting is mainly about ad-hoc problems that came up during the time since the previous meeting, and nothing of value gets discussed. The principal discusses the issues with staff, but does not encourage suggestions. If suggestions are given, they are done in an unstructured way and the principal does not take note of possible solutions.	The principal mainly acknowledges the problems they are discussing in the meeting and listens to any feedback offered without encouraging it, but does not actively request it or write down comments. He/she also rarely implements others' suggestions.	The principal actively listens to any feedback given and encourages it. He/she does not write it down, but does make an effort to implement some suggestions when reminded.	Those present in the meeting know they are expected to contribute to the dicussions and do so actively. It is an open forum where the principal encourages open feedback and creative solutions to problems. The principal takes notes of feedback given. There is an open discussion of problems but in an unstructured way, and as a matter of course the conversations do not drive to the root cause of problems.	Those present in the meeting actively contribute to discussions in a structured way, using a range of techniques to find the root cause of problems. The review focuses on failures in order to identify what is not working in the school.	Those present in the meeting actively contribute to discussions in a structured way, using a range of techniques to find the root cause of problems. The review focuses on both successes and failures in order to idenify what is and what is not working in the school. Meetinds are an opportunity fo constructive feedback and coaching.

ITEM	Possible questions	1	1.5	2	2.5	3	4	5
10. Consequence Management								
10.1: Clear responsibilities for action plan	a) After a review meeting, how are people aware of their responsibilities and actions that must be taken?	There are no follow up plans, tasks or list of things that need to geet done after the meetings, so there are no assigned responsibilities (ie. tasks are not assigned to people)	The principal makes a mental note of the things that need to get done after the meeting and asks members of staff to do some of them (no clear tasks as no explanation on how to get them done). Since there is no record and it is too much for the principal to remember, things rarely get done and no one is accountable/answerable for them.	The principal has a list of things that need to get done after a meeting, but it is not clear how he/she expects to achieve them (no clear tasks as no explanation on how to get them done). He takes note of the list and asks members of staff to do some of the tasks. However, there is no clear responsibility and accountability set, and the majority of things end up being discussed again in the next meeting.	There are clear tasks that come out of meetings, but there are no individuals assigned to nor timeframe allocated to tasks. There are no major consequences for failure to follow through with the action plan/ tasks.	There are clear follow up plans (with assigned tasks, responsibilities, people involved, and timeframe) that come out of meetings with specific people being responsible (but not necessarily accountable) for actions/tasks. They follow this up every month in the following meeting, but consequences for failure are not clear.	There are clear follow up plans (with assigned tasks, responsibilities, people involved, and timeframe) that come out of meetings. They follow these up in the following meeting. Actions are generally taken to modify the follow up plan in case task targets are not met, but these actions are not very clear.	There are clear follow up plans (with assigned tasks, responsibilities, people involved, and timeframe), that come out of meetings with specific people being responsible and accountable for actions/tasks. They follow this up every month in the following meeting, and with clear consequences for failure in completing the tasks.
10.2: How long it takes to identify and deal with a problem	d) How long does it typically go between when a problem starts and you realize this and start solving it? e) Can you give me an example of a recent problem you've faced?	It would take over one academic year for action to be taken.	It would take at most one academic year for action to the taken.	It would take over six months for action to be taken.	It would take three months for action to be taken.	It would take about a month for action to be taken.	It would take about two weeks for action to be taken.	Action is taken immediately after a problem is identified. Principal is made aware of the progress along the way.
10.3: How they avoid having the same problem again	f) How would you make sure this problem does not happen again? e) If a year from now the problem were to happen again, how would you know if and how you dealt with such a problem before?	There are no measures taken to make sure the problem does not happen again. The solution to the problem is not recorded anywhere. If the problem happened again, the principal would not be aware/remembers that they faced a similar problem in the past.	The principal makes a mental note of the issue and makes sure he/she brings it up in an annual meeting, but nothing formal.	The principal brings it up in a monthly meeting to inform staff of the issue and have a record, but sees it as a problem of the past and that they should move onwards.	The principal notes the issue in a diary, but the diary is not used for anything proactive.	The principal notes the problem in a diary, and consults it from time to time when there is a problem to see if they have figured it out before. There is nothing done to prevent future problems, however.	There is a reporting system with all problems and action plans in detail which the principal, teachers and staff have access to. However, the follow up is not done on a regular basis (depending on the problem).	There is an online reporting system with all problem and action plans in detail which the principal, teachers and staff have access to and follow up on a regular basis.

ITEM	Possible questions	1	1.5	2	2.5	3	4	5
11. Balance of Targets/Goal Metrics								
11.1: Clarity and Balance of Targets/Goal Metrics	a) What goals do you have set for your school?	There are no goal metrics, so no definition either. Principal struggles to answer this question.	There is a general sense that they would like to improve one main student outcome measure (ie. "increase enrolment", "increase grades"), but no absolute numbers or percentages regarding how much.	There is a general sense that they would like to improve two or more main student outcome measures (ie. "increase enrolment", "increase grades"), but no absolute numbers or percentages regarding how much.	The student outcome goals are absolute and tangible, such as "increase enrolment to 90% of the village" or "decrease dropout rates by 5%".	The student outcome goals as well as other types of goals such as teacher outcomes are absolute and tangible, such as increase enrolment to 90% of the village or decrease dropout rates by 5%, increasing graduation rates by x%, offering two teacher development courses per year)	The student outcome goals as well as other types of goals such as teacher outcomes are absolute and tangible. One goal is also defined in value-added terms.	The student outcome goals as well as other types of goals such as teacher outcomes are both in terms of absolute/tangible and value-added measures.
11.2: Set at the district, school, departmental and individual levels	b) Can you tell me about any specific goals for departments, teachers and staff?	The only school goal metric is year-end student marks.	There is a small range of goals for the school including year-end student marks, but they are not very clear, in addition to a loose goal that is tied to a government/board target (such as improving the school overall rate).	There is a small range of goals that are defined for the government/school boards and the school as a whole but not for levels within the school (including departments/subjects, teachers, students, staff).	There is a small range of goals that are defined for the government/school boards, the school, and for subjects/departments as a whole but not for individuals within the school (including teachers, students, staff).	There is a small range of goals that are defined for the government/school boards, the school, for subjects/departments, and for individuals within the school (including teachers, students, staff).	A range of goals (measured in terms of absolute and one goals is measured in tmers of value-added) are defined for the government/school boards, the school, for subjects/departments, and for individuals within the school (including teachers/staff or students)	A range of goals (measured in terms of absolute and value-added measures) are defined for the government/school boards, the school, for subjects/departments, and for individuals within the school (including teachers, students, staff).
11.3: Linked to student outcomes and defined by internal and external factors	d) How are your goals linked to student outcomes? e) How are your school goals linked to the goals of the school board system (government/ICSE/CBSE)? f) What are the goals of other schools in the area?	Goals relate directly to government or school board targets. Principal cannot explain why the goals were chosen, there is not a particularly clear reason for determining these goals.	Goals relate directly to government or school board targets. BUT Principal explains or understands that these goals are losely tied to the overall system student outcomes.	Goals relate directly to government or school board targets which are tied to the overall system student outcomes, but with some regard for a internal school benchmark (decided partialy based on realistic improvements on previous years' student marks).	Goals are set based on internal targets based on a range of student outcomes and also following government-imposed targets. The principal does not actively seek this outside information.	Goals are set based on internal targets based on students' previous years scores and also following government-imposed targets. The principal checks around schools *in the local area* to ensure their goals are reasonable.	Goals are set based on internal targets based on students' previous years scores and also following government-imposed targets. The principal checks around schools *in the area and the district* to ensure their goals are reasonable.	Goals are set based on internal targets based on students' previous years scores and also following government-imposed targets. The principal checks around schools *in the area, the district as well as country-wide rankings* to ensure their goals are reasonable.

ITEM	Possible questions	1	1.5	2	2.5	3	4	5
12. Interconnection of Targets/Goals								
12.1: Clarity of goals through the hierarchy chain	a) How do you learn of the goals the school system expects of you? b) Are the goals clear to you and others in your school?	Goals do not trickle down through the school system or the school.	Only one overall goal gets trickled down to the school, though it is unclear and vague.	A set of goals get trickled down from the school system (government/ICSE/CBSE) to the school but they are not very clear even to the principal.	A set of goals get trickled down from the school system (government/ICSE/CBSE) to the school, but they are only clear to the principal. Senior teachers and other staff do not have clarity on the school goals.	A set of goals get trickled down from the school system (government/ICSE/CBSE) to the school, but they are only clear to the principal and some senior teachers and heads of departments. Other teachers do not have clarity on the school goals.	A set of goals get trickled down from the school system (government/ICSE/CBSE) to the school. They are only clear to the principal and some senior teachers and heads of departments. Other teachers and staff have only some clarity on the school goals.	A set of goals get trickled down from the school system (government/ICSE/CBSE) to the school. Goals are clear to principal, heads of departments, teachers and other staff in the school.
12.2: Breaking down big goals into smaller ones and linking to individual goals	c) If I were a teacher or another member of the school, what kind of goals would I have?	There are no specific goals for staff or students, only large goals for the school system.	The principal knows what the school as a whole must achieve in terms of student outcome goals, but he does not break it down by subject area, teachers or classes.	The principal knows what the school as a whole must achieve in terms of student outcome goals, and he breaks it down by subject area only (not by individual teachers).	Teachers have an idea of the student outcome goals for their classes, but do not have specific goals regarding professional development.	Teachers have an idea of the goals for their classes in terms of student outcomes, and some specific goals regarding professional development.	Teachers have a good idea of the goals for their classes in terms of student outcomes, and some specific goals regarding professional development. There is a broad understanding of how individual effort towards goals affects the school as a whole.	Teachers fully understand how goals are aligned and linked at system level and how they increase in specificity as they trickle down, ultimately defining individual expectations for all.
12.3: Goals are well communicated within the school	d) How do you communicate to your teachers and staff what their goals are?	The principal tells staff in the annual meetings that their goal is to improve, but nothing very concrete.	The principal talks to his/her staff members sporadically throughout the year to tell them how they should be doing.	There is no formal process by which the principal communicates the school and individual goals to teachers, but he/she does use an informal system of word-of-mouth by talking to them in the hallways and ad-hoc meetings.	The principal will reiterate the school goals in their annual meeting, and has irregular meetings with teachers to talk about specific goals. He/she only does this when there is a problem, and not as a matter of routine.	Once per academic year, teachers have professional development meetings to revise their goals and ensure they're proper. The principal keeps track of teachers' development and their students' outcomes.	Once per semester, teachers have professional development meetings to revise their goals and ensure they're proper. The principal keeps track of teachers' development and their students' outcomes.	Teachers have professional development meetings frequently to revise their goals and ensure they're proper. The principal keeps track of teachers' development and their students' outcomes.

ITEM	Possible questions	1	1.5	2	2.5	3	4	5
13. Time Horizon of Targets/Goals								
13.1 :A range of short, mid-term, long-term goals Short-term: under 1 year Mid-term: 1 year Lond-term: over 1 year	a) What kind of time-scale are you looking at with your goals?	The school does not have a time-scale for their goals (or they do not have goals).	The school has annual goals that relate to the following years' marks, but not more.	The school has mostly annual goals and a few short-term goals.	The school has mostly annual goals and a few short-term and long-term goals.	There is a good balance of short-term and mid-term goals for all levels of the school system. (ie. Long term are 5-year plans of construction, graduation rates, etc. and short-term goals are to increase test scores for the next year)	The school has a range of short-term and mid-term goals, as well as at least one long-term goals.	There is a good balance of short-term, mid-term and long-term goals for all levels of the school system. (ie. Long term are 5-year plans of construction, graduation rates, etc. and short-term goals are to increase test scores for the next year)
13.2: Interlinked goals that staircase from short to long term	b) Could you meet all your short term goals but miss your long-run goals?	The school does not have a time-scale for their goals (or they do not have goals), so cannot be interlinked.	The school only has annual goals, so there is nothing to link to longer goals.	The school only has long term goals, so there is nothing to link to other goals.	The long term and short term goals are set independently, so it is possible to meet all short term goals and miss long term goals and it happens often.	The long term and short term goals are set independently but somewhat aligned with each other, so it is possible to meet all short term goals and miss long term goals but it does not happen often.	Long-term goals are translated into specific short-term targets so that short-term targets become a "staircase" to reach long-term goals. However, it could happen that long-term goals are not reached.	Long-term goals are translated into specific short-term targets so that short-term targets become a "staircase" to reach long-term goals
13.3: Emphasis of goals	c) Which goals would you say get the most emphasis?	The school does not have a time-scale for their goals (or they do not have goals), so cannot have a focus in one time frame.	The school focuses only on short term goals.	The school focuses on short term goals, but keeps in mind the mid-term goals.	The school focuses on mid-term goals.	The school focuses on both the short and long term goals, keeping track of their short run goals to ensure they make the long run goal, though they often have to extend the long-run goal because they missed too many short-term goals.	The school focuses on all goals (short-, mid-, and long-term), keeping track of their short run goals to ensure they make the long run goal. Sometimes readjustements have to be made, but it is not often.	The school focuses on all goals (short-, mid-, and long-term), keeping track of their short- and mid-run goals to ensure they make the long run goal.

ITEM	Possible questions	1	1.5	2	2.5	3	4	5
14. Stretch of Targets/Goals								
14.1: Goals are tough but achievable (80 to 90% of the time)	a) How tough are your goals? Do you feel pushed by them? b) On average, how often would you say that the school meets their goals?	The principal says that their goals are too easy (never pushed), or too hard (always pushed too much). Principal finds them ridiculous!	The principal says that the goals are very very hard, but if they push a lot they can get there. Or they say the goals are very very easy, but they do still try to get above the goals since they know this. Principal still finds them ridiculous but at least tries to do something about them!	The principal and the teachers believe they have aggressive goals, but they do tend to meet them 100% of the time and is satisfied with the results.	The principal and the teachers believe they have aggressive goals, but they do tend to meet them 100% of the time. Because of this, they create their own goals of slightly overreaching the goal (ie. 105%)	The principal and the teachers push for aggressive goals, and find that they can't always meet them because they're genuinely hard, but they do make it 80-90% of the time.	The principal and the teachers push for aggressive goals, and find that they can't always meet them because they're genuinely hard, but they do make it 80-90% of the time. When goals are easily met, goals sometimes are stretched.	The principal and the teachers push for aggressive goals, and find that they can't always meet them because they're genuinely hard, but they do make it 80-90% of the time. When goals are easily met, goals are stretched.
14.2: Goals are equally difficult/demanding for all	c) Do you feel that all the departments/areas have goals that are just as hard? Or would some areas/departments get easier targets?	The principal does not set goals for different department/areas.	The principal keeps the same goals every year and does not bother to check if some departments have easier/harder goals than others as a result of changing circumstances.	The principal tries to make goal difficulty equally distributed to everyone, but never checks if this is actually true	Goals are demanding for a few department/areas. There are some areas which have considerably easier goals than others. (ie. English teachers have easier goals than Telugu teachers)	Goals are demanding for most department/areas, but there are some areas which have slightly easier goals than others. (ie. English teachers have easier goals than Telugu teachers)	Goals are demanding for all department/areas, but there are some areas which have slightly easier goals than others, so an effort is made to adjust targets accordingly.	Goals are demanding for all department/areas.
14.3: Goals are set with reference to external benchmarks	d) How are your goals benchmarked?	Goals are set only internally and do not take into account external factors or teachers' feedback. There are no benchmarks or comparisons with external schools.	The principal compares and benchmarks their goals with some schools he/she hears about from teachers, but doesn't look externally for meaningful comparisons.	The principal compares and benchmarks their goals with schools in the village/city, but not the district.	The principal compares and benchmarks their goals with schools in the district.	The principal compares their goals with those of the school boards (government/ICSE/CBSE), but not beyond that.	The principal uses a wide range of internal (such as school statistics) and some external benchmarks to set their goals (such as sectorial, regional, or state/provincial level benchmarks)	The principal uses a wide range of internal (such as school statistics) and external benchmarks to set their goals (such as sectorial, regional, and state/provincial level benchmarks)

ITEM	Possible questions	1	1.5	2	2.5	3	4	5
17. Clarity and Comparability of Goals								
17.1: Clearly defined and strongly communicated to all	a) If I asked one of the teachers directly about their individual goals, what would they tell me? b) How do you, as the school principal, know that the teachers are aware of their goal? c) Does anyone ever complain their goals are difficult to understand?	The school does not define clear goals for staff, so there would be no use in asking.	The principal believes the staff know their goals, but there's no way for him/her to verify this.	The principal says some teachers should certainly be aware of their goals as they have informal conversations once in a while, but cannot say if they are all aware or not.	The principal says teachers are aware of their goals, but some do complain that they are too difficult to understand and should be simplified.	The principal says the teachers are well aware of their goals and do not find them difficult to understand.	The principal says the teachers are well aware of their targets, and do not find them difficult to understand. Staff performance is also communicated informally during school review meetings.	The principal says the teachers are very well aware of their goals and do not find them difficult to understand. Performance measures are strongly communicated and reinforced at all reviews.
17.2: Based on both qualitative and quantitative measures	c) What are the goals based on?	The school does not define clear goals for staff.	The goals are based on student marks as mandated by the government.	The goals are based on student marks plus another quantitative measure that goes beyond government requirements.	The goals are a limited number of quantitative measures (2 or 3) that go beyond government requirements.	The goals are a range of quantitative measures (more than 3) that go beyond government requirements.	The targets are a range of quantitative measures (more than 4), as well as one or two qualitative measures, that go beyond government requirements.	The goals include a range of both quantitative and qualitative measures that go beyond government requirements.
17.3: Everyone knows how everyone is doing and can compare	d) How do people know about their own performance when compared to other people's performance?	The school does not have individual goals, only a school-based goal on academic achievement.	The principal only keeps an informal tally in his/her head of who the best subjects are (not teachers), and does not publicize any data on this so the principal and other people cannot compare their performance.	The principal only keeps an informal tally in his/her head of who the best teachers are, and does not publicize any data on this so people cannot compare their performance.	The principal has an open-door policy regarding data on goals and will show scores to teachers if they wish to see them.	The principal has an open-door policy regarding data on goals and will show scores to teachers if they wish to see them. Formal conversations are held during review meetings where teachers became aware of which subjects/departments are doing better.	Information on team/ unit targets and performance metrics are communicated formally during review meetings as well as via email or monthly reports.	Information on individual goals and performance metrics are made public through boards displayed in the school and online. Teachers, parents, and student have access to this information.

ITEM	Possible questions	1	1.5	2	2.5	3	4	5
18. Building a High Performance Culture/ Rewarding High Performers								
18.1: Identification of good performers	a) How do you know who your best teachers are? b) What criteria do you use and how often do you identify these teachers?	There is no formal or informal identification of good performers (ie. The principal cannot tell you which teachers are good and which ones are not: "everyone is a great performer!")	Good teachers are identified only on the observed academic results of students (ie. The principal can tell who the best teachers are by looking at the best class scores, but nothing else)	Good teachers are identified on a range of observed student results, but nothing formal (ie. The principal can tell who the best teachers are by looking at the best class scores, behaviour, and absenteeism rates, but it's all from memory or ad-hoc checking of records)	There is a formal set of criteria by which good teachers are identified (such as student academic results, student behaviour, teacher absenteeism etc.) BUT it is NOT done regularly and it follows a small/narrow range of criteria (ie. If the good teacher is identified only on academic achievement and behaviour, or only on their absenteeism)	There is a formal set of criteria by which good teachers are identified (such as student academic results, student behaviour, teacher absenteeism etc.) and it is done regularly but with a small/narrow range of criteria (ie. If the good teacher is identified only on academic achievement and behaviour, or only on their absenteeism)	There is a formal set of criteria by which good clinicians are identified (for example, academic results, student behaviour, and teacher abseenteism). It is done regularly and with 3 criteria.	There is a formal set of criteria by which good teachers are identified (for example, academic results, student behaviour, and teacher abseenteism). It is done regularly and with a broad range of criteria (4 ore more).
18.2: Formally evaluated	b) How do you evaluate and rate your teachers? c) How often do you do this evaluation?	There is no teacher evaluation system (that is, teachers never sit down with the principal for face-to-face or written evaluations)	The principal individually evaluates teachers in his/her opinion, but does not give formal feedback about it or follow a set of criteria (ie. Only say "you're doing ok," or "you're not doing ok"	Teachers are formally evaluated ad-hoc, when the principal feels there is a need (such as if someone is doing badly or exceedingly well, there is a formal write-up and discussion)	An annual evaluation system exists that allows the principal to rank performance (the ranking is not necessarily shared with teachers, but the principal knows)	An evaluation system exists and happens at least quarterly, that allows the principal to rank performance (the ranking is not necessarily shared with teachers, but the principal knows)	An evaluation system exists and happens at least quarterly, that allows the principal to rank performance and share this with teachers, should they ask to see it. Results are shared informally or only to some teachers.	An evaluation system exists and happens at least quarterly, that allows the principal to rank performance and share this with teachers.
18.3: Separate reward system for individuals and teams	d) What types of rewards are given to teachers? Any monetary or non-monetary rewards? e) Are these rewards linked to the ranking teachers get?	No reward systems at all	Reward everyone regardless of performance	Rewards are given to reward good performance, but given ad-hoc, whenever the principal feels like it	A reward system exists, but they're always or never given (so teachers don't think it is linked to performance)	A system of monetary or non-monetary reward exists, but it is informal (that is, there are guidelines, albeit not formal/written down in a rule book)	A formal system of monetary or non-monetary reward exists, but only some rewards are given out regurlarly.	A formal system of monetary or non-monetary reward exists. Rewards are awarded on a regular basis as a consequence of well-defined and monitored individual achievements.

ITEM	Possible questions	1	1.5	2	2.5	3	4	5
19. Making Room for Talent/ Removing Poor Performers								
19.1: Identification of poor performers	a) How do you know who are the teachers who are not doing so well (the worst teachers)? b) What criteria do you use and how often do you identify who these teachers are?	There is no formal or informal identification of bad performers (ie. The principal cannot tell you which teachers are good and which ones are bad "everyone is a great performer!")	Bad teachers are identified only on the observed academic results of students (ie. The principal can tell who the worst teachers are by looking at the worst class scores, but nothing else)	Bad teachers are identified on a range of observed student results, but nothing formal (ie. The principal can tell who the worst teachers are by looking at the worst class scores, behaviour, and absenteeism rates, but it's all from memory or ad-hoc checking of records)	There is a formal set of criteria by which bad teachers are identified (such as student academic results, student behaviour, teacher absenteeism etc.) BUT it is NOT done regularly and it follows a small/narrow range of criteria (ie. If the bad teacher is identified only on academic achievement and behaviour, or only on their absenteeism)	There is a formal set of criteria by which bad teachers are identified (such as student academic results, student behaviour, teacher absenteeism etc.) and it is done quarterly (ie. regularly, such as following a set of exams) but with a small/narrow range of criteria (ie. If the bad teacher is identified only on academic achievement and behaviour, or only on their absenteeism)	There is a formal set of criteria by which bad teachers are identified (such as student academic results, student behaviour, teacher absenteeism etc.). It is done regularly and with 3 criteria.	There is a formal set of criteria by which bad teachers are identified (for example, academic results, student behaviour, and teacher abseenteism). It is done regularly and with a broad range of criteria (4 ore more).
19.2: Methods of dealing with bad performers	b) If you had a teacher who is struggling or who could not do their job properly, what would you do? c) What if you had a teacher who would not do their job, as in slacking off, what would you do then?	Bad performance is not addressed at all	Bad performance is addressed inconsistently (ie. Sometimes the principal deals with it, but not always)	Bad performance is addressed consistently, but with not much consequence (ie. The principal will always talk to the teachers who are underperforming, but offer no coaching or support for improvement)	Bad performance is addressed consistently, and with support for improvement but still no real consequence (ie. The principal always talks to the teachers who are underperforming, and offer coaching/training to improve them but if they don't, not much happens)	Bad performance is addressed consistently and with support, and with real consequence attached to continued bad performance (ie. The principal tries to improve the teacher, but if it doesn't work, the teacher can be moved or fired after a certain time)	Bad performance is addressed consistently. Support such as targeted interventions and coaching/development may be provided in certain ocasions . Poor performers are temporarily moved out of their positions in order for the problem to be addressed immediately while they receive coaching/training to improve. Poor performers are also moved out of the school when weaknesses cannot be overcome.	Bad performance is addressed consistently and with support, beginning with targeted interventions. Poor performers are temporarily moved out of their positions in order for the problem to be addressed immediately while they receive coaching/training to improve. Poor performers are also moved out of the school when weaknesses cannot be overcome.
19.3: Time scale of action	d) How long would a teacher be able to stay in his/her position while performing badly? e) How long does it take to address the issue once you come to know of it?	There is no action because nothing is identified or addressed	There is no real time-scale in mind, but eventually there is some action that is taken (ie. It can take a few years)	It takes more than one academic year to address any issues (ie. More than one whole year goes by without any action because the principal waits for multi-year academic results)	Action is not taken immediately, but it is taken at some point during the year, up to one academic year (ie. Actions could be taken throughout the year, but not immediately. However, it also does not take over one year)	Action is taken immediately, but it can take one academic year for a bad teacher to be removed from the position (possibly to other positions of less responsibility, not necessarily fired)	Action is taken immediately, but it can take around 6 months for a bad teachers to be removed from the position (possibly to other positions of less responsibility, not necessarily fired).	Action is taken immediately, it takes very little time for a bad teacher to be removed from the position (possibly to other positions of less responsibliity, not necessarily fired)

ITEM	Possible questions	1	1.5	2	2.5	3	4	5
20. Promoting High Performers								
20.1: Identification of good performers	a) How do you know who your best teachers are? b) What criteria do you use and how often do you identify who these teachers are?	There is no formal or informal identification of good performers (ie. The principal cannot tell you which teachers are good and which ones are not: "everyone is a great performer!")	Good teachers are identified only on the observed academic results of students (ie. The principal can tell who the best teachers are by looking at the best class scores, but nothing else)	Good teachers are identified on a range of observed student results, but nothing formal (ie. The principal can tell who the best teachers are by looking at the best class scores, behaviour, and absenteeism rates, but it's all from memory or ad-hoc checking of records)	There is a formal set of criteria by which good teachers are identified (such as student academic results, student behaviour, teacher absenteeism etc.) BUT it is NOT done regularly and it follows a small/narrow range of criteria (ie. If the good teacher is identified only on academic achievement and behaviour, or only on their absenteeism)	There is a formal set of criteria by which good teachers are identified (such as student academic results, student behaviour, teacher absenteeism etc.) and it is done regularly but with a small/narrow range of criteria (ie. If the good teacher is identified only on academic achievement and behaviour, or only on their absenteeism)	There is a formal set of criteria by which good teachers are identified (such as student academic results, student behaviour, teacher absenteeism etc.). It is done regularly and with 3 criteria.	There is a formal set of criteria by which good teachers are identified (such as student academic results, student behaviour, teacher absenteeism etc.) and it is done regularly and with a broad range of criteria.
20.2: Development of good performers	b) What types of career and teacher development opportunities are provided? c) How do you tailor opportunities for particular teachers?	There is no professional/career development for any teachers.	Professional/career development opportunities exist for all teachers, such as additional training, but these come only from mandatory government or school board (ie. CBSE/ICSE) rules. Principals don't actively encourage teachers to attend (don't discourage, but no encouragement either)	Professional/career development opportunities exist for all teachers, such as additional training, but these come only from mandatory government or school board (such as ICSE/CBSE) rules. Principal actively encourages teachers to attend these, but does not keep track.	Professional/career development opportunities exist for all teachers, such as additional training, but these come only from mandatory government or school board (such as ICSE/CBSE) rules. Principal actively encourages teachers to attend these, and the principal keeps track of each teacher's development.	School provides professional/career opportunities for top teachers, such as additional training as a reward for good performance. This includes not only govt training, but also school initiatives. However, this does not happen very often and in a systematic manner. (ie. The school initiative has happened once/twice in the past few years)	School provides professional/career opportunities for top teachers such as additional training as a reward for good performance. This includes not only government training, but also school initiatives. This is typically done once a year. In certain occasions. the school may allows these teachers to determine which classes they want to teach and give them leadership positions and responsibilities within the school.	School systematically provides professional/career opportunities for top teachers based on their individual evaluation and professional development plan, such as additional training as a reward for good performance. This includes not only govt training, but also school initiatives. The school allows these teachers to determine which classes they want to teach and give them leadership positions and responsibilities within the school.
20.3: Reason for promotion	d) How do you make decisions about promotion/progression of teachers and additional opportunities within the school, such as performance, years of service, etc.? e) If we have two teachers, one has been at the school two years and the other for five years, and the teacher who is there for two years is better, who would be promoted faster? f) If there were two teachers, one with a B.Ed degree and one without, and the one without the B.Ed performed better, who would be promoted faster?	There is no promotion of the teachers, or promotion is based only on years of service (ie. experience)	Teachers are promoted primarily based on years of service (experience), but some consideration for performance or qualifications is used if teachers have similar years of service.	Teachers are promoted with some consideration for years of service (experience) and also performance or qualifications	Teachers are promoted with consideration for their qualifications and some performance, but no consideration is given to years of service (experience)	Teachers are promoted based on how good their performance is, with no importance given to years of service (experience), and less to qualifications	School controls the number and type of staff they have in the school. School will make changes if they witness a need for it and it is done immediately.	Teachers are promoted purely based on how good their performance is.

ITEM	Possible questions	1	1.5	2	2.5	3	4	5
21. Managing Talent								
21.1: Who makes hiring decisions	a) Who decides how many and which teachers (full-time regular members of staff) to hire?	School has no formal control over the number and type of teacher/staff needed to meet their goals. Ie. central authority of education system (such as govt for state schools, ICSE/CBSE boards for private) decides how many teachers and of what subject the school gets	School has no formal control, but can make suggestions regarding their needs. However, they don't often take an active role in trying to get the teachers they need.	School has no formal control, but can make suggestions regarding their needs and very actively engages with higher authorities to make sure they get the type and number of teachers they need.	School has some control over the number and type of teachers they have in the school, but require approval/permission (sign-off) from higher authorities, which can take a while to come through.	School controls the number and type of teachers they have in the school, but only make any changes after they witness a need for it at the end of an academic year.	School controls the number and type of staff they have in the school. School will make changes if they witness a need for it and it is done immediately.	School activelly controls the number and type of teachers they have in the school, often making changes to ensure teacher hiring strategies are well-aligned with the school goals and linked to student outcomes.
21.2: How/where do you seek out and find teachers to hire	b) Where do you seek out and find teachers? c) How do you ensure you have the teachers you need for the subjects you have? For example, how do you make sure you have enough grade 3 teachers given the number of students in that grade?	Do not do anything to try and find good teachers. They have no control over who they hire so it is not up to them to do anything.	Since hiring is out of their hands they do not actively engage in this, but if a current teacher refers another talented teacher the principal does pass it on to the higher authorities to try and hire that teacher if needed.	The principal actively asks for referrals from current teachers, but does not go outside the school (such as placing ads in newspapers).	The principal primarily bases his/her search on current teacher referrals, but if none are made then places ads in newspapers (but as a last resort).	The principal follows a formal process of putting ads in newspapers, and actively encourages current teachers to refer other talented teachers	The principal follows a formal process of putting ads in newspapers, and actively encourages current teachers to refer other talented teachers. The principal may attend job fairs or source teachers from the best universities.	The principal follows a formal process of doing a state-wided search, putting ads in newspapers, attending job fairs, and sourcing teachers from the best universities. The principal actively encourages current teachers to refer other talented teachers from other schools and from their personal networks.
21.3: Hiring criteria and why these were chosen	d) How do you decide which teachers should be hired? e) What criteria do you use to hire teachers?	The reason for hiring new teachers is not determined by the school (not done by the principal, but by a centralized committee)	Principal does not have control over hiring, but the principal expresses their concern that some criterias should be followed in this decision (ie. given the chance, they would help in the hiring process but not with any formal set of criteria)	Principal has some control over which teachers to hire, but does not follow any formal set of criteria in ranking candidates and bases his/her decision on a "feeling" or "hunch".	Principal has control to hire teachers based on only one set of criteria (ie. only qualifications or only demo, etc), and does so without regard for student academic results and behaviour (ie. If Math classes are doing badly and would benefit from an additional teacher, but the principal hires an English teacher because they did well on the interview/demo)	Principal has control to hire teachers based on a formal set of criteria (such as qualifications, interview and class demos), but does so without regard for student academic results and behaviour (ie. If Math classes are doing badly and would benefit from an additional teacher, but the principal hires an English teacher because they did well on the interview/demo)	Principal has control to hire teachers based ononly one criterium (such as qualifications, interview or class demos). Sometimes ther principal takes into account student academic results and behaviour.	Principal has control to hire teachers based on a formal set of criteria (such as qualifications, interview and class demos), and does so to ensure teacher hiring strategies are well-aligned with the school goals and linked to student outcomes.

ITEM	Possible questions	1	1.5	2	2.5	3	4	5
22. Retaining talent								
22.1: When a teacher leaves/wants to leave, is there a formal process followed to understand the reason for leaving	a) When one of your best teachers wants to leave the school, what do you do?	The principal does not question or care why the teacher is leaving, they just go	The principal has an informal chat with the teacher to understand why they are leaving but does not take note of any feedback	The principal does a somewhat formal "exit interview" to understand why the teacher wants to leave, but this does not happen in a structured manner and is ad-hoc	The principal always does a structured and formal "exit interview" to understand why the teacher wants to leave but does not note anything for future learnings	The principal always does a structured and formal "exit interview" to understand why the teacher wants to leave and notes what could be improved for the future to avoid this, but does not follow up on what has been learned.	The principal always does a structured and formal "exit interview" to understand why the teacher wants to leave and notes what could be improved for the future to avoid this. There is some follow up on what has been learned but in a unstructured way.	Principal is often doing evaluations to understand and forsee any problems that might arise and to make sure the teachers are satisfied with their job and with the school in order to avoid a teacher wanting to leave. In case this happens, the principal always does a structured and formal "exit interview" to understand why the teacher wants to leave and notes what could be improved for the future to avoid this.
22.2: What can they offer (or do) to keep best teachers who want to leave	b) What would you be able to offer to try and keep that best teacher in your school? c) Could you give me an example of a time when you were able to keep a best teacher? And what about a teacher that you could not convince to stay?	The principal cannot offer or do anything to try and keep a top teacher	The principal cannot offer or do anything to try and keep a top teacher in terms of money, but they may offer them more responsibility or flexible time	The school has an informal agreement that the principal can offer extra opportunities to try and keep top teachers, but the principal only considers this if asked by the teacher	The principal has the authority to offer some extra opportunities to try and keep top teachers, but rarely does so (ie. He/she can offer more money or class flexibility, but has only done it once or twice in the past few years)	The principal has the authority to offer some extra opportunities to try and keep top teachers, and regularly does so.	The principal has the formal authority to offer some extra opportunities to try and keep top teachers, and regularly does so. There are some limits to what can be offered, that is, their authority generally extends over schedules and minor monetary raises to match other schools.	The principal usually tries to convince teachers to stay by offering a range of extra opportunities through a formal process, such as different class schedules, time flexibility or more money.
22.3: What do they do to ensure top teachers want to stay in the school	d) How would you know if your best teachers are happy working in this school?	The principal treats everyone equally, regardless of performance. The principal does not focus especially on retaining top teachers.	The principal does not initiate conversations with teachers and staff regarding their work satisfaction level, but has an open door policy where people can come and talk about it	The principal has informal chats with teachers and staff and has a general feeling of how satisfied their employees are. However, there is no formal check that he/she does.	The principal has a set process that he/she follows to ask the best teachers how happy they are in their work environment. They do this to try and fix any issues before teachers want to leave. However, this is not done regularly and is not recorded anywhere.	The principal has a set process that he/she follows to ask the best teachers how happy they are in their work environment. They do this to try and fix any issues before teachers want to leave. This is done fairly regularly, but not recorded anywhere.	The principal has a set process that (s)he follows to ask the best teachers how happy they are in their work environment. (S)he does this to try and fix any issues before clinicians want to leave. This is done fairly regularly, and is recorded, although it is not necessarily consulted often.	The principal has a set process during teachers evaluation that he/she follows to ask the best teachers how happy they are in their work environment. They do this to try and fix any issues before teachers want to leave. This is done fairly regularly and recorded in each teachers evaluation plan.

ITEM	Possible questions	1	1.5	2	2.5	3	4	5
23. Creating a Distinctive Employee Value Proposition								
23.1: Why would teachers want to teach at your school	a) If I were a very good teacher considering working at your school or somewhere else, what would you say to try and get me to work here? b) What are the professional benefits of working at your school?	The principal does not know how to answer this question as they have never thought about it before.	The principal recognizes that teachers perhaps would not want to work there, as there are other, better schools nearby.	Despite acknowledging there aren't formal professional benefits that the school can offer, the principal believes the school has some informal benefits (such as being a "nice atmosphere" or "family environment")	The principal believes there is a good atmosphere in the school, and there are professional benefits to working there (although he/she cannot think of clear examples)	The school offers similar professional benefits as other schools nearby. However, there is usually a waiting list for teachers wanting to join this school.	The hospital offers one of two more competitive professional benefits than most schools nearby.	The school offers a range of better, more competitive professional benefits than other schools nearby.
23.2: Teachers are aware of the benefits of working at your school	c) How do teachers come to know that working at your school is better than others? How do you communicate this to the teachers?	The principal does not communicate at all that their school is a good place to work at.	The principal only communicates the value of working at their school during the first day of work of a new teacher, but not again.	The principal communicates during the first day of work of a new teachers and rarely communicates that their school is a good place to work at after that, but has done so once or twice.	The principal communicates the value of working at their school in annual teacher-staff meetings (no more than once a year in special occasions)	The principal usually communicates that their school is a good school to work at during PTA meetings, teacher-staff meetings and community meetings (any of these happening more than once a year)	The principal frequently and actively communicates that their school is a good school to work at during PTA meetings, teacher-staff meetings and community meetings. These take place on a bi-annual basis.	The principal frequently and actively communicates the value of working at their school in regular teacher evaluation meetings, PTA meetings, teacher-staff meetings and community meetings. These happen very frequently.
23.3: How do you keep track that the communication is effective	d) Do you check to see if teachers are aware of the benefits of working at your school?	The principal does not keep track at all since there is no communication.	The principal does not keep track at all, only believes people know (ie. "oh, they know why it is good to work here")	The principal has informal chats in the hallways about whether people are aware of the benefits of working in the school so he believes that they are aware.	The principal has informal follow up conversations with teachers either individually or in groups to ensure their beliefs are aligned.	The principal has informal follow up conversations with teachers either individually or in groups to ensure their beliefs are aligned and keeps a written record of this.	The principal has formal, structured follow up conversations with teacher in groups and sometimes individually to ensure their beliefs are aligned. Principal keeps a written record of this and follows up regularly.	The principal has formal, structured follow up conversations with teachers either individually or in groups to ensure their beliefs are aligned and keeps a written record of this.

5.2 3 leadership practices

ITEM	Possible questions	1	1.5	2	2.5	3	4	5
1. Leadership Vision								
1.1: What is the school's vision? Why was this vision chosen?	a) What is the school's vision for the next 5 years? b) Could you summarize in a couple of sentences?	There is no vision. Principal cannot articulate a vision.	Vision is not clear and not linked to student outcomes. Principal cannot explain why this vision was chosen. For example, school follows the vision of the government or other educational systems (such as CBSE & ICSE) but cannot articulate the vision clearly.	Vision is somewhat clear yet not well-defined and it is not linked to student outcomes. For example, Principal broadly says the vision is "to educated all children".	Vision is clear and well-defined but it is not directly linked to a range of student outcomes. For example, Principal says the vision is to "increase enrolment in the community" but is not concerned with other student outcomes.	Vision is clear, well-defined and linked to a range of student outcomes BUT largely focused on meeting state/national mandates.	The vision is clear, well-defined and linked to a range of student outcomes, largely focused on meeting state/national mandates but also with some consideration given to student and community needs.	Vision is clear and well-defined. School leaders broadly communicate a shared vision and purpose for the school that focuses on improving student learning and outcomes (beyond those required by law); vision and purpose is built upon a keen understanding of student and community needs.
1.2: Who sets the vision?	c) Who is involved in deciding on the vision?	There is no vision.	The School Board/Correspondent/Superintendent/ only. The Principal, teachers or others involved in the school matters are not consulted.	The School Board/Correspondent/Superintendent. Principal and/or other school leaders are consulted but the ultimate decision is made by the School Board/Correspondent/Superintendent.	The School Board/Correspondent/Superintendent and Principal jointly set the vision	The School Board/Correspondent/Superintendent, Principal, departmental heads and other school leaders jointly sets the vision	The School Board/Correspondent/Superintendent, Principal, departmental heads and other school leaders jointly sets the vision. Sometimes they ask and incorporate suggestions from parents and other community members and representatives involved in school matters.	Vision is defined collaboratively with a wide range of stakeholders. The School Board/Correspondent/Superintendent, Principal, departmental heads, other school leaders jointly sets the vision in annual meetings with teachers, parents, students and other community members and representatives involved in the school matters.
1.3: Communicated to whom and how?	d) How do teachers, staff and others involved in the school matters know and understand this vision?	There is no vision or vision is not communicated.	Principal believes that the staff is aware of the vision as he has mentioned it before in informal conversations. However, the vision is not actively communicated to teachers as well others involved in the school matters such as students ,parents, and other community members.	Principal believes that the staff is aware of the vision as it is displayed in the school and often mentioned in annual meetings. However, the vision is not actively communicated to others involved in the school matters such as students, parents, and other community members.	Principal believes that staff is aware of the vision as it is displayed in the school and always mentioned in annual meetings. Principal also has informal conversations with parents and others involved in the school matters about the vision from time to time.	Staff, students, and parents are actively communicated about the school's vision in their annual newsletter, annual meetings, PTA meetings or some other formal mean of communication.	Staff, students, and parents are actively communicated about the school's vision in their annual newsletter, annual meetings, PTA meetings or some other formal mean of communication. There is also some informal yet regular communication with other community members and representatives involved in the school matters.	Vision is define and often communicated during regular meetings to a wide range of stakeholders such as the School Board/Correspondent/Superintendent, Principal, departmental heads, other school leaders, teachers, parents, students and other community members and representatives involved in the school matters.

ITEM	Possible questions	1	1.5	2	2.5	3	4	5
15. Clearly Defined Accountability for School Leaders								
15.1: Who is responsible for school reaching overall targets (including quality, equity, and cost-effectiveness of student outcomes)	a) Who is responsible for delivering school goals?	The principal does not know who is responsible	The principal says he/she is solely responsible but there are never any consequences.	The principal is responsible for the academic results of the students, and he/she knows that there are some consequences from time to time for not reaching goals (though this is unstructured/random).	The principal is held responsible by the school board/correspondent for the goals of the school. In turn, the principal holds his/her teachers accountable, but the only "official" consequences fall on the principal. The teachers, however, know the principal will hold them accountable in some way as well (though not formal).	The principal and the senior teachers or admin (department heads/vice principals etc.) are jointly held responsible for academic results of the students.	The principal and the senior teachers or admin (department heads/vice principals etc.) are jointly held responsible for academic results of the students. Some teachers might also be responsible with consequences for not reaching the targets.	The principal, the heads of departments, the teachers and all other staff members of the school are responsible for delivering school goals
15.2: School and individual-level consequences for good and bad performance (accountability)	b) How are individuals school leaders answerable/accountable for achieving these goals? Does this apply to all types of goals?	There are no consequences for not achieving goals.	There are some school-level mild consequences for not achieving goals, but none of these are ever enforced.	There are technically school-level consequences for not achieving goals, but these are only enforced sometimes.	There are only school-level consequences for not achieving goals, and while these are enforced at the school level, individuals rarely feel these consequences personally.	There are only school-level consequences for not achieving goals, and while these are enforced at the school level, only the principal and other school leaders feel these consequences personally.	There are school-level and individual-level consequences for good and bad performance on the goals, although these may not be consistently applied.	There are school-level and individual-level consequences for good and bad performance on the goals.
15.3: Autonomy to make decisions that will directly affect the outcomes of these targets.	c) What autonomy do you have to take actions that would affect the ability to meet the goals? (ie. Budget authority, hiring/firing)	Principal does not have any autonomy/authority to take any action	Only the principal has autonomy/authority to take action when the matter involves student outcomes. The principal has limited autonomy/authority to impact hiring and firing or budget tweaks to bring help in case it is needed to meet a goal BUT never exercises this autonomy/authority.	Only the principal has autonomy/authority to take action when the matter involves student outcomes. The principal has limited autonomy/authority to impact hiring and firing or budget tweaks to bring help in case it is needed to meet a goal AND often exercises this autonomy/authority.	The principal, departmental heads and other school leaders have the autonomy to take action when the matter involves student outcomes. The principal has full authority to impact hiring/firing or budget tweaks to bring help in case it is needed to meet a goal but rarely exercises this autonomy.	The principal, departmental heads, and other school leaders have the autonomy to take action when the matter involves student outcomes. The principal, departmental heads, and other school leaders have full authority to impact hiring/firing or budget tweaks to bring help in case it is needed to meet a goal. They rarely exercise this autonomy even when needed.	The principal, departmental heads, and other school leaders have the autonomy to take action when the matter involves student outcomes. The principal, departmental heads, and other school leaders have full authority to impact hiring/firing or budget tweaks to bring help in case it is needed to meet a goal. They sometimes exercise this autonomy.	The principal, departmental heads, and other school leaders have the autonomy to take action when the matter involves student outcomes. The principal, departmental heads, and other school leaders have full authority to impact hiring/firing or budget tweaks to bring help in case it is needed to meet a goal. They exercise this autonomy when needed.

ITEM	Possible questions	1	1.5	2	2.5	3	4	5
16. Clearly Defined Leadership Roles and Teacher Roles								
16.1: Leadership roles are clearly defined with student outcomes in mind	a) How are the roles and responsibilities of the school leaders defined? b) Are they linked to student outcomes?	The school does not define leardership roles or gives instructions to school leaders at all.	Heads of departments and other school leaders are given vague instructions about their role in the school.	The school formally defines clear roles to heads of departments and other school leaders.	The school formally defines clear roles AND responsibilities to heads of departments and other school leaders.	The school formally defines clear roles, responsibilities, AND competencies to heads of departments and other school leaders.	The school formally defines clear roles, responsibilities, AND competencies to heads of departments and other school leaders built upon some understanding of what drives student performance and outcomes.	The school formally defines clear roles, responsibilities, AND competencies to heads of departments and other school leaders built upon an understanding of what drives student performance and outcomes.
16.2: Teacher roles are clearly defined with responsibilities and desired competencies	c) How are the roles and responsibilities of the teachers defined? d) How clearly are the required teaching competencies defined and communicated?	The school does not define teacher roles or gives instructions to teachers at all.	Heads of departments and other school leaders are given vague instructions about their role in the school.	The school formally defines clear roles to teachers	The school formally defines clear roles AND responsibilities to teachers	The school formally defines clear roles, responsibilities, AND competencies to teachers.	The school formally defines clear roles, responsibilities, AND competencies to heads of departments and other school leaders built upon some understanding of what drives student performance and outcomes.	The school formally defines clear roles, responsibilities, AND competencies to teachers built upon an understanding of what drives student performance and outcomes.
16.3: Distributes leadership across the school	e) How are leadership responsibilities distributed across the school?	The school does not define leardership roles, and, thus, cannot distribute them.	The school does not distribute leadership across the school, but rather concentrates it on the hands of the principal only.	The school does not distribute leadership across the school, but rather concentrates it on the hands of the principal only. However, when need arises, he informally asks school leaders to take leadership in a certain area of the school (such as having the assistant principal in charge of overseeing rounds when principal does not have time to complete the job).	The school does not distribute leadership across the school, but rather concentrates it mostly on the hands of the principal. However, he delegates a few leadership responsibilities to other school leaders (such as having the assistant principal in charge of overseeing rounds for a certain department)	The school distributes leadership across the principal and school leaders only.	The school distributes leadership across the principal and school leaders only. Extra responsabilities may be delegated to teachers informally.	The school distributes leadership across the principal, heads of departments, teachers and other members of staff.

6 Appendix B - Development WMS Hospital Tool

6.1 20 management practices

ITEM	Possible questions	1	1.5	2	2.5	3	4	5
1. Layout of Patient Flow								
1.1 What does the patient journey feel like? Is it a smooth progression or are there several roadblocks?	a) Can you briefly describe the patient journey or flow for a typical episode?	There is no thought-through layout. Patients are often lost and delays abound. Manager cannot understand the question.	The layout of the hospital and organization is not conducive to patient flow. There are signs marking where wards and theatres are, but patients often get lost.	The layout of the hospital is not good and has not been optimized, but there are signs and not too many roadblocks along the way. Patients and staff are generally able to find their way, albeit it is long.	The layout of the hospital is not good and has not been optimized, but someone did put related departments close to each other such that patients and staff would have less distance to travel. If the hospital has elevators, one is a dedicated patient elevator to ensure patients flow as easily as possible.	The layout of the hospital has been thought-through and optimized as far as possible. There are, however, (real or perceived) constraints that make it impossible to fully optimize the layout and patient pathway.	The layout of the hospital has been configured to optimize patient flow. Considerable efforts are made to overcome hurdles to change and any constraints to achieving long-run efficiency.	Hospital layout was *designed* to be as efficient as possible. Old units are refurbished to align well with brand new buidllings/units.
1.2 How closely located are the different "points" of the journey and any consumables that might be needed?	b) How closely located are the wards, theatres, diagnostics centres and consumables? c) How long on average would a patient have to travel from, say, waiting room to pre-op to the OR?	Everything is where it was initially built, and the initial building was not well thought through. Theatres and wards are not close at all. Consumables are generally all in one spot and not easily accessible.	Wards are on different levels from theatres or consumables are often not available in the right place at the right time.	Wards and theatres are on the same level and walkable distances, but not very easily accessible from the hospital entrance. Consumables are often not available in the right places.	Wards and theatres are on the same level and walkable distances, but not very easily accessible from the hospital entrance. Consumables are, however, rather easily accessible. **OR** Consumables are easily accessible, but wards and theatres are on different levels/difficult to reach from one to the other.	Wards and theatres are relatively close to each other, and there are consumables stations spread out across the hospital. These are not, however, systematically restocked and can sometimes be difficult to refill.	Wards and theatres are relatively close to each other, and there are consumables stations spread out across the hospital. These are systematically restocked though they can sometimes be difficult to refill.	The different points of the journey have been set to have the least amount of distance possible, and consumables are available and refilled at every floor at strategic points.
1.3 How often are there problems with this pathway? Does improvement come from it?	d) How often do you run into problems with the current layout and pathway management?	There is no thought-through layout and/or the one that exists is not ever challenged.	The layout of the hospital does not get challenged regularly, but people are open to making suggestions. These are not, however, documented properly and often not followed up on.	The layout of the hospital does not get challenged regularly. Every 10 years or so someone from the government audits the pathway. Staff suggestions are made once in a while but it is very informal.	The layout of the hospital does not get challenged regularly, but when problems happen it gets questioned (albeit not systematically). Changes can be suggested and have to go through a bureaucratic process to be implemented.	Patient flow is not regularly challenged but there is a signficant effort to improve. Staff is encouraged to make suggestions and these are taken seriously by senior management.	Workplace organization is regularly discussed in meetings with different staff involved. Regularly means at least once a quarter.	Patient flow and workplace organization are challenged regularly by a multidisciplinary team with complete authority to implement changes whenever necessary. Regularly means at least monthly.

ITEM	Possible questions	1	1.5	2	2.5	3	4	5
2. Rationale for introducing standardization and pathway management								
2.1: What was the rationale for implementing operational improvements to the pathway?	a) Can you take me through the rationale for making operational improvements to the management of the patient pathway? Can you describe a recent example?	There are no changes implemented.	The rationale for improvements is purely to meet bare minimum government regulatory demands.	The rationale for improvements is purely to meet full government regulatory demands (rather than just bare minimum).	The rationale for implementing operational improvements to the pathway is mainly relating to regulation imposed by the government. Hospital takes the opportunity to improve pathway to decrease costs as well. However, patient satisfaction and overall efficiency are not even	The rationale for changes is ultimately to improve performance, however, they are motivated *mainly by financial* reasons or to meet regulatory demands.	The rationale for changes was to meet *clinical and financial* outcomes. The clinical outcomes impetus behind the changes went beyond regulatory demands.	The rationale includes clinical and financial motivations, in a good balance. The aim is to improve overall efficiency in every hospital level.
2.2: How *often* is the pathway challenged? What *factors* drove this change?	b) How often do you challenge/streamline the patient pathway? c) What factors led to the adoption of these practices?	The pathway is never challenged, even if problems happen.	The pathway is rarely challenged, even if there are problems or accidents. There might be an audit if the accident was very serious.	The pathway is rarely challenged, and generally only happens if there is some sort of accident (even if minor). If they are very serious, it will *definitely* trigger a review of the incident.	The pathway is not challenged very often, but there is a small review every time there is an accident - big or small - as wel as a near-miss. It is very much a reactive approach (rather than proactive) but there is a system in place to handle the problems.	The pathway is challenged every time there is an accident, near-miss or someone in management notices (or is advised) that something could become a problem. Pre-emptive suggestions are taken on board as an important factor, *but this is not fully formalized* and sometimes take a while to get attention from senior managers.	The pathway is challenged every time there is an accident, near-miss or someone in management notices (or is advised) that something could become a problem. Pre-emptive suggestions are taken on board as an important factor. This is *a formal process* though sometimes the process can be rather long.	The pathway is continuously challenged with all staff members having access to an intranet documentation system they can access from any computer terminal in the hospital. There is a "quality team" dedicated solely to the task of reviewing issues, problems and suggestions to improve the pathway and operations within the hospital.
2.3: *Who* within the hospital drives the changes?	d) Who typically drives these changes?	Nobody ever drives any changes.	The government or board members dictate changes, but staff rarely take it seriously (including senior management within the hospital)	Changes are dictated top-down and senior management is generally on board with them. The staff, however, do not pay much attention and simply "do as they are told" as long as they have to.	Changes are dictated top-down, but senior management tries to communicate the changes to the staff in a way that they can understand why the changes are being implemented. This tends to get a bit of traction with employees in implementing the changes.	Changes generally come from the top, but the senior level managers have a stake in the process. Senior management discusses with middle management on an informal basis to get some feedback.	All staff groups in the hospital are *expected* to drive improvement changes. Ideas are encouraged from both senior managers, though no rewards exist for good ideas that were implemented.	All staff groups in the hospital are *responsible* for driving improvement changes. Ideas are encouraged from both senior managers and junior staff members, with appropriate rewards when ideas are implemented.

ITEM	Possible questions	1	1.5	2	2.5	3	4	5
3. Standardization and protocols								
3.1: Standardization of protocols and clinical processes (MAIN clinical processes - common cases such as hip replacement surgery, triple bypass sugery, knee surgery, catheters, etc.)	a) How standardized are the main clinical processes? What share of your processes have you standardized? (Examples to check for: pre-surgery checklist, "wrong side wrong patient wrong procedure" protocol, transition between units and shifts, etc.)	There is no standardization. A patient could come in and receive two completely different treatment protocols from two different doctors.	There is a general agreement amongst clinical staff on how they should proceed on the most common cases, but this is not formalized anywhere. Less than 25% of processes standardized.	There is a general agreement amongst clinical staff on how they should proceed on most common cases, but this is agreed in meetings and might live in "minutes" somewhere, only half-formalized. Less than 50% of processes standardized.	There are a set of standard protocols given to the hospital by regulatory agencies. They are posted on walls and could serve as a guide but are very often ignored. About 50% of processes standardized.	There are a set of standard protocols for only the most common of cases, but they are not "user-friendly" or easily available (ie. only available on a website or in a clunky manual). About 75% of main processes standardized by now.	There is a set of standard care protocols for the key diseases/surgeries/treatments, and the protocols are based on clinical evidence. All major processes have been standardized, and they are updated every year or two.	The hospital has a set of standard care protocols for many diseases/surgeries/treatments, as well as standardized work-ups, tests and prescriptions. These protocols were created based on clinical evidence and are regularly updated. All major processes have been standardized.
3.2: Clarity of process and procedures	b) How clear are the clinical staff members about how specific procedures should be carried out?	There is no clarity of processes and procedures as there is no standardization. A patient could come in and receive two completely different treatment protocols from two different doctors.	Heads of departments are aware of the understanding and believe procedures are being followed, but more junior clinical staff are not aware of any protocols.	Clinical staff know about the existence of protocols, but are unclear on how they are supposed to implement their use on a day to day basis.	Clinical staff are clear on the existece and use of protocols. Some try to follow them, but not consistently.	Clinical staff are clear on how to use the protocols and that they exist. They understand them and are expected to use them. They use them once in a while when convenient and time allows, but don't believe these must be followed.	Protocols are well known and used by the clinical staff quite frequently.	Clinical staff know and make use of protocols daily. This is second nature to everyone.
3.3: Monitoring tools, resources and protocols (Note this is about TOOLS for monitoring standardization, not about level of standardization)	c) What tools and resources does the clinical staff employ (ie. checklists, patient barcoding) to ensure they have the correct patient and/or conduct the appropriate procedure? d) How are managers able to monitor whether clinical staff are following established protocols?	There is no monitoring as there are no tools, resources and protocols. A patient could come in and receive two completely different treatment protocols from two different doctors.	There are very basic tools available to identify patients and procedures. There is no monitoring of processes as these do not exist.	Clinical monitoring and protocol tools are not available to all staff, but middle managers have them in their induction manuals. There is no monitoring of the usage of protocols, formally or informally.	Written (physical or electronic) clinical monitoring and protocol tools are available to all staff, *but not easily accessible* . They are seen as a guideline only. There is no formal monitoring of the usage of the protocols, but senior managers keep an eye on what is happening informally.	Written (physical or electronic) clinical monitoring and protocol tools are available to all staff and *are easily accessible* , but the protocol is seen as a guideline only. There is minor monitoring of the usage of the protocols though senior managers will review incidence reports.	Written (physical or electronic) clinical monitoring and protocol tools are available to all staff and *are easily accessible.* Protocols are seen as a *requirement* and there is a monitoring system that identifies discrepancies.	There is a standard procedure and other members of staff would notice if someone was not following the agreed protocol. Further, there are clear tools such as checklists, patient bracelets and monitoring forms to be filled out by the clinical staff. This data is regularly monitored by a "clinical quality" team who is looking for deviations in order to improve and refine the protocols.

ITEM	Possible questions	1	1.5	2	2.5	3	4	5
4. Continuous Improvement								
4.1: Finding and documenting problems	a) When you have a problem in the hospital, how do you come to know about them? b) What are the steps you go through to fix them?	Problems are never exposed. The manager is not aware of any problems (or they say they haven't had problems for years - means they just didn't know!).	The manager rarely finds out about issues within the hospital. He/She thinks all is well most of the time, when in reality it is not.	The manager is often informed about problems when they are happening, but never documents the issues after the fact.	The manager is often (but not always) informed about problems when they are happening, and sometimes documents the issues after the fact. The manager does not look back at these notes to try and prevent further issues.	The manager is always informed about problems when they are happening, and always documents the issues after the fact. The manager does not look back at these notes to try and prevent further issues.	The manager is always informed about problems when they are happening, and always documents the issues after the fact. The manager will sometimes look back at these notes to try and prevent further issues.	Exposing and solving problems (for the hospital, patients and staff) in a structured way is integral to individual's responsibilities. There is an online reporting system which all staff have access to and follow up on a daily basis.
4.2: Who resolves problems	c) Who is involved in resolving these issues, that is, in deciding what course of action will be taken to resolve the issue?	Nobody gets involved as there are no issues to be solved.	There is no set person/staff group who follows up with problems. This is done by whoever wants to see the issue resolved, very ad-hoc.	There is only one staff group involved in solving the issue, usually just the manager. (S)he might ask a third party to perform a task so the problem can be fixed, but ultimately, the manager decides how the problem will be solved.	Only one staff group (ie. the manager, the dept heads, nursing leadership) gets involved in solving the issue, but he/she does ask for informal feedback from other staff groups.	Most of the appropriate staff groups are involved in solving the issues (ie. the head of cardiology and the porters get together to solve an issue of turnover time when patients are discharged)	All of the appropriate staff groups are involved in solving the issues.	All of the appropriate staff groups are involved in solving the issues. There is also an advisory committee composed of different representatives (doctors/nurses/admin staff) to address problems within the hospital.
4.3: Who improves processes	d) Who is involved in improving/suggesting improvements to the process so these issues do not happen again?	No process improvements are ever made.	There is no set person/staff group who suggests improvements. If there are any improvements, these are done by whoever wants to see the issue resolved (very ad-hoc).The manager rarely implements suggestions to improve processes.	Only one staff group (ie. the head of dept/nurse manager) gets involved in improving processes, but this is done in a unstructured way (only when the manager feels the need to improve it). No feedback is asked from other staff groups.	Only one staff group (ie. the head of dept/nurse manager) gets involved improving processes, but he/she does ask for informal feedback from other staff groups.	Only one staff group (ie. the head of dept/nurse manager) gets involved improving processes, but he/she does ask for formal feedback from appropriate staff groups during meetings and other formal functions.	All staff groups get involved in improving processes (e.g. through and other formal functions. All staff are expected to contribute.	Improvements are performed as part of regular management processes. Clinicians are encouraged to discuss process improvements with their peers and dept. heads during dept. meetings and to implement process improvements previously discussed and share more effective processes with the hospital in regular meetings. There is also an advisory committee composed of different representatives (doctors/nurses/staff/patients) to address problems and suggest improvements within

ITEM	Possible questions	1	1.5	2	2.5	3	4	5
5. Good use of human resources								
5.1: What happens when one area of the hospital becomes busier than the other	a) With respect to your staff, what happens when different areas of the hospital become busier than others?	Nothing happens. The different areas of the hospital are not linked.	Nothing much happens - staff rarely moves around. If there is a dire emergency unit managers will call around to their colleagues to see if there is anyone wh ocould sub or come help out.	Managers allocate some staff across units, but this is not coordinated at all. There is no register or skills so allocation is done very informally based on superficial knowledge of skills.	Senior staff try to use the right staff for the right job when it is simple to do so, but this rarely happens. For example, it is not uncommon to see nurses doing jobs that porters should be doing.	Senior staff try to use the right staff for the right job, but they do not go to great lengths to ensure this. This is often done in an uncoordinated manner.	Senior staff always use the right staff for the right job using a database of skills and competencies. This is done through one person or department.	Staff recognize human resource deployment as a key issue and will go to great lengths to make it happen. Shifting staff from less busy to busier areas is done routinely and in a coordinated manner, often before ward managers have to call with an 'emergency.'
5.2: What tools exist to help managers best allocate human resources across the hospital	b) How do you know which tasks are better suited to different staff?	There are no tools and no way to know what staff are better suited for what tasks.	Managers have some knowledge of the staff and try to allocate them where they might be best suited, but their knowledge is limited and not used most of the time.	There are no formal tools, but the senior managers tend to have an idea of the broad area of speciality of the staff in some departments.	There is a register of staff skills, but it is not comprehensive. This register consists solely of basic job description qualitifcations rather than specific skillsets.	There is a register of staff skills, but it is not easily searchable. This register consists mainly of the job posting skillset description and qualitifcations, but does not list extra qualifications the staff may have. There is a "nurse bank" they can reach out to in an emergency.	There is a register of staff skills, competencies and qualifications, which is accessible and easy to use. This is used to allocate staff to different areas/ tasks.	There are extensive lists with all employees and their specialties in an easily searchable format. These go beyond job descriptions and include skills that staff may have that were not required for the job they have, but can be useful elsewhere. There is also a register for affiliated staff who are not full time staff but can be called in an emergency.
5.3: How is the flow of the staff coordinated	c) What kind of procedures do you have in place to assist staff flow between areas; for example, is there one central person or centre which coordinates this process?	There is nobody in charge of coordinating the flow of staff around the hospital. People do not move around, ever.	There is nobody in charge of coordinating the flow of staff around the hospital, but this might happen through a series of two-way calls/conversations.	Many senior managers take care of the flow independently if necessary. This is often uncoordinated and through series of phone calls or running around the hospital.	There is not a designated position that is in charge of coordinating staff around the hospital, but people know to generally call the front desk to alert more staff is needed. It is not a formal process or coordinated, but eventually staff is distributed where necessary.	There is a designated position that is in charge of coordinating staff around the hospital, and all know to call this person when they need more staff. This person might not always be available or know which areas have excess staff, as people rarely call to report low volume.	There is a central office/person that coordinates the movement of staff around the hospital. Managers can request more people or offer them when they are not busy, although this is not done routinely.	There is a central office/person that coordinates the movement of staff around the hospital. It is easy for departments to request more people or offer them when they are not busy.

ITEM	Possible questions	1	1.5	2	2.5	3	4	5
6. Performance Tracking								
6.1: Types of parameters (such as quality of care, infection rates, time spent in A&E, admission to surgery times, leadership performance, staff engagement, service quality, etc.)	a) What kind of Key Performance Indicators do you use to track hospital performance? b) What documents are you using to inform this tracking?	Only government-required metrics are tracked, such as patient volume and basic costs/expenditures numbers.	One main indicator in addition to patient volume and basic costs/expenditures numbers, but it does not show how well the hospital is doing overall.	Two main indicators in addition to patient volume and basic costs/expenditures numbers are tracked, but it does not show how well the hospital is doing overall.	Three main indicators in addition to patient volume and basic costs/expenditures numbers are tracked, but it does not show how well the hospital is doing overall.	There are a large number of indicators in addition to patient volume and basic costs/expenditures numbers, but they mostly cover operations and patient satisfaction. The indicators do not show how well the hospital is doing overall.	A large set of indicators are tracked. They *do cover a range* of types to show how the hospital is doing overall (ie. patient volume, patient satisfaction, infection rates, A&E average wait times and budgets). *However, because of the large number of indicators, it is not straightforward to name the "key" ones.*	There are 5-7 key indicators that are tracked and can be recited off the top of senior management's head. They cover a range of types to show how the hospital is doing overall (ie. patient volume, patient satisfaction, infection rates, A&E average wait times and budgets).
6.2: Tracking and compilation frequency (note the difference between daily eletronic tracking available every day vs. data available monthly that details day to day indicator activity)	c) How often are these measured?	Government metrics are compiled quarterly and cannot be checked in the mid-term.	Government metrics are compiled quarterly and cannot be checked in the mid-term. Other indicators are tracked annually.	Government metrics are compiled quarterly and cannot be checked in the mid-term. Other indicators are tracked quarterly as well.	Government metrics are compiled quarterly and cannot be checked in the mid-term. Other indicators are tracked monthly.	All main metrics are tracked and compiled weekly. The data is not available in real time, but can be compiled at the end of the week.	All main metrics are tracked and compiled daily and weekly. The data is not available in real time, but can be compiled at the end of the day/week.	All indicators are tracked continuously throughout the year and are accessible at *any point in time* (real time).
6.3: Communicated to whom and how	d) Who gets to see this data? e) If I were to walk through your hospital, could I tell how it is doing compared to its main indicators?	Data is only officially seen by directors and top level management.	Data is only officially seen by directors and top level management. It is available to department heads upon request.	Data is only officially seen by directors and top level management. Basic reports are sent quarterly to departement heads only.	All management team has access to the data. Reports are compiled quarterly and sent to staff.	All management team has access to the data. Reports are compiled monthly and sent to staff.	Records are automatically updated in computer systems that all staff have access to.	Records are automatically updated in computer systems that all staff have access to. There are various visual systems displaying the targets and hospital performance against it (ie. dashboards).

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7. Performance Review								
7.1: Frequent discussions	a) How often do you have meetings to review the indicators?	Performance is reviewed annually.	Performance is reviewed bi-annually.	Performance is reviewed quarterly but limited items are discussed.	Performance is reviewed monthly but limited items are discussed.	Performance is reviewed in *monthly* meetings and all key items are discussed.	Performance is reviewed in *weekly* meetings and all key items are discussed. However, there are no clear links between this performance review and day to day operations.	Performance is continually reviewed in a series of weekly meetings with links to staff daily 'huddles'
7.2: Who is involved in these meetings and how are results communicated to the hospital	b) Who is involved in these meetings? c) Who gets to see the results of these meetings? Are details of the meeting shared with other staff?	The meetings are informal and include only top level directors. Staff never get feedback.	The meetings are informal and include only top level directors. Staff only get feedback if there is an audit.	Meetings include directors and most senior managers of key departments. They are informal and details of meeting are not well communicated to other staff.	Meetings include directors and senior managers of all key departements. Nobody cares to get feedback from junior staff. Results are not generally communicated to all staff, though they are available if asked for.	Meetings include all key departments but only senior managers are expected to attend. Senior managers do try to get feedback from junior staff, but it is done on an ad-hoc basis. Results are not generally communicated to all staff but are available upon request.	Meetings include all key departments but only senior managers are expected to attend. Results are always communicated to all other staff.	Senior managers of all key departments and some junior managers (on a rotating basis) are involved in review meetings. Results are always communicated to staff using a range of tools (such as newsletters and handouts for stand-up staff meetings)
7.3: Action plan follows the meeting	d) After reviewing these indicators, what is the action plan you leave these meetings with? e) What steps would people take after? f) Who is responsible for carrying out the action plan?	There is no systematic action plan. If it is made because of an audit, it is only relating to senior staff.	There is no systematic action plan, but people are expected to take note of what they have to do.	There is no sistematic action plan put in place. Take-aways are informal and not generally followed up on, but taken down in meeting minutes.	There is no sistematic action plan put in place. Take-aways are very informal but are generally followed up on by senior management.	There is no clear action plan in place after meetings, but it is noted in minutes and senior management can refer to those if necessary.	Action plans are detailed with responsible people noted, deadline and expectation from the meetings. They stay within senior management, however, and are not regularly communicated to other staff.	Action plans are detailed with responsible people noted, deadline and expectation from the meetings and published via the hospital intranet system or staff board.

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8. Performance Dialogue								
8.1: Follow a clear agenda	a) Can you tell me about a recent review meeting you have had? What topics did you discuss in this meeting? Was there an agenda?	There is no set agenda for the meeting.	There is a list of topics to talk about that the manager brings along, but he/she does not share it with others previously and it is not clear what the discussion will be about and people do not know what to expect.	There is no formal agenda for the meeting, but the manager tends to always follow the same topics in the meetings so people know what to expect.	There is a formal agenda for the meeting, but it is not always clear what the topics are and it only sometimes gets circulated to staff before the meeting.	The manager holds set meetings with a clear agenda. The manager circulates the agenda before hand so all know what will be discussed and can come prepared.	There is a clear, formal agenda for the meeting. The manager circulates the agenda in advance so participants know what will be discussed and can come prepared. Staff can add items to the agenda if they wish to do so, but do not do so often.	The manager holds set meetings with a clear agenda. The manager circulates the agenda before-hand so all know what will be discussed and can come prepared. All staff are encouraged to add relevant items to the agenda and often do so.
8.2: Meetings have appropriate data present	b) What kind of data or information about the indicators do you normally have with you?	There is no data available for the meeting.	The manager brings some basic hospital admissions data to the meeting.	The manager brings some detailed hospital stats on admissions and some financial data, but no other type of data.	The manager brings a small set of good data to the meeting, but it is limited and only helps in part of the discussions. **OR** Manager brings too much data to the meeting so it is not useful.	There is an appropriate set of data available for the meeting, though not in a very easy format to read. (ie. No charts/graphs, just numbers/comments)	There is an appropriate set of data available for the meeting. The main indicators are displayed in an easy format to read (e.g. charts/graphs). They are not organized/displayed in a way to promote debate, though.	There is an appropriate set of data available for the meeting, and it is displayed in a very easy format to read such as in charts/graphs, summarizing the indicators collected *which reflect the performance of the hospital.* The indicators chosen to discuss are displayed in a way that facilitates discussion.
8.3: Get people involved in constructive feedback	c) What type of feedback do you get during these meetings? d) How do you get to solving the problems raised in the meetings?	The manager only tells staff about the issues and does not expect or encourage feedback on how to solve the issues. It feels more like a lecture rather than an interactive meeting. Since there is very little interaction, conversations do not lead to root causes of issues.	The meeting is mainly about ad-hoc problems that came up during the time since the previous meeting, and nothing of value gets discussed. The manager discusses the issues with staff, but does not encourage suggestions. If suggestions are given, they are done in an unstructured way and the manager does not take note of possible solutions.	The manager mainly acknowledges the problems they are discussing in the meeting and listens to any feedback offered without encouraging it, but does not actively request it or write down comments. He/she also rarely implements others' suggestions.	The manager actively listens to any feedback given and encourages it. He/she does not write it down, but does make an effort to implement some suggestions when reminded.	Those present in the meeting know they are expected to contribute to the dicussions and do so actively. It is an open forum where the manager encourages open feedback and creative solutions to problems. The manager takes notes of feedback given. There is an open discussion of problems but it is done in an unstructured way, and as a matter of course the conversations do not drive to the root cause of	Those present in the meeting actively contribute to discussions in a structured way, using a range of techniques to find the root cause of problems. The manager takes notes of feedback given.	Those present in the meeting actively contribute to discussions in a structured way, using a range of techniques to find the root cause of problems. The review focuses on both successes and failures in order to idenify what is and what is not working in the hospital. Meetings are an opportunity fo constructive feedback and coaching.

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9. Consequence Management								
9.1: Clear responsibilities for action plan	a) After a review meeting, how are people aware of their responsibilities and actions that must be taken?	There are no follow up plans, tasks or list of things that need to geet done after the meetings, so there are no assigned responsibilities (ie. tasks are not assigned to people)	The manager makes a mental note of the things that need to get done after the meeting and asks members of staff to do some of them (no clear tasks as no explanation on how to get them done). Since there is no record and it is too much for the manager to remember, things rarely get done and no one is accountable/answerable for them.	The manager has a list of things that need to get done after a meeting, but it is not clear how he/she expects to achieve them (no clear tasks as no explanation on how to get them done). (S)he takes note of the list and asks members of staff to do some of the tasks. However, there is no clear responsibility and accountability set, and the majority of things end up being discussed again in the next meeting	There are clear tasks that come out of meetings, but there are no individuals assigned to nor timeframe allocated to tasks. There are no major consequences for failure to follow through with the action plan/ tasks.	There are clear follow up plans (with assigned tasks, responsibilities, people involved, and timeframe) that come out of meetings with specific *groups* being responsible (but not necessarily accountable) for actions/tasks. They follow this up every month in the following meeting, but consequences for failure are not clear.	There are clear follow up plans (with assigned tasks, responsibilities, people involved, and timeframe) that come out of meetings with specific *people* being responsible (and only marginally accountable) for actions/tasks. They follow this up every month in the following meeting, and there are generally minor consequences for not meeting task targets.	There are clear follow up plans (with assigned tasks, responsibilities, people involved, and timeframe), that come out of meetings with specific people being responsible and accountable for actions/tasks. They follow this up every month in the following meeting, and with clear consequences for failure in completing the tasks.
9.2: How long it takes to identify and deal with a problem	d) How long does it typically go between when a problem starts and you realize this and start solving it? e) Can you give me an example of a recent problem you've faced?	It would take over one year for action to be taken.	It would take at most one year for action to the taken.	It would take over six months for action to be taken.	It would take three months for action to be taken.	It would take about a month for action to be taken.	It would take a week or two for action to be taken.	Action is taken immediately after a problem is identified. Manager is made aware of the progress along the way.
9.3: How they avoid having the same problem again	f) How would you make sure this problem does not happen again? e) If a year from now the problem were to happen again, how would you know if and how you dealt with such a problem before?	There are no measures taken to make sure the problem does not happen again. The solution to the problem is not recorded anywhere. If the problem happened again, the manager would not be aware/remembers that they faced a similar problem in the past.	The manager makes a mental note of the issue and makes sure he/she brings it up in an annual meeting, but nothing formal.	The manager brings it up in a monthly meeting to inform staff of the issue and have a record, but sees it as a problem of the past and that they should move onwards.	The manager notes the issue in a diary, but the diary is not used for anything proactive.	The manager notes the problem in a diary, and consults it from time to time when there is a problem to see if they have figured it out before. There is nothing done to prevent future problems, however.	The manager notes all problems in a diary and details how the problems were solved. This is used to help prevent similar future problems.	There is an online reporting system with all problem and action plans in detail which the department heads, nurses and other staff have access to and follow up on a regular basis.

ITEM	Possible questions	1	1.5	2	2.5	3	4	5
10. Balance of Targets/Goal Metrics								
10.1: Clarity and Balance of Targets/Goal Metrics (Examples of clear and tangible goals are: "decrease infection rates by 50%" or "increase handwashing rate to 97%", or "offering two nurse development courses per year")	a) What goals do you have set for your hospital?	There are no goal metrics, so no definition either. Manager struggles to answer this question.	There is a general sense that they would like to improve one main clinical outcome measure (ie. "infection rates", "re-admission rates"), but no absolute numbers or percentages regarding how much.	There is a general sense that they would like to improve two or more main clinical outcome measures iie. "infection rates", "re-admission rates"), but no absolute numbers or percentages regarding how much.	The clinical goals are absolute and tangible, such as "decrease infection rates by 50%".	There are clinical outcome goals and financial goals, and they are defined in absolute and tangible measures.	Clinical outcome goals, as well as other types of goals such as efficiency *as well as* financial outcomes, are defined in absolute and tangible measures.	The hospital has clinical goals as well as other types of goals, such as efficiency outcomes, financial outcomes and operational outcomes. They are all defined in terms of absolute/tangible and value-added measures.
10.2: Set at the district, hospital, departmental and individual levels	b) Can you tell me about any specific goals for departments, doctors, nurses and staff?	The only hospital goal metric is year-end patient volume or patient satisfaction.	There is a small range of goals for the hospital including year-end patient volume or patient satisfaction, but they are not very clear, in addition to a loose goal that is tied to a government/board target (such as improving the hospital overall ranking).	There is a small range of goals that are defined for the district and the hospital as a whole but not for levels within the hospital (including departments, doctors, nurses, staff).	There is a small range of goals that are defined for the district, the hospital as a whole, and for departments but not for individuals within the hospital (including doctors, nurses, staff).	There is a small range of goals that are defined for the district, the hospital as a whole, departments and for individuals within the hospital (including senior doctors and nurses).	There is a small range of goals that are defined for the district, the hospital as a whole, departments and for individuals within the hospital (including senior and junior doctors, nurses and staff).	A range of goals (measured in terms of absolute and value-added measures) are defined for the district, the hospital, departments, and for individuals within the hospital (including senior and junior doctors, nurses, staff).
10.3: Linked to patient outcomes and defined by internal and external factors	c) How are your goals linked to patient outcomes? d) How are your hospital goals linked to the goals of the health system (district, national)?	Goals relate directly to government targets. Manager cannot explain why the goals were chosen, there is not a particularly clear reason for determining these goals.	Goals relate directly to government targets. BUT manager explains or understands that these goals are losely tied to the overall system health outcomes.	Goals relate directly to government targets which are tied to the overall system health outcomes, but with some regard for a internal hospital benchmark (decided partialy based on realistic improvements on previous years' outcomes).	Goals are set based on internal targets based on a range of patient outcomes and also following government-imposed targets. The manager does not actively seek outside information.	Goals are set based on internal targets based on a range of patient outcomes, as well as government-imposed targets. The manager checks around with nearby hospitals to ensure their goals are reasonable.	Goals are set based on internal targets based on a range of patient outcomes, as well as government-imposed targets. The manager routinely checks with nearby and region-level hospitals to ensure their goals are reasonable.	Goals are set based on internal and external factors based on a range of patient outcomes.

ITEM	Possible questions	1	1.5	2	2.5	3	4	5
11. Interconnection of Targets/Goals								
11.1: Motivation and clarity of goals through the hierarchy chain	a) What is the motivation behind your goals? b) Are the goals clear to you and others in your hospital?	Goals do not trickle down through the health system or the hospital.	Only one overall goal gets trickled down to the hospital, though it is unclear and vague.	A set of goals get trickled down from the health system to the hospital but they are not very clear even to the manager.	A set of goals get trickled down from the health system to the hospital, but they are only clear to the manager. Senior clinicians and other staff do not have clarity on the hospital goals.	A set of goals get trickled down from the health system to the hospital, but they are only clear to the manager and some senior doctors and heads of departments. Other staff do not have clarity on the hospital goals.	A set of goals get trickled down from the health system to the hospital. Goals are clear to manager, heads of departments, doctors and other staff in the hospital.	A set of goals get trickled down from the health system to the hospital. Goals are not only clear but have significant buy-in from managers, heads of departments, doctors and other staff in the hospital.
11.2: Goals are well communicated within the hospital	c) How are these goals cascaded down to the different staff groups or to individual staff members?	The manager tells staff in the annual meetings that their goal is to improve, but nothing very concrete.	The manager talks to his/her staff members sporadically throughout the year to tell them how they should be doing. ADD THINGS HERE TO DIFFERENTIATE BTW A 1.5 AND 2	There is no formal process by which the manager communicates the hospital and individual goals to clinicians, but he/she does use an informal system of word-of-mouth by talking to them in the hallways and ad-hoc meetings.	The manager will reiterate the hospital goals in their annual meeting, and has irregular meetings with clinicians to talk about specific goals. (S)he only does this when there is a problem, and not as a matter of routine.	Once per year, doctors and nurses have professional development meetings to revise their goals and ensure they're proper. The manager keeps track of clinicians' development and their patient outcomes.	At least twice per year, doctors and nurses have professional development meetings to revise their goals and ensure they're proper. The manager keeps track of clinicians' development and their patient outcomes.	Doctors and nurses have professional development meetings every month to revise their goals and ensure they're proper. The manager keeps track of clinicians' development and their patient outcomes.
11.3: Breaking down big goals into smaller ones and linking to individual goals	d) How are your unit targets linked to overall hospital performance and its goals?	There are no specific goals for staff, only large goals for the health system.	The manager knows what the hospital as a whole must achieve in terms of patient outcome goals, but (s)he does not break it down by department.	The manager knows what the hospital as a whole must achieve in terms of patient outcome goals, and (s)he breaks it down by department area only (not by individual doctors/nurses).	Clinicians have an idea of the patient outcome goals for their departments, but do not have specific goals regarding professional development.	Clinicians have an idea of the goals for their departments in terms of patient outcomes, and some specific goals regarding professional development.	Clinicians have a clear understanding of the goals for their departments in terms of patient outcomes and operational/staff development and how it affects their unit and the hospital as a whole.	Clinicians fully understand how goals are aligned and linked at system level and how they increase in specificity as they trickle down, ultimately defining individual expectations for all.

ITEM	Possible questions	1	1.5	2	2.5	3	4	5
12. Time Horizon of Targets/Goals								
12.1 :A range of short, mid-term, long-term goals Short-term: under 1 year Mid-term: 1 year Long-term: over 1 year	a) What kind of time-scale are you looking at with your goals?	The hospital does not have a time-scale for their goals (or they do not have goals).	The hospital has annual goals that relate to the following years' basic indicators, but not more.	The hospital has mostly annual goals and a few short-term goals.	The hospital has mostly annual goals and a few short-term and long-term goals.	There is a good balance of *short-term* and *mid-term* goals for all levels of the hospital system. (ie. mid-term goals are 1-year plans to decrease 'infection rates' by x%, and short-term goals are to improve hand-washing rates to 97% by next quarter/month.)	There hospital has a range of short-term and mid-term goals, as well as at least one long-term goals.	There is a good balance of short-term, mid-term and long-term goals for all levels of the health system. (ie. Long term are, for example, 5-year plans of construction, growth rates. Mid-term goals are 1-year plans to decrease 'infection rates' by x%. Short-term goals are to improve hand-washing rates to 97% by next quarter/month.)
12.2: Emphasis of goals	b) Which goals would you say get the most emphasis?	The hospital does not have a time-scale for their goals (or they do not have goals), so cannot have a focus in one time frame.	The hospital focuses only on short term goals.	The hospital focuses on short term goals, but keeps in mind the mid-term goals.	The hospital focuses on mid-term goals.	The hospital focuses on both the short and long term goals, keeping track of their short run goals to ensure they make the long run goal, though they often have to extend the long-run goal because they missed too many short-term goals.	The hospital focuses on both the short and long term goals, keeping track of their short run goals to ensure they make the long run goal. Sometimes readjustements have to be made, but it is not often.	The hospital focuses on all goals, keeping track of their short run goals to ensure they make the mid and long run goals.
12.3: Interlinked goals that staircase from short to long-term	c) Are long-term and short-term goals set independently? d) Could you meet all your short term goals but miss your long-run goals?	The hospital does not have a time-scale for their goals (or they do not have goals), so cannot be interlinked.	The hospital only has annual goals, so there is nothing to link to longer goals.	The hospital only has long term goals, so there is nothing to link to other goals.	The long term and short term goals are set independently, so it is possible to meet all short term goals and miss long term goals and it happens often.	The long term and short term goals are set independently but somewhat aligned with each other, so it is possible to meet all short term goals and miss long term goals but it does not happen often.	Long-term goals are translated into specific short-term targets so that short-term targets become a "staircase" to reach long-term goals. However, it could happen that long-term goals are not reached.	Long-term goals are translated into specific short-term targets so that short-term targets become a "staircase" to reach long-term goals. Long-term goals are always reached.

ITEM	Possible questions	1	1.5	2	2.5	3	4	5
13. Stretch of Targets/Goals								
13.1: Goals are tough but achievable (80 to 90% of the time)	a) How tough are your goals? Do you feel pushed by them? b) On average, how often would you say that the hospital/department meets its goals?	The manager says that their goals are too easy (never pushed), or too hard (always pushed too much). Manager finds them ridiculous!	The manager says that the goals are very very hard, but if they push a lot they can get there. Or they say the goals are very very easy, but they do still try to get above the goals since they know this. Principal still finds them ridiculous but at least tries to do something about them!	The manager and the staff believe they have aggressive goals, but they do tend to meet them 100% of the time and be satisfied with the results.	The managers and the staff believe they have aggressive goals, but they do tend to meet them 100% of the time. Because of this, they create their own goals of slightly overreaching the goal (ie. 105%)	The manager and the staff push for aggressive goals, and find that they can't always meet them because they're genuinely hard, but they do make it 80-90% of the time.	The manager and the staff push for aggressive goals, and find that they can't always meet them because they're genuinely hard, but they do make it 80-90% of the time. When goals are easily met, goals are stretched. No re-evaluation is made for goals never met.	The manager and the staff push for aggressive goals, and find that they can't always meet them because they're genuinely hard, but they do make it 80-90% of the time. When goals are easily met, goals are stretched. If goals are never met, then there is also a re-evaluation process though it is stringent.
13.2: Goals are set with reference to external benchmarks	c) How are your goals benchmarked?	Goals are set only internally and do not take into account external factors or clinicians' feedback. There are no benchmarks or comparisons with other hospitals.	The manager compares and benchmarks their goals with some hospitals he/she hears about from doctors and nurses, but doesn't look externally for meaningful comparisons.	The manager compares and benchmarks their goals with hospitals in the village/city, but not the district.	The managers compares and benchmarks their goals with hospitals in the district.	The manager compares their goals with those of the government health boards, but not beyond that.	The manager compares their goals to a limited set of internal and/ or external benchmarks.	The manager uses a wide range of internal and external benchmarks to set their goals.
13.3: Goals are equally difficult/demanding for all	d) Do you feel that all the departments/areas have goals that are just as hard? Or would some areas/departments get easier goals?	The manager does not set goals for different department/areas.	The manager keeps the same goals every year and does not bother to check if some departments have easier/harder goals than others as a result of changing circumstances.	The manager tries to make goal difficulty equally distributed to everyone, but never checks if this is actually true.	Goals are demanding for a few department/areas. There are some areas which have *considerably* easier goals than others. (ie. Cardiology has easier goals than Orthopedics)	Goals are demanding for most department/areas, but there are some areas which have *slightly* easier goals than others.	Goals are demanding for most department/areas, but there are some areas which have *slightly* easier goals than others, so an effort is made to adjust targets accordingly.	Goals are equally demanding for all department/areas.

ITEM	Possible questions	1	1.5	2	2.5	3	4	5
14. Clearly defined accountability for clinicians								
14.1: What is the role of clinicians in achieving targets	a) Can you tell me about the role that clinicians have in improving performance and achieving targets?	No role at all. Clinicians are simply consultants.	Clinicians are not directly involved and are rarely asked for advice in how to proceed with certain targets. When they are, it is not taken too seriously. It is considered to be a job of the accountants only.	There is some informal involvement of clinicians in the department, but it is ad-hoc and only when issues arise. When help is requested, it is taken seriously.	There is an annual practice of asking clinicians for input in terms of cost targets, but this survey is only sent to top level clinical managers and the response rate is not very high.	There is involvement of clinicians in achieving financial targets. They understand what the financial targets are and that they are expected to contribute to the discussions, but clinical duties are considered to be the main part of the job.	There is involvement of clinicians in achieving both clinical and financial targets. They are both considered part of the job.	Clinicians take active roles in achieving both clinical and cost targets for the hospital. They actively engage medical supplies companies to procure cheaper yet high quality materials and drugs, and sit on committees on possible usage improvement and cost reductions.
14.2: What is the accountability clinicians have to targets	b) How are individual clinicians responsible for delivery of targets? Does this apply to cost targets as well as quality targets?	No accountability. They are not held responsible for anything other than clinical quality.	No formal accountability. Joining a committee on cost reduction might be a required chore given to some junior people.	No formal accountability, but informally the senior managers attribute some merit if the clinicians to do well.	No formal accountability, but senior managers *and colleagues* expect those involved to take it seriously. Performance can sometimes be informally taken into account in assessments.	Formal accountability is present at the top level, with some consequences diffused within teams for lower levels rather than at specific people.	Formal accountability is present at all levels. There are consequences for not reaching targets, although these may not be consistently applied.	Formal accountability across quality service and cost dimensions with effective performance management and consequences for good and bad performance exist.
14.3: Who defines the accountability of clinicians	c) How do clinicians take on roles to deliver cost improvements? Are they selected for this role or do they volunteer? Can you think of examples?	Clinicians do not take on roles.	Clinicians only join if they are required to do by the government or the governing body of the hospital.	Clinicians get involved if top management pushes them to do so.	Clinicians get involved if top management or colleagues invite them to do so, but there is not much initial enthusiam.	There are workshops organized to explain the importance of financial targets to all staff and clinicians, and some volunteer to lead the charge for a few months as part of a team.	Clinicians and staff are fully aware of the importance of financial targets, and are expected to contribute to these as part of their job.	Clinician leadership in this regard is part of the culture of the hospital and all clinicians and staff are fully aware of this when they join the team. All staff and clinician levels (junior and senior) are held jointly responsible for achieving clinical and cost targets.

ITEM	Possible questions	1	1.5	2	2.5	3	4	5
17. Making Room for Talent/ Removing Poor Performers								
17.1: Identification of poor performers	a) How do you know who your best doctors/nurses are? b) What criteria do you use and how often do you identify these clinicians?	There is no formal or informal identification of good performers (ie. The manager cannot tell you which doctors/nurses are good and which ones are not: "everyone is a great performer!").	Good performers are identified only on the observed patient outcome (ie. The manager can tell who the best doctors/nurses are by looking at the patient satisfaction scores, but nothing else).	Good performers are identified on a range of observed patient outcome results, but nothing formal (ie. The manager can tell who the best doctors/nurses are by looking at the patient satisfaction scores, re-admission rates, and handwashing compliance rates, but it's all from memory or ad-hoc checking of records).	There is a formal but small/narrow range set of criteria by which good performers are identified BUT it is NOT done regularly. **OR** There is no formal and clear set of criteria, but the review is formally done regularly.	There is a formal set of criteria by which good clinicians are identified and it is done *regularly* but with a small/narrow range of criteria.	There is a formal set of criteria by which good clinicians are identified and it is done *regularly.* There is a broad range of criteria, though they mainly focus on operational duties.	There is a formal set of criteria by which good clinicians are identified and it is done regularly and with a broad range of criteria. These include operational duties as well as leadership and teamwork.
17.2: Methods of dealing with poor performers	e) If you had a clinician who is struggling or who *could not* do their job properly, what would you do? f) What if you had a clinician who *would not* do their job, as in slacking off, what would you do then?	Bad performance is not addressed at all.	Bad performance is addressed inconsistently (ie. Sometimes the manager deals with it, but not always).	Bad performance is addressed consistently, but with not much consequence (ie. The manager will always talk to the clinicians who are underperforming, but *does not offer* coaching or support for improvement).	Bad performance is addressed consistently, and with support for improvement but still no real consequence (ie. The manager always talks to the clinicians who are underperforming, and *does offer* coaching/training to improve them but if they don't, not much happens).	Bad performance is addressed consistently and with support, and with real consequence attached to continued bad performance (ie. The manager tries to improve the clinician, but if it doesn't work, the clinician can be moved or fired after a certain time).	Bad performance is addressed consistently and with support, beginning with targeted interventions. Poor performers are given a timeframe in which to improve, but if they do not succeed the clinician can be moved or fired.	Bad performance is addressed consistently and with support, beginning with targeted interventions. Poor performers are temporarily moved out of their positions in order for the problem to be addressed immediately while they receive coaching/training to improve. Poor performers are also moved out of the hospital when weaknesses cannot be overcome
17.3: Time scale of action	d) How long would a clinician stay in his/her position while not performing well? e) How long would it take to address the issue once you find out about it?	There is no action because nothing is identified or addressed.	There is no real time-scale in mind, but eventually there is some action that is taken (ie. It can take a few years).	It takes more than one year to address any issues (ie. More than one whole year goes by without any action because the manager waits for multi-year results).	Action is not taken immediately, but it is taken at some point during the year, up to one year (ie. actions could be taken throughout the year, but not immediately. However, it also does not take over one year).	Action is taken immediately, but it can take one year for a bad clinician to be removed from the position (possibly to other positions of less responsibility, not necessarily fired).	Action is taken immediately, but it can take around 6 months for a bad clinician to be removed from the position (possibly to other positions of less responsibility, not necessarily fired).	Action is taken immediately, it takes very little time for a bad clinician to be removed *from the position* (possibly to other positions of less responsibliity, not necessarily fired).

ITEM	Possible questions	1	1.5	2	2.5	3	4	5
18. Promoting High Performers								
18.1: Identification of good performers	c) How do you know who your best doctors/nurses are? d) What criteria do you use and how often do you identify these clinicians?	There is no formal or informal identification of good performers (ie. The manager cannot tell you which doctors/nurses are good and which ones are not: "everyone is a great performer!").	Good performers are identified only on the observed patient outcome (ie. The manager can tell who the best doctors/nurses are by looking at the patient satisfaction scores, but nothing else).	Good performers are identified on a range of observed patient outcome results, but nothing formal (ie. The manager can tell who the best doctors/nurses are by looking at the patient satisfaction scores, re-admission rates, and handwashing compliance rates, but it's all from memory or ad-hoc checking of records).	There is a formal but small/narrow range set of criteria by which good performers are identified BUT it is NOT done regularly. **OR** There is no formal and clear set of criteria, but the review is formally done regularly.	There is a formal set of criteria by which good clinicians are identified and it is done *regularly* but with a small/narrow range of criteria.	There is a formal set of criteria by which good clinicians are identified and it is done *regularly.* There is a broad range of criteria, though they mainly focus on operational duties.	There is a formal set of criteria by which good clinicians are identified and it is done regularly and with a broad range of criteria. These include operational duties as well as leadership and teamwork.
18.2: Development of good performers	e) What types of career and professional development opportunities are provided? f) How do you tailor opportunities for particular clinicians?	There is no professional/career development for any clinicians.	Professional/career development opportunities exist for all clinicians, such as additional training, but these come only from mandatory government rules. Managers don't actively encourage clinicians to attend (don't discourage, but no encouragement either).	Professional/career development opportunities exist for all clinicians, such as additional training, but these come only from mandatory government rules. Manager actively encourages clinicians to attend these, but does not keep track.	Professional/career development opportunities exist for all clinicians, such as additional training, but these come only from mandatory government rules. Manager actively encourages clinicians to attend these, and the manager keeps track of each clinician's development.	Hospital provides professional/career opportunities for top clinicians, such as additional training as a reward for good performance. This includes not only government training, but also hospital initiatives. However, this does not happen very often or in a systematic manner. (ie. The hospital initiative has happened once/twice in the past few years).	Hospital provides professional/career opportunities for top clinicians, such as additional training as a reward for good performance. This includes not only government training, but also hospital initiatives. This is typically done once a year.	Hospital systematically provides professional/career opportunities for top clinicians based on their individual evaluation and professional development plan, such as additional training as a reward for good performance. This includes not only government training, but also hospital initiatives. The hospital allows these clinicians to determine which classes they want to attend and gives them leadership positions and additional responsibilities within the
18.3: Reason for promotion	d) Which criteria do you use to make decisions about additional opportunities for clinicians within the hospital (performance, years of service, etc.)? e) If we have two nurses, one has been at the hospital two years and the other for five years, and the nurse who is there for two years is better, who would be promoted faster?	There is no promotion of the clinicians, or promotion is based only on years of service (ie. experience).	Clinicians are promoted primarily based on years of service (experience), but some consideration for performance or qualifications is used if clinicians have similar years of service.	Clinicians are promoted with some consideration for years of service (experience) and also performance or qualifications.	Clinicians are promoted with consideration for their qualifications and some performance, but no consideration is given to years of service (experience).	Clinicians are promoted based on how good their performance is, with no importance given to years of service (experience), and less to qualifications.	Clinicians are promoted based on how good their performance is, and with some regard to qualifications.	Clinicians are promoted purely based on how good their performance is.

ITEM	Possible questions	1	1.5	2	2.5	3	4	5
19. Managing Talent								
19.1: Who makes hiring decisions, how are they made	a) How do you ensure you have enough staff of the right type in the hospital? b) Who decides how many and which clinicians (full-time regular members of staff) to hire?	Hospital has no formal control over the number and type of staff needed to meet their goals. Ie. central authority of health system (such as government or governing board) decides how many staff the hospital gets	Hospital has no formal control, but can make suggestions regarding their needs. However, they don't often take an active role in trying to get the staff they need.	Hospital has no formal control, but can make suggestions regarding their needs and very actively engages with higher authorities to make sure they get the type and number of staff they need.	Hospital has some control over the number and type of staff they have in the hospital, but require approval/permission (sign-off) from higher authorities, which can take a while to come through.	Hospital controls the number and type of staff they have in the hospitall, but only make any changes after they witness a need for it at the end of the year.	Hospital controls the number and type of staff they have in the hospitall, and will review staffing needs yearly. Hospital will make a change if they witness a need for it an the end of the quarter.	Hospital actively controls the number and type of staff they have in the hospital, often making changes to ensure staff hiring strategies are well-aligned with the hospital goals and linked to patient outcomes.
19.2: Ensuring senior managers show talent is a top priority for the hospital	c) How do senior managers show that attracting and developing talent is a top priority?	They don't. The manager is confused with the question.	The manager mentions that they do the best they can with what they are given, and that they try to give pats on the back of the best staff from time to time to recognize them.	The manager acknowledges that having talented people working in the hospital is very important, but there is no formal process to communicate this to the staff.	Senior management believes that attracting and developing talent is important and there is a regular *informal* statement of this to employees, but senior managers are not held accountable to the talent pool they build.	Senior management believes that attracting and developing talent is important and there is a regular *formal* statement of this to employees, but senior managers are not held accountable for the talent pool they build.	Senior management believes that attracting and developing talent is important and there is a regular *formal* statement of this to employees. Senior managers are held accountable for their talent pool, although this is not formalised through set targets.	Senior management believes that attracting and developing talent is important and there is a formal statement of this to employees. Senior managers are held accountable for their talent pool they build through actual targets and rewards and forms part of their appraisal.
19.3: Seeking out talented candidates	d) Where do you seek out and find staff? How is this aligned with the hiring process implemented at the government levels? e) Do senior managers get any rewards for bringing in and keeping talented people in the hospital?	The reason for hiring new clinicians is not determined by the hospital (not done by the manager, but by a centralized committee).	Since hiring is out of their hands they do not actively engage in this, but if a current clinician refers another talented clinician the manager does pass it on to the higher authorities to try and hire that clinician if needed.	The manager actively asks for referrals from current clinicians, but does not go outside the hospital (such as placing ads in newspapers).	The manager primarily bases his/her search on current clinician referrals, but if none are made then places ads in newspapers (but as a last resort).	The manager follows a formal process of putting ads in newspapers, and actively encourages current clinicians to refer other talented clinicians.	The manager follows a formal process of advertising positions externally though job sites and job fairs, and actively encourages current clinicians to refer other talented clinicians.	The manager follows a formal process of doing a region-wide search, putting ads in newspapers, attending job fairs, and sourcing clinicians from the best universities. The manager actively encourages current clinicians to refer other talented clinicians from other hospitals and from their personal networks.

ITEM	Possible questions	1	1.5	2	2.5	3	4	5
20. Retaining talent								
20.1: When a clinicians leaves/wants to leave, is there a formal process followed to understand the reason for leaving	a) When one of your best clinicians wants to leave the hospital, what do you do?	The manager does not question or care why the clinician is leaving, they just go.	The manager has an informal chat with the clinician to understand why they are leaving but does not take note of any feedback.	The manager does a somewhat formal "exit interview" to understand why the clinician wants to leave, but this does not happen in a structured manner and is ad-hoc.	The manager always does a structured and formal "exit interview" to understand why the clinician wants to leave but does not note anything for future learnings.	The manager always does a structured and formal "exit interview" to understand why the clinician wants to leave and takes note of what could be improved to avoid this happening again in the future.	The manager tries to keep an eye on his staff to ensure clinicians are satisfied with their job and with the hospital in order to avoid a clinician wanting to leave. In case this happens, the manager always does a structured and formal "exit interview" to understand why the clinician wants to leave and takes note of what could be improved to avoid this happening again in the future.	The manager is often doing evaluations to understand and forsee any problems that might arise and to make sure the clinicians are satisfied with their job and with the hospital in order to avoid a clinician wanting to leave. In case this happens, the manager always does a structured and formal "exit interview" to understand why the clinician wants to leave and takes note of what could be improved to avoid this happening again in the future.
20.2: What can they offer (or do) to keep best clinicians who want to leave	b) What would you be able to offer to try and keep that best clinicians in your hospital? c) Could you give me an example of a time when you were able to keep a top clinician? And what about a clinician that you could not convince to stay?	The manager cannot offer or do anything to try and keep a top clinician.	The manager cannot offer or do anything to try and keep a top clinician in terms of money, but they may offer them more responsibility or flexible time.	The hospital has an *informal* agreement that the manager can offer extra opportunities to try and keep top clnicians, but the manager only considers this if directly asked by the clinician.	The hospital has an *informal* agreement that the m anager can offer some extra opportunities to try and keep top clinicians, but rarely does so (ie. He/she can offer more money or class flexibility, but has only done it once or twice in the past few years).	The manager has the *formal* authority to offer some extra opportunities to try and keep top clinicians, and regularly does so. Their authority generally extends over schedules and minor monetary raises.	The manager has the *formal* authority to offer some extra opportunities to try and keep top clinicians, and regularly does so. Their authority generally extends over schedules and minor monetary raises, as well as promotions when basic HR requirements are met.	The manager will try to convince clinicians to stay by offering a range of extra opportunities and has *formal* authority to do so. Beyond simply offering more, the manager ensures they address the clinician's reason for wanting to leave and adjusts other top employees to prevent others from wanting to leave.
20.3: What do they do to ensure top clinicians *want* to stay in the hospital	d) How would you know if your top clinicians are happy working in this hospital?	The manager treats everyone equally, regardless of performance. The manager does not focus especially on retaining top clinicians.	The manager does not initiate conversations with clinicians and staff regarding their work satisfaction level, but has an open door policy where people can come and talk about it.	The manager has informal chats with clinicians and staff and has a general feeling of how satisfied their employees are. However, there is no formal check that (s)he does.	The manager has a set process that (s)he follows to ask the top clinicians how happy they are in their work environment. (S)he does this to try and fix any issues before clinicians want to leave. However, *this is not done regularly* and is not recorded anywhere.	The manager has a set process that (s)he follows to ask the top clinicians how happy they are in their work environment. (S)he does this to try and fix any issues before clinicians want to leave. *This is done fairly regularly* , but not recorded anywhere.	The manager has a set process that (s)he follows to ask the top clinicians how happy they are in their work environment. (S)he does this to try and fix any issues before clinicians want to leave. *This is done fairly regularly* , and is recorded, although it is not necessarily consulted often.	The manager has a set process during clinician evaluation that (s)he follows to ask the best clinicians how happy they are in their work environment. (S)he does this to try and fix any issues before clinicians want to leave. *This is done regularly* and is recorded in each clinician evaluation plan.

ITEM	Possible questions	1	1.5	2	2.5	3	4	5
21. Attracting talent								
21.1: Why would clinicians want to work at your hospital	a) If I were a very good clinician considering working either at your hospital or a different one, what would you say to try and get me to work here? b) What are the professional benefits of working at your hospital?	The manager does not know how to answer this question as they have never thought about it before.	The manager recognizes that clinicians perhaps would not want to work there, as there are other, better hospitals nearby.	Despite acknowledging there aren't formal professional benefits that the hospital can offer, the manager believes the hospital has some informal benefits (such as being a "nice atmosphere" or "family environment").	The manager believes there is a good atmosphere in the hospital, and there are professional benefits to working there (although (s)he cannot think of clear examples).	The hospital offers similar professional benefits as other hospitals nearby. However, there is usually a waiting list for junior clinicians wanting to join this hospital.	The hospital offers a range of better, more competitive professional benefits than most hospitals nearby.	The hospital offers a range of better, more competitive professional benefits than all other hospitals nearby.
21.2: Clinicians are aware of the benefits of working at your hospital	c) How do clinicians know that working at your hospital is better than others? d) How do you communicate this to the clinicians?	The manager does not communicate at all that their hospital is a good place to work at.	The manager only communicates the value of working at their hospital during the first day of work of a new clinician, but not again.	The manager communicates during the first day of work of a new clinicians and rarely communicates that their hospital is a good place to work at after that, but has done so once or twice.	The manager communicates the value of working at their hospital in annual staff meetings (no more than once a year in special occasions).	The manager usually communicates that their hospital is a good hospital to work at during staff meetings and huddles, and informal staff gatherings/parties (any of these happening more than once a year).	The manager frequently and actively communicates the value of working at their hospital in regular clinician evaluation meetings, staff meetings, and informal gatherings. These take place on a quarterly basis.	The manager frequently and actively communicates the value of working at their hospital in regular clinician evaluation meetings, staff meetings, and informal gatherings. These happen very frequently.
21.3: How do you keep track that the communication is effective	e) Do you check to see if clinicians are aware of the benefits of working at your hospital?	The manager does not keep track at all since there is no communication.	The manager does not keep track at all, only believes people know (ie. "oh, they know why it is good to work here").	The manager has informal chats in the hallways about whether people are aware of the benefits of working in the hospital so (s)he believes that they are aware.	The manager has *informal* follow up conversations with clinicians either individually or in groups to ensure their beliefs are aligned.	The manager has *informal* follow up conversations with clinicians either individually or in groups to ensure their beliefs are aligned and *keeps a written record of this.*	The manager has *formal,* structured follow up conversations with clinicians either individually or in groups to ensure their beliefs are aligned and keeps a written record of this, but does not do this regularly.	The manager has *formal,* structured follow up conversations with clinicians either individually or in groups to ensure their beliefs are aligned and keeps a written record of this.

6.2 1 leadership practices

ITEM	Possible questions	1	1.5	2	2.5	3	4	5
14. Clearly defined accountability for clinicians								
14.1: What is the role of clinicians in achieving targets	a) Can you tell me about the role that clinicians have in improving performance and achieving targets?	No role at all. Clinicians are simply consultants.	Clinicians are not directly involved and are rarely asked for advice in how to proceed with certain targets. When they are, it is not taken too seriously. It is considered to be a job of the accountants only.	There is some informal involvement of clinicians in the department, but it is ad-hoc and only when issues arise. When help is requested, it is taken seriously.	There is an annual practice of asking clinicians for input in terms of cost targets, but this survey is only sent to top level clinical managers and the response rate is not very high.	There is involvement of clinicians in achieving financial targets. They understand what the financial targets are and that they are expected to contribute to the discussions, but clinical duties are considered to be the main part of the job.	There is involvement of clinicians in achieving both clinical and financial targets. They are both considered part of the job.	Clinicians take active roles in achieving both clinical and cost targets for the hospital. They actively engage medical supplies companies to procure cheaper yet high quality materials and drugs, and sit on committees on possible usage improvement and cost reductions.
14.2: What is the accountability clinicians have to targets	b) How are individual clinicians responsible for delivery of targets? Does this apply to cost targets as well as quality targets?	No accountability. They are not held responsible for anything other than clinical quality.	No formal accountability. Joining a committee on cost reduction might be a required chore given to some junior people.	No formal accountability, but informally the senior managers attribute some merit if the clinicians to do well.	No formal accountability, but senior managers *and colleagues* expect those involved to take it seriously. Performance can sometimes be informally taken into account in assessments.	Formal accountability is present at the top level, with some consequences diffused within teams for lower levels rather than at specific people.	Formal accountability is present at all levels. There are consequences for not reaching targets, although these may not be consistently applied.	Formal accountability across quality service and cost dimensions with effective performance management and consequences for good and bad performance exist.
14.3: Who defines the accountability of clinicians	c) How do clinicians take on roles to deliver cost improvements? Are they selected for this role or do they volunteer? Can you think of examples?	Clinicians do not take on roles.	Clinicians only join if they are required to do by the government or the governing body of the hospital.	Clinicians get involved if top management pushes them to do so.	Clinicians get involved if top management or colleagues invite them to do so, but there is not much initial enthusiam.	There are workshops organized to explain the importance of financial targets to all staff and clinicians, and some volunteer to lead the charge for a few months as part of a team.	Clinicians and staff are fully aware of the importance of financial targets, and are expected to contribute to these as part of their job.	Clinician leadership in this regard is part of the culture of the hospital and all clinicians and staff are fully aware of this when they join the team. All staff and clinician levels (junior and senior) are held jointly responsible for achieving clinical and cost targets.