“Doesn’t everyone deserve a chance to live?”

Providing Cancer Care to All at the TMC

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Foreword

This report was written as part of the Tata International Social Entrepreneurship Scheme (TISES). During July and August 2011 we spend our days at the Tata Medical Center; analysing the costs and revenue generation of this brand new cancer hospital. Although we initially started off with looking only at the costs, we quickly realized that there is great room for improvement on the other end of the spectrum as well. We therefore produced two reports, of which this is the second. We aimed to help with the streamlining of the "patient navigation" process – the process that decides which patient should pay what for their treatment.

This report could not have been written without the help of many people at the TMC. Firstly, we would like to thank Dr. Chandy – the director of the TMC. We much appreciate how we were given the responsibility and freedom to shape our project as to fit our likes and capabilities. Secondly, we are very much indebted to the Patient Navigation team. Mrs. Trishna Dey, Mrs. Ananya Mukherjee, and Miss Rupsa Datta guided us through the patient navigation process – and were patient enough to answer all our questions and translate the patient interviews, day after day. During the research for this report, we interviewed over twenty doctors of the TMC. The consultants and fellows provided us with very useful and candid insights, something for which we are enormously grateful.
Furthermore, we wish to express our gratitude to all the employees at the Tata Medical Center. The administrative staff, nurses, doctors, engineers, front desk employees, cleaners, catering staff, and technicians made our stay at the TMC unforgettable. The two months in Kolkata flew by, and it was without a doubt the friendliness of all our 'co-workers' that made us feel so much at home.

Yours truly,

Anna Cabrera
Leanthe van Harten

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Introduction

The Tata Medical Center (TMC) is established as a philanthropic cancer hospital in New Town, Kolkata. Formally inaugurated on the 17th of May 2011, the TMC is one of the many not-for-profit initiatives of the House of Tata. The ambitions for the TMC are high; the hospital aims to become one of the leading cancer institutes in India. The building, equipment and staff are of the highest quality.

The hospital has opened its doors to all patients with cancer, regardless of their background or socio-economic status. It is incorporated in the mission statement of the TMC that "it will serve all sections of the society, with 50% earmarked for free or subsidized treatment for the underprivileged sections."
In this report, we aimed to analyse exactly this process of providing free and subsidised treatment. We were interested in how patients can apply for financial assistance at the TMC, and on what criteria their application was subsequently considered. What started with personal curiosity, ended in a full blown project that hopefully provides a framework to streamline this "patient navigation" process. The report starts with an explanation and overview of the current Patient Navigation / financial assistance system. We then move to our research, explaining which analyses we performed and what we learned from it. Four main methods of research were used; we investigated the historical data of all the patients that were being treated at the TMC. Secondly, we compared the system of the TMC with that of comparable medical institutions in India. We conducted interviews with more than twenty doctors at the TMC. Finally, we were able to observe sixteen interviews that the patient navigators held with patients applying for financial assistance. After our research, we come to our recommendations. Our revised plan for the patient navigation process is described here. We end with a summary and some closing remarks.

Our report was written with a quote from the Tata Medical Center website in mind:

"State-of-the-art and straight-from-the-heart, too. Because cancer cannot be cured by medicine alone. "

The Current Patient Navigation Process at the TMC

In this section the current patient navigation system will be clarified. In order to identify points of improvement, we analysed the existing process of when a patient first arrives at the TMC to when s/he has to pay for treatment. We looked at all the steps involved; from registration at the front desk, to consultations with the doctors, the authorization of concessions and the interview with the patient navigators and we also investigated what happens if a patient cannot afford the bill.

Categories and charges

Currently, the TMC has two main patient categories. Patients are either in the private category, or in the general category. The charges for the two categories are pre-determined and fixed. For consultations and investigations, the charges for the private patients are twice the cost price, whereas general patient pay the cost price.
Patients in the general category can express the need for financial assistance. Doctors have the authority to give any concession on general charges. The concession can be a percentage of the treatment/activity, or can be an absolute amount of rupees. Besides giving concessions, doctors can also authorise completely free treatment. The doctor can Figure 1. provides a graphical representation of the different categories at the TMC. A summary of the charges is given by Figure 2.

Figure 1. Current patient categories at Tata Medical Center (TMC) in Kolkata

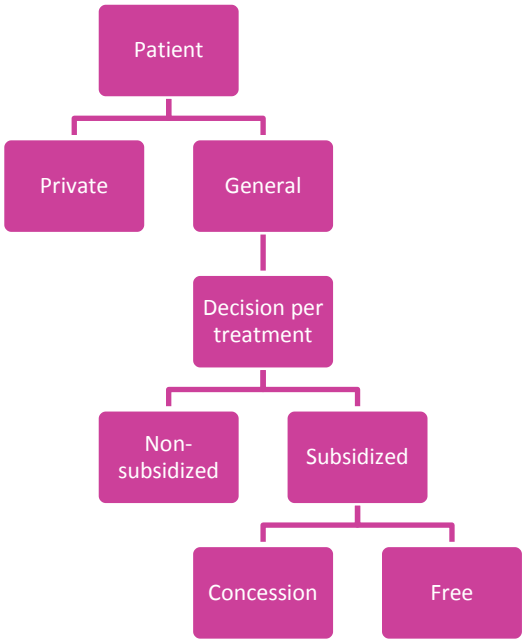
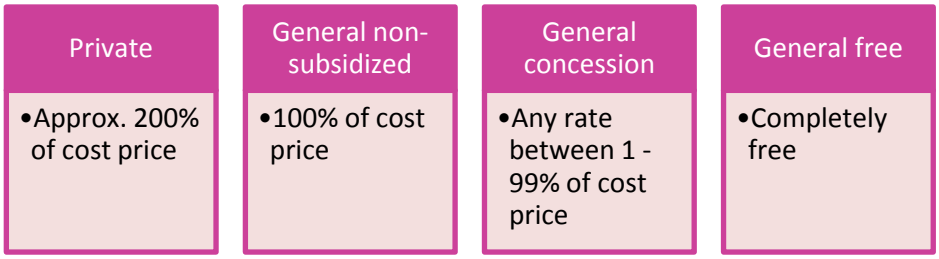


Figure 2. Current charges per patient category at TMC



The Tata Medical Center Trust aims to move to a '50/50' system. In this system half of the patients receive their care completely for free and the other half pays private rates (i.e. twice the cost price). In this way, the hospital will be sustainable. However, the director of the TMC has expressed that it is more feasible to move to a '33/33/33' system. A third of the patients will receive their care completely for free, a third should pay cost price and another third will pay double the cost price.

From referral to paying for treatment: the process

Registration

Patients can be referred to the TMC through different channels. General practitioners (family doctors) can refer a patient, but this can also happen through other hospitals or even through personal referral. One way or another, the patient wants to make an appointment at the TMC. The patient has two options; s/he can telephone the TMC to schedule a first appointment or s/he can come to the hospital in person. Employees from the appointment desk are the first contact persons; they create a new appointment in the Information System under a "NC" number. This 'New Case' number refers to patients coming in for the first time, who have not yet registered with the TMC. The patient immediately has to make a decision about the appointment, s/he must choose between a general and a private consultation. The appointment desk employee will outline the positives and negatives of both options, as outlined in box 1.

As a private patient...

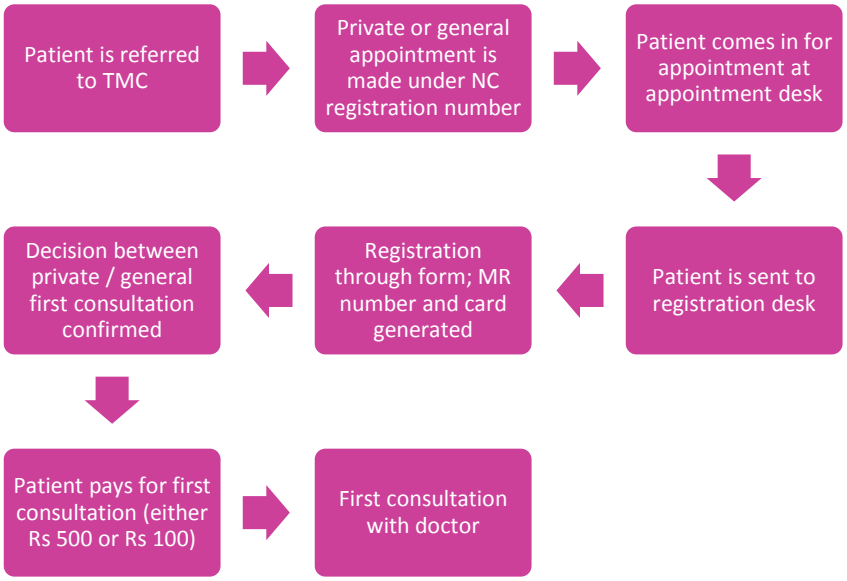
- The patient sees the consultant directly, rather than meeting with a fellow
- The patient can go to the private waiting areas and the more luxurious wards
- The waiting time is generally less and patients are less rushed
- The patient pays a higher charge for consultations and investigations

Box 1. Differences between private and general category

Once the decision is made the appointment is scheduled. The patient receives the time and date of the appointment, and the name of the consultant (in case of private).
When the patient reports to the appointment desk at the agreed time and date, s/he is sent to the 'billing/registration desk'. Here, a front desk employee checks the appointment. When everything is correct, the patient needs to register.

The patient fills out a medical registration form (asking about basic personal information). This information is entered in the Information System and a "MR" (a medical registration) number is automatically generated. Subsequently, a patient registration card is made; this plastic card shows the patient MR number, a bar code, the name and a photo of the patient. Once this process is completed, the patient is almost ready to move to the appointment with the doctor. Some employees ask again if the patient is sure about their private/general decision, and the patient is presented with the bill for the coming consultation. For a new consultation the price is either Rs. 500 (for private) or Rs. 100 (for general). Payment concludes the registration. A summary of this process is presented in figure 3.

Figure 3. The registration steps at the TMC



Applying for a concession

The patient can indicate the need for financial assistance at any time during treatment. Patients are currently not informed about the possibility of receiving treatments against a concession price, but have to think of asking for it themselves. The two likely points where a patient will express financial difficulty are, firstly, when meeting the doctor and secondly at the point of paying.

When a general patient asks for a concession during a consultation, the doctor can do three things. The doctor can immediately make a decision about the concession; the request can be denied or can be granted. If it is granted, the doctor has to come up with a precise concession. This is entered in the Information System, so that when the patient proceeds to the billing desk the concession rate is billed. A third option is that the patient is referred to 'Patient Navigation'. One of the two medical social workers will perform a financial assessment of the patient. This information is then summarised to the doctor (oftentimes a consultant, as the fellows will have asked the consultant for their opinion), either in person or over the phone. The doctor then has to make the decision whether to give a concession,

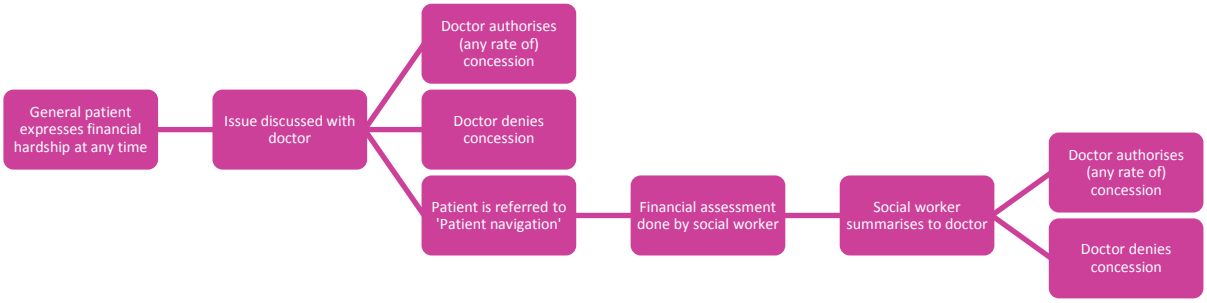
and if so, how much. When this has been discussed with the patient, the information is put in the Information System.

The decision whether (and how much) concession to grant happens per treatment. This means that a patient could be granted 50% concession on radiotherapy, nothing on chemotherapy, and 70% on all the blood test. The relevant doctor (e.g., the medical oncologist, the radiotherapist) decides about their part of the treatment.

When a patient indicates his/her financial hardship at the registration/billing desk, the employees of the front desk will urge the patient to discuss the matter with the doctor. If there is no option of the patient going back to the doctor, the employee will contact the doctor by phone. The front desk employees have the authority to give a concession, but only after discussion with the doctor. If a patient cannot pay for a consultation, investigation or treatment, than the ordered activity will not happen. Every activity is pre-paid at the TMC.

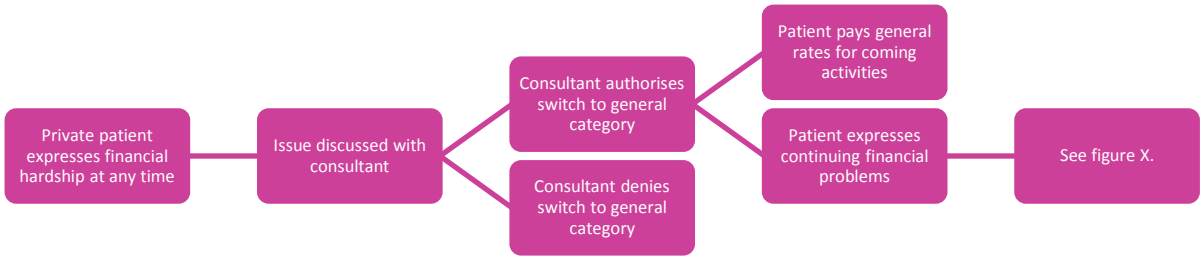
Figure 4. shows the process when a general patient indicates the need for financial assistance.

Figure 4. Current procedure when a general patient expresses financial hardship



If a private patient expresses the wish to receive financial assessment, s/he should always discuss this with the consultant. The doctor will analyse the case and decide whether to authorise a change-over from the private category to the general category. If the switch is authorised, the patient will from now on pay the general rates (but will not get a refund for the previously paid private charges). It is possible that these charges are still too high for the patient. In that case, the same procedure as for general patient is started. The doctor has to make a decision about concession, with the help of Patient Navigation if they wish. The process when a private patient expresses financial hardship is depicted in figure 5.

Figure 5. Current procedure when a private patient expresses financial hardship



Assessment by the doctor

The doctor has the end responsibility about concession decisions. We spoke to 23 doctors (see page 30.) about how they currently decide who should get a concession and how much. Most doctors (15, 65%) indicated that they look at how much the patient/their family members earn and what profession they have. The second most mentioned parameter (9 doctors, 39%) was general appearance -how the patient looks, dresses and communicates. Together with education (4 doctors, 17%), place of residence (4, 17%) and number of dependents (2, 9%) the doctors get a general impression of how poor the patient is. The poorer a patient, the more concession a doctor will give. The next mentioned comment (6 doctors, 26%) was to take into consideration the prognosis or curability of the disease. The six doctors expressed that they do not give concession when the prognosis of the disease are bad or when the disease is known to be incurable. A third factor that doctors say they take into consideration is the incurred costs (2, 9%) and the estimated treatment costs (2, 9%). The higher these costs, the more concession they will give. Two doctors (9%) take into consideration if the patient is registered under the private or the general category. A patient is more likely to receive concession if they are registered under the general category. A further two doctors (9%) try to assess what would happen if they do not grant concession. If the doctor is of the opinion that the patient will walk out and not receive treatment, s/he is more likely to grant concession than when s/he believes the patient will stay and raise funds a different way. A final two doctors (9%) indicate that they take qualitative factors into account, such as how old a patient is, whether they are employable and if they have children. The two doctors explained that they make an assessment whether it is 'worth' investing in the patients. Younger, employable patients with children are more likely to receive concession.

As indicated by our doctor interviews, there currently is no uniform decision protocol for the doctors. Different doctors make different evaluations and value parameters differently. While some doctors make an assessment of what would happen if they do not allow a concession, others only assess how poor the patient is. Additionally, some doctors actively value the investment of money and estimate the returns (for society or on a personal level), others leave this information out of their consideration completely.

Assessment by patient navigation

In the interview with one of the two medical social workers, the patient (or their relatives) gets asked several questions about the financial situation of the household. The social workers work with an excel spreadsheet, where they fill in the answers to the questions and can add comments and remarks. The questions can be found in Box 2.

Box 2. Parameters asked in patient navigation assessment

1. Personal data • Name • Gender • Date of birth • Date of registration • Attending doctor • Diagnosis **2**. Level of education **3**. Documentation (BPL card, reference letters, income certificates, etc.) **4**. Profession **5**. Monthly income **6**. Way of referral **7**. Number of family members **8**. Estimated costs (at TMC) **9**. Incurred costs	**10**. Dwelling • Ownership status • Number of rooms • Condition of roof • Condition of walls • Condition of floor • Overall condition • Electricity facilities • Type of cooking fuel • Type of toilet **11**. Food • Number of meals a day • Frequency that family is hungry **12**. Assets • Area of land ownership • Ownership of livestock • Type of transport • Ownership of electrical appliances

In this interview, lasting approximately 10 minutes, the social workers try to get a clear idea of the financial situation of the patient and their family. The patients have a chance to show any documents that they brought (such as a Below Poverty Line card or a letter from their MP or employer) –although they were not informed beforehand to bring these documents. The social workers write down their general impression (in an offline excel sheet) and communicate this to the relevant doctor. A brief summary of the interview is given (e.g. “they own their concrete house, but they have 4 young children and the patient is the only earner in the family, he earns Rs 7500 a month”) and the patient is sent back to the doctor to hear the decision about the concession.

Advantages

The current patient navigation system has several advantages. Firstly, the process is flexible. The system allows for any kind of changes; as the concession rate is re-determined for every activity, doctors can easily adjust the rate when they see the need. As there are no fixed

concession rates, there is ultimate flexibility to change the concession when necessary. Secondly, the risk for corruption is reduced. As there are many doctors allowed to authorise a concession, the responsibility and risks are spread. Nevertheless, it should be noted that individual doctors can still be bribed. As there is no cross-checking system, the possibility that doctors are corrupt still exists.

Limitations

We also identified the limitations of the current system. The first and most important limitation is the subjectivity of the system. As there is no uniform decision protocol, every doctor uses their own interpretation and values to make a decision (and every doctor gives different rates of concessions). As evident in our interviews with the doctors, differences of opinion exist about what to take into consideration. Some doctors see cheating as a baseline, whereas others are not bothered by this possibility. Additionally, subconscious factors also influence the decision by the doctors. As not all doctors send their patients to Patient Navigation, the social workers also have limited impact on the decision. No rules are in place about the verification of documents or the crosschecking of claims by the patients. Some patients might lie, while others present authentic documents. The system is hence not fair and unbiased.

Secondly, the system is inefficient for the patient, the doctors and the social workers. The patient has to 'beg' for money for every separate activity and with every different doctor. Consequently, doctors spend a great deal of their time 'negotiating' with patients and discussing the case with seniors (in case of fellows) and the social workers. The social workers have to trace down all the doctors on a case, to give them a summary of the financial assessment. The assessment of the social workers is offline, which is inefficient and not transparent. There is a lot of communicating and moving back and forth for all the relevant parties. Furthermore, as patients are not sufficiently informed about the decision procedure and about what private/general categories entail, the inefficiency is increased. There are many switch-overs between categories (requiring re-registration), and patients who might not be eligible for a concession can still continue to ask for it. Some doctors stated that whether the patient is a private or a general patient influences their decision about concessions. However, as patients do not really understand the difference between private and general, this seems an unfair criterion at this point.

Currently, the burden of making these very important decisions lies with the doctors. Although some doctors have indicated that they like the way the system works, almost all doctors said they want more help with making this decision in one form or another. As the doctors are unaware how much concessions they can give and they have to make up their own criteria, most of the doctors feel they are unqualified and not the right person to make the decision (one doctor put it this way: "I neither have the time nor the qualifications". The system also feels arbitrary and subjective to them, which makes it harder to carry the responsibility of making the decision.

Finally, patients can not formally appeal the decision. Doctors are figures of authority, and there is no way to formally express disagreement for the patients.
Overall, we believe that the current system has major flaws. In the following section, we will propose a new and improved system that aims to overcome the limitations of the current system.

Methods

Our recommendations are based on several sources of information. To fully understand the current patient navigation process, we held interviews with front desk employees, with doctors, and we sat in on meetings with the patient navigators. Furthermore, we conducted a literature search and compared the TMC to several other hospitals in India.

Literature search. We conducted an academic literature search to become familiar with financial hardship in India. Relevant articles included studies on the poverty line, on indicators of household poverty and on cost of health care. Furthermore, we had e-mail contact with a researcher from the University of Oxford, UK.

Historical data. We analysed all the treatment data from when the TMC started operations (the 17th of May 2011) to the moment of data collection (1st August 2011). In this analysis, we looked at the total charges, the amount of concession and tried to discover patterns.

Benchmark against comparable institutions. An in-depth analysis of the Tata Memorial Hospital in Mumbai was performed. Furthermore, we investigated the 'patient navigation' systems of the Christian Medical Center in Vellore, the All Indian Institute of Medical Sciences in New Delhi and the Amrita Institute of Medical Sciences in Kochi.

Doctor interviews. We interviewed 23 doctors from different departments, of which 11 fellows and 12 consultants. In the semi-structured interviews we spoke to the doctors about their experiences with the current system, as well as their thoughts about ways to improve it.

Patient interviews with patient navigation. We sat in on x interviews that the social workers held with patients (or their relatives) asking for concessions. In those interviews, we observed the current procedure and summarised the cases in a 'patient profile'. The patient profiles were also used to test our proposed system. Of the x patient interviews, x patients were granted a concession.

Registration desk interview and dummy registration. To fully understand the process of registering as a private or a general patient, we spoke to several employees at the front desk. They explained the registration process and showed us the relevant documents and information system. Together with the employees from the front desk, we also conducted a dummy registration. In this fake registration we walked through all the steps from coming in as a new patient, to going for the first consultation, ordering test and payment.

Analysis of historical data

In order to attain a clear idea of how the system currently functioned, we analysed the data of all the services administered so far. This enabled us to see the distribution between the different categories at the TMC. Subsequently, we were able to assess whether the hospital was approaching its goal of administering a third of all services at the private rate, a third at the general rate and a third at a subsidised rate. Using this analysis, it was possible to draw some interesting conclusions and make recommendations for the future of the hospital.

The analysis enlightened us on many areas of the categorical system of the hospital where we were unsure of the guidelines and protocol, and if indeed there were any. For example, before analysing the historical data, we were under the impression that private patients received no discounts. In fact, this is not the case. A substantial fraction of the hospital's private patients receive free or discounted procedures at some point in their treatment. From discoveries such as this, we were able to frame our approach of improving the current system of registration in context with how it has been working to date.

Furthermore, assessing the data gave us knowledge of how much had been spent on subsidies to date, of which it seemed no one in the hospital had a clear idea. Providing this breakdown had two clear advantages. For us, it was an integral part of our research in order to proceed with an assessment of whether the amount of subsidy given to date was appropriate with the hospital's vision. For the hospital administration, the breakdown would provide them with an idea on whether the organisation is anywhere near their vision and a basis for a projection of when their goal can be achieved. The mission of the hospital is to provide care to those in need in a self-sustainable manner. However, if the management of the hospital have no idea how many patients are paying each rate, it becomes difficult to sustain such an organisation. Additionally, the ethos of helping the poor will become a hit-and-miss venture, where the hospital can fluctuate between helping many and helping barely anyone.

There were several ways in which we could assess the data. Naturally, the first route of assessment would be to calculate the revenue generated and subsidies given to date. The comparison between the two was very interesting indeed. We also evaluated the distribution of the data by service and then by patient. It was essential to assess the data from both perspectives in order to attain a basis for our subsequent recommendations.

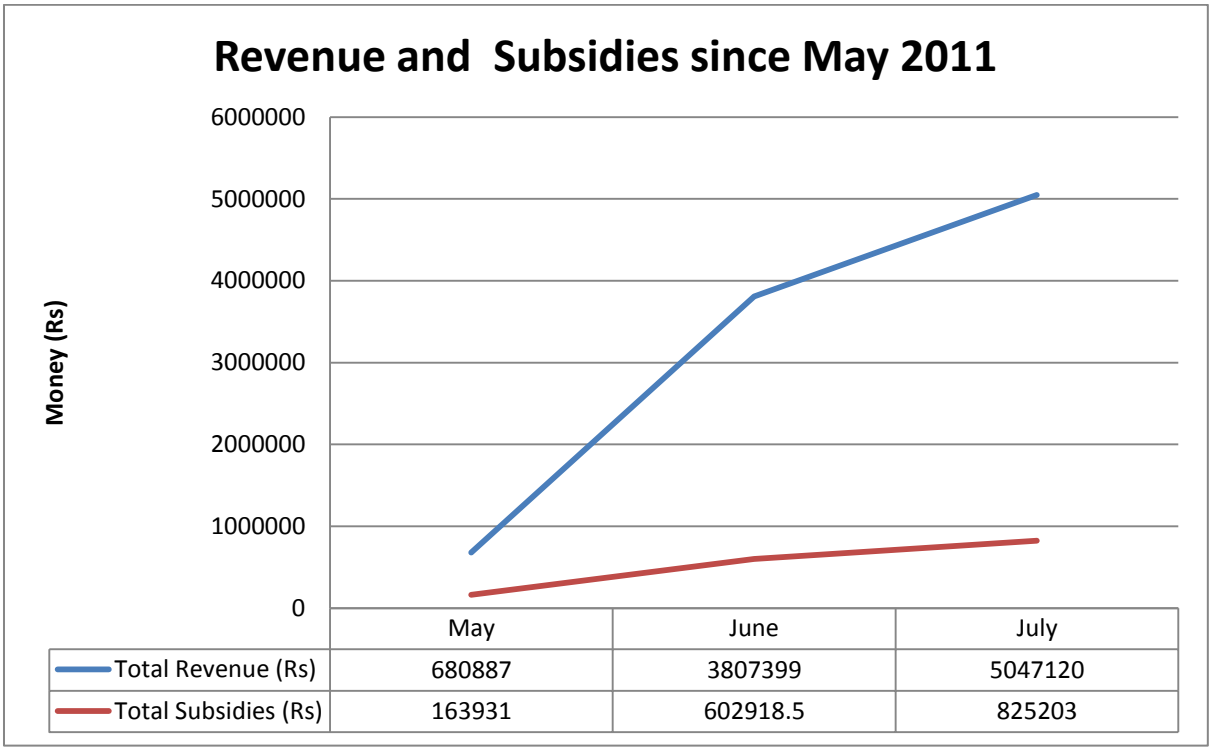
Revenue Generation

Before looking at the distribution between categories, it was essential to examine how much revenue the hospital had generated in its first months of operation. From here we could see the proportion of revenue used for the expenditure on subsidies.

Overall, in the first few months of operation the hospital generated Rs 95,35,406 in revenue from services to its patients including consultations and referrals. Out of this revenue, the hospital had given out Rs 15,92,053 worth of subsidies to its patients.

The chart below depicts the distribution of revenue and subsidies over the months that the hospital had been open.

Figure 6.



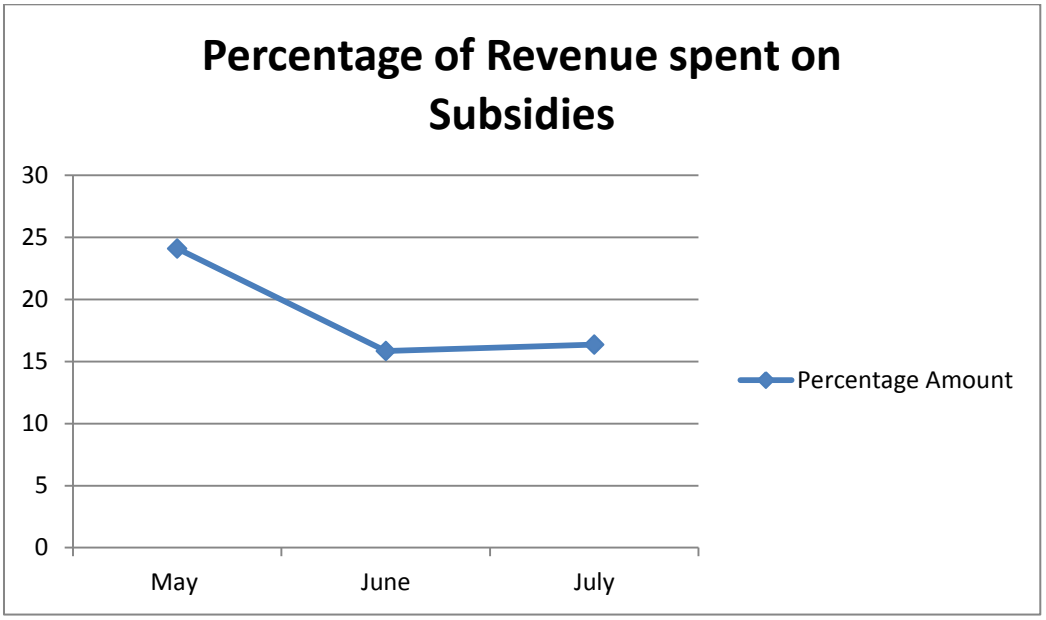
As expected, revenue has risen over time and there was a dramatic increase from May to June. An explanation for this particularly large increase could be that the Hospital was only inaugurated on the 17TH May, resulting in the hospital only having fifteen days of operation in May.

Naturally, both the increase in revenue from May to June and that from June to July can certainly be explained by the fact that the hospital is gaining more recognition. It is expected that all start-up organisations will experience a low generation of revenue in their infancies. It can be expected that the recognition of the hospital will continue to grow and with it the revenue generated.

Furthermore, at the time of inauguration few areas of the hospital were fully functioning. Over the period of time examined the hospital continued to open other areas, resulting in an increase in activities revenue. In August the operation theatres opened, which of course will be a large addition to the hospital's generation of revenue. Therefore, it should be expected that the revenue generated in August will be much higher than that in July. This growth of revenue will continue until the hospital is fully functioning and past its "project phase", which is only expected to be declared finished in March 2012.

However, from inspecting Figure 1, it is concerning that it seems the amount of subsidy given out has not increased anywhere near proportionally with revenue. Although in absolute values the expenditure on subsidies has increased, the percentage of revenue spent on subsidies has decreased substantially. This is exemplified in Figure 2.

Figure 7..



In May, around 24% of revenue was spent on giving out subsidies. However, this figure dropped to 15.8% in June and then rose only slightly to 16.2% in July.

This revelation gave way to a number of theories as to why the expenditure on subsidies has dropped so much as a percentage of revenue. A simple answer could be that the number of financially destitute patients coming to the TMC had dropped in proportion to those willing to pay. Another explanation may be because those patients who received discount incurred a less costly treatment than those who were paying full price. This could happen by chance. However we later discovered from our conversations with the consultants that they often try to reduce the cost of a procedures or opt for a cheaper treatment if they know the patient is receiving a subsidy.

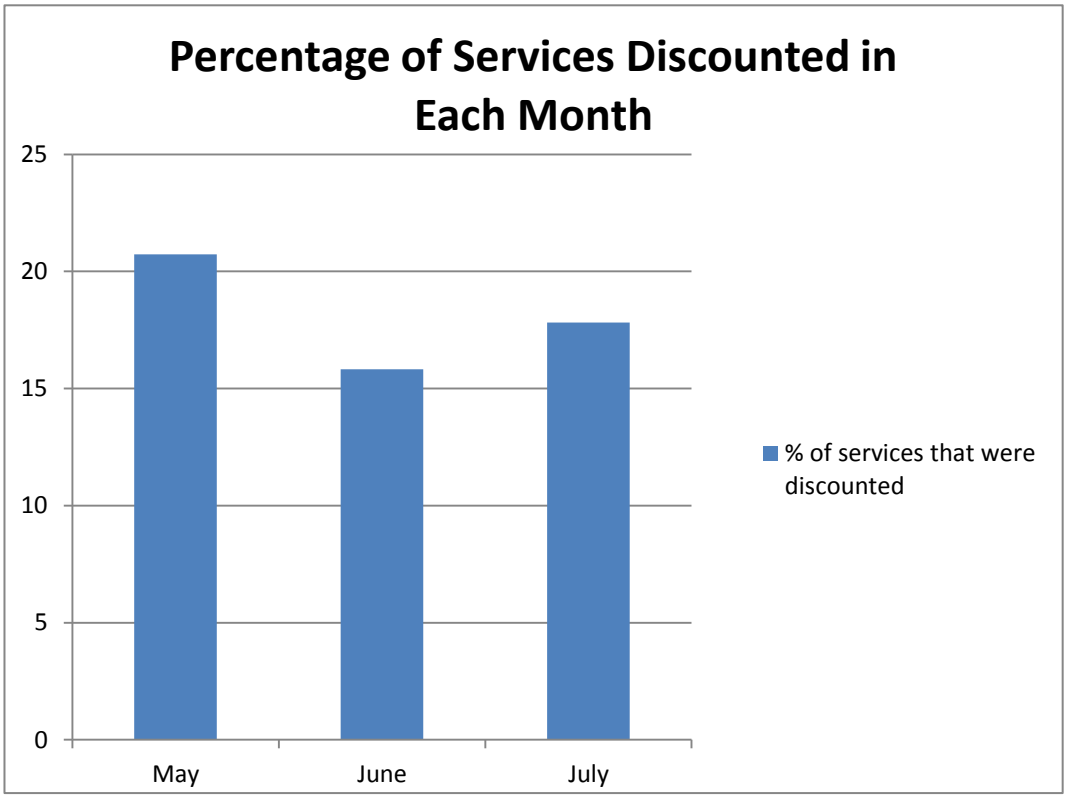
The decrease in the expenditure on subsidies as a percentage could have also be an indication that doctors became less willing to give discounts to their patients than before.

Later on in our discussions with the consultants, we realised that many had indeed become biased against giving out concessions due to experiences of patients being dishonest. This bias was further reinforced by the Director's strong recommendation against giving out subsidies.

In order to evaluate whether this statement was true we studied the number of treatments that had been given at a discount. We calculated this as a percentage of total services that had been administered.

The result was that discounted services had in fact decreased as a percentage of total services. In May 21% of services were discounted, which then dropped to 16% in June. The number rose to 17.5% in July, which was still lower than the initial percentage in May.

Figure 8.



Regardless of the rationale behind this, it can be said that this trend is not in line with the mission of the hospital. To fully understand the explanation, further analysis was needed.

Although our analysis was limited due to the short history of the hospital, there were many benefits nonetheless. It was useful to see the how much revenue had been generated and to see the proportion of this that had been committed to discounts. This gave us an indication that in fact not many patients were receiving discounts, or at least not a third of all patients. In order to verify this, we moved towards assessing the data per procedure and then per patient.

Analysis per procedure

Since the hospital's mandate was to reach a certain distribution per procedure, it made sense to analyse the data using this approach. In order to make an analysis per service, we had to categorise the data ourselves. Although the hospital management system categorised the treatments given, it only gave a classification of general or private. There were no categories for a treatment given for free or at a subsidy; they were still classified under either general or private. It also became apparent that whether the patient was private or general had no bearing on whether he received a subsidy. This was surprising since we were very clearly told that no private patients were eligible for a subsidy. Therefore, it was decided that we should create our own classification of the data. By cross-checking against a list of all the services charges, we were able to determine a treatment's true classification. All services could be categorised under the following:

1. Private – treatment price matched the "P" rate set by the hospital
2. General (non-subsidised) – treatment price matched the "G" rate set by the hospital
3. General (subsidised) - treatment price was a percentage of the "G" rate.
4. General (free) – treatment was completely subsidised

The breakdown of the services from May to June into the different categories is given in Figure 4. There were 23 services whose prices were either unlisted or the charge did not match any of the four categories.

Table 1.

Undefined	Private	General (non-subsidised)	General (subsidised)	General (free)	Total
23	2833	4093	1154	309	8412

Figure 9.

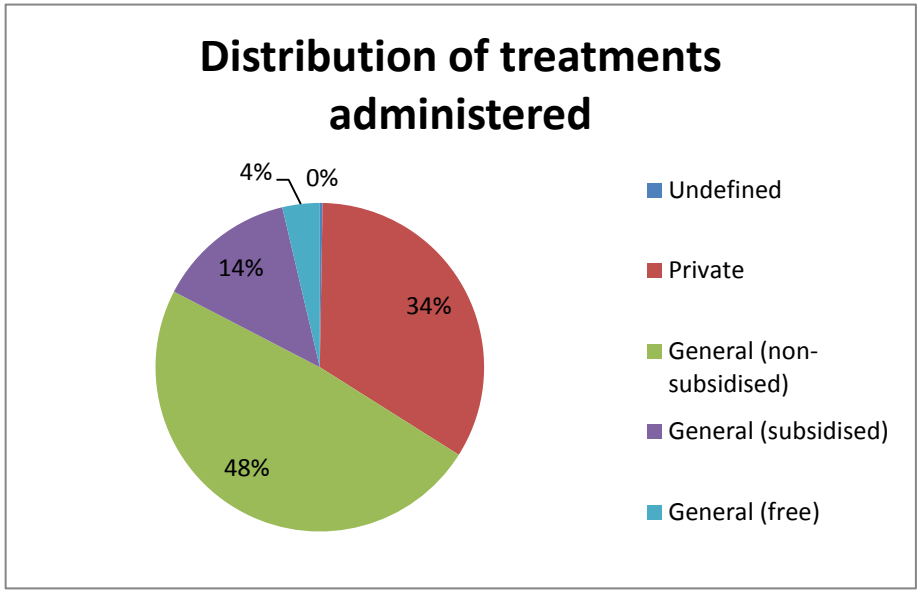


Figure 5 establishes that the proportion of private procedures is approximately on target for what has been set by the hospital's administration at 34% of all procedures. However, the other categories are completely off balance compared to the vision for the hospital. Considering the mission of the hospital to be a philanthropic organisation, this seems particularly important. It is imperative that the proportion of subsidised procedures should be a priority in order to allow the hospital to help as many as possible. This is especially vital since the hospital has many fundraising initiatives under the guise of earmarking 50% of its beds to subsidised care. This suggests two strong recommendations for the hospital:

Recommendation 1:

It is evident that the hospital should take action to redistribute some of its general patients to the subsidised category. It is obvious that the hospital is failing to target the financially destitute with a subpar level of 4% of procedures being provided completely free. With the 14% of treatments that have been discounted, this accumulates to a proportion of financial assistance that is far below target. This could be because the hospital is having trouble identifying those who are already registered and need help. This difficulty could possibly be attributed to the fact that the criteria set for assistance may be too high. Those deciding on the rate of subsidies for patients may not have an accurate picture of which patients are in dire need of help and it would be beneficial to all to set clearer criteria. Although high criteria is a likely explanation, the disparity in the current system between decisions made for each patient is a more pressing matter. The outcome of this disparity is that even though some of the right patients are being targeted for assistance, many are being categorised incorrectly and are consequently paying for treatment they can't afford at the TMC. We have subsequently created a classification that will aim to target patients who have been missed under the current system by considering boundaries which are fair once income distribution in the area and the cost of treatments have been taken into account.

Recommendation 2:

The hospital is not attracting enough patients from the low income bracket that it wishes to help. TMC and its administration must consider that it is much harder to target this section of society than it is to target those who come from a middle or upper class background. The route of advertisement and awareness that is currently used by the hospital is mainly based upon media, such as internet, television and advertisements in shopping malls. These campaigns are vital to the survival of the hospital; not only for attracting private patients who help to sustain it, but also in attracting donors. However, these initiatives will not take the hospital far in accomplishing its mission statement of serving the financially destitute. In a state such as West Bengal, a majority of those who are suffering from extreme poverty live in villages in the rural areas. The hospital's current methods of broadcasting their presence are unlikely to reach such communities. Therefore, in order to comply with its mission statement, the hospital should put forward an outreach program. The TMC administration

should envisage utilising the currently existing resources present in the local volunteer program to this purpose.

Analysis per patient

Before we began our assessment per patient, we were under the impression that there were only three categories of patients – subsidised, general and private. This proved to be an erroneous assessment of the situation. We had been told that only general patients were allowed to apply for discounts, and once a patient had been categorised he would pay the rate set at said category. However, it came to our attention that patients were allowed to move freely between categories and at times the classification of a patient had little bearing upon the charge they were billed for a procedure.

When we attempted to classify the data into the given categories, the exercise proved impossible. Therefore, we created our own classification for the patients.

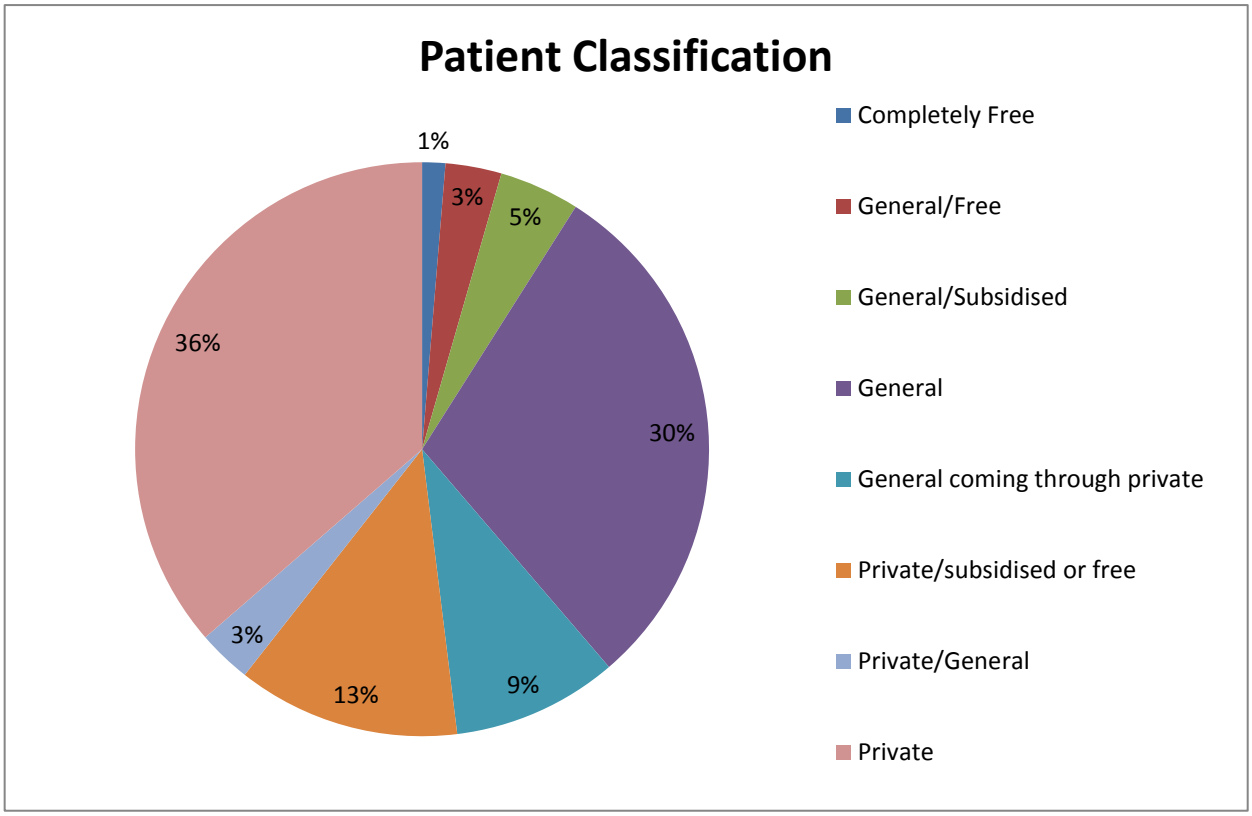
1. "Completely free" – Patients who received all procedures for free.
2. "General/free" – Patients who received at least one procedure for free, but not all procedures for free.
3. "General/subsidised" – Patients who received at least one procedure at a discounted rate. There were no patients who were given a discount on all their procedures.
4. "General" – Patients who paid the "G" rate for all procedures.
5. "General coming through private" – Patients whose first consultation was private but then paid the general or a discounted rate for the rest of their procedures.
6. "Private/subsidised or free" – Private patients who received one or more procedures for free or at a discounted rate.
7. "Private/General" – Patients who had a mixture of private and general procedures.
8. "Completely Private" – Patients who paid the "P" rate for all procedures.

The distribution of patients across the several categories is shown in table 2 and a visual representation in figure 10.

Table 2.

Completely Free	19
General/Free	46
General/Subsidised	66
General	433
General coming through private	136
Private/subsidised or free	183
Private/General	44
Private	530
Total	1457

Figure 10.



It is evident that the hospital is not lacking in private patients and, in fact, the proportion of private patients registered is above the rate the administration is targeting. From this discovery and the distribution of categories per procedure, we can conclude that attracting private patients should not be a concern to the hospital. The advertisement and awareness campaigns already in place, added to the advantages of being associated with the "Tata brand", seem to be sufficient in attracting patients to the Private category of the TMC.

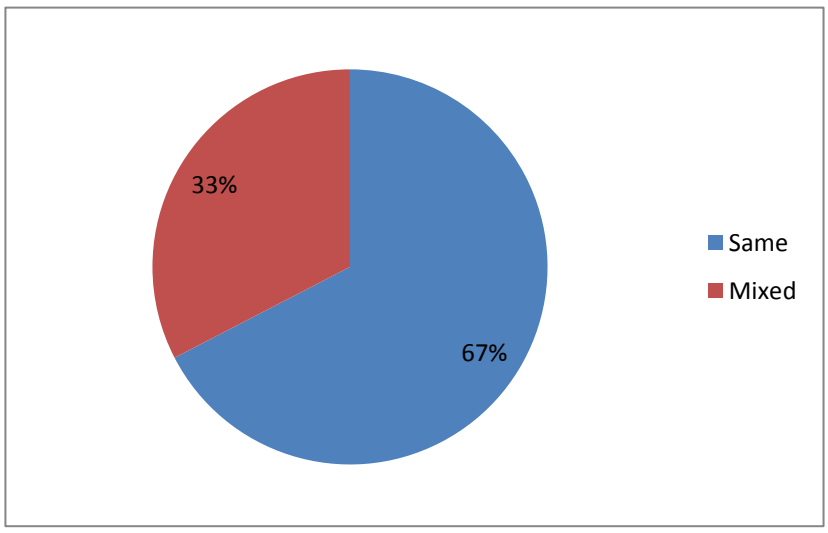
However, it should concern the hospital that only 1% of all patients treated were given completely free care. Upon further investigation of these nineteen patients, it was discovered that at least five of these were either staff themselves or relatives of staff. Ignoring this, even accumulating this percentage with that of "General/Free" patients and "General/Subsidised" patients, we arrive at a mere 8% of patients in the correct category being given discounted rates. This is far below the targeted distribution of a third of all patients receiving subsidised care. Subsequently, targeting a higher proportion of patients in need of financial assistance should become a priority for the hospital.

Allowing only general patients the right for a discount and implementing this rule correctly is a major recommendation. It should disturb the administration that 13% of all patients are registered as private patients, but have received subsidised or free care at some point of their duration at the TMC. It is the patient's choice to be registered as a private patient in order to receive certain benefits. The hospital should not allow their patients to receive these benefits of being a private patient, whilst still receiving discounts or even free procedures. Otherwise, the hospital will be paying for the expenditure of those who are not only able to afford treatment, but in fact the most expensive care TMC offers. As a result, the hospital will be unable to help the patients they should be targeting – those who, without financial assistance, would not be able to undergo treatment.

From the classification alone it is easy to pinpoint an area of the hospital that is in desperate need of improvement. Allowing patients to change categories at ease and providing private patients with the right to request discounts creates an unsustainable system of registration. The hospital cannot expect to reach their target of such a defined distribution of patients when there is not one in place at the registration point.

The lack of rigidity in categorisation is exemplified in Figure 8 which demonstrates the proportion of patients who stayed in the same category versus those who changed categories.

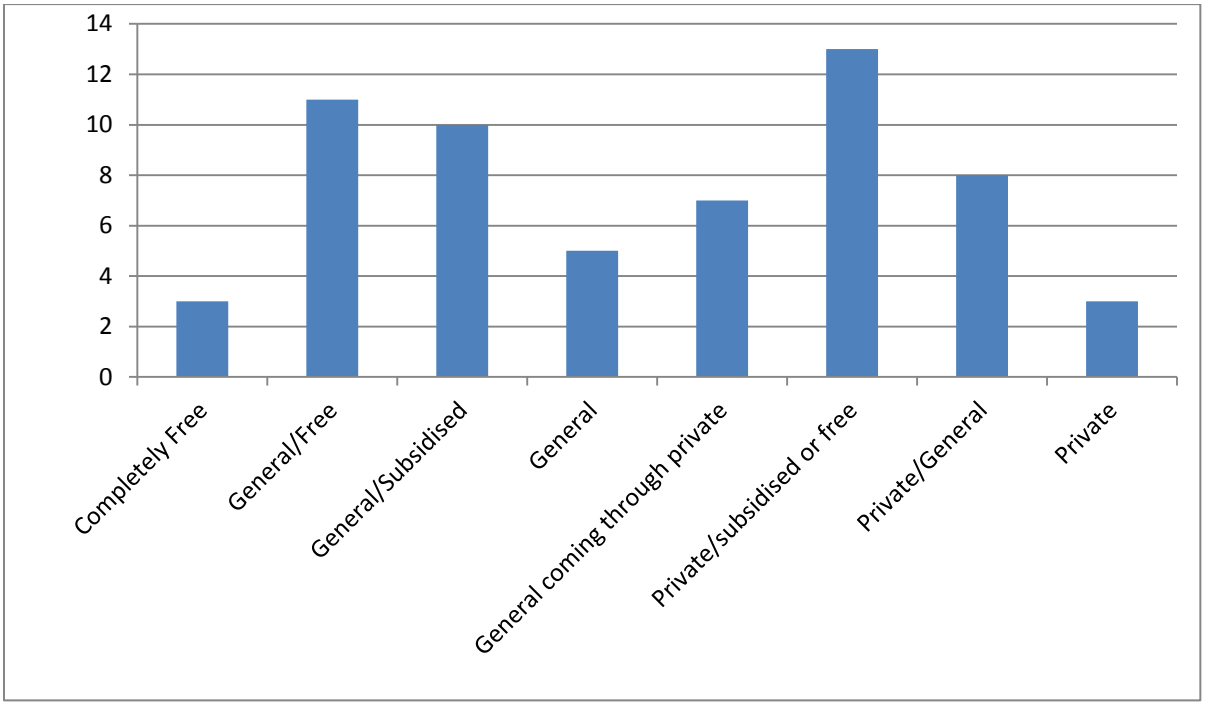
Figure 11. A depiction of the proportion who stayed within the same category.



This suggests implementation of strict guidelines on whether patients can change categories. This could be achieved by permitting patients to only change category once, with the authorisation of their consultants, throughout the duration of their stay at the TMC. It should be further recommended that there ought to be better communication with patients pre-registration. This is essential in enabling patients to make an informed decision about which category to choose and avoiding changes of classification at a later date.

Once we had analysed the distribution of patients, the next logical step was to examine the average number of procedures for a patient of each category.

Figure 12.



The number of average procedures per patient is lowest for private patients and for those who received completely free care. The low number of treatments for private patients is particularly concerning given that these patients are intended to generate income that would support the subsidised treatment of others. A number of reasons can be attributed to this.

One possibility is that these patients may have a tendency to come to the hospital solely for a consultation or diagnosis and then decide to be treated elsewhere. If this is the case, it is important that the hospital investigate for what reasons private patients are not continuing their treatment with the TMC. This may happen because costs of treatment are too high in comparison with other hospitals. If this scenario is the case, it would be beneficial to the

sustainability of the hospital for a benchmark comparison to be conducted against other hospitals.

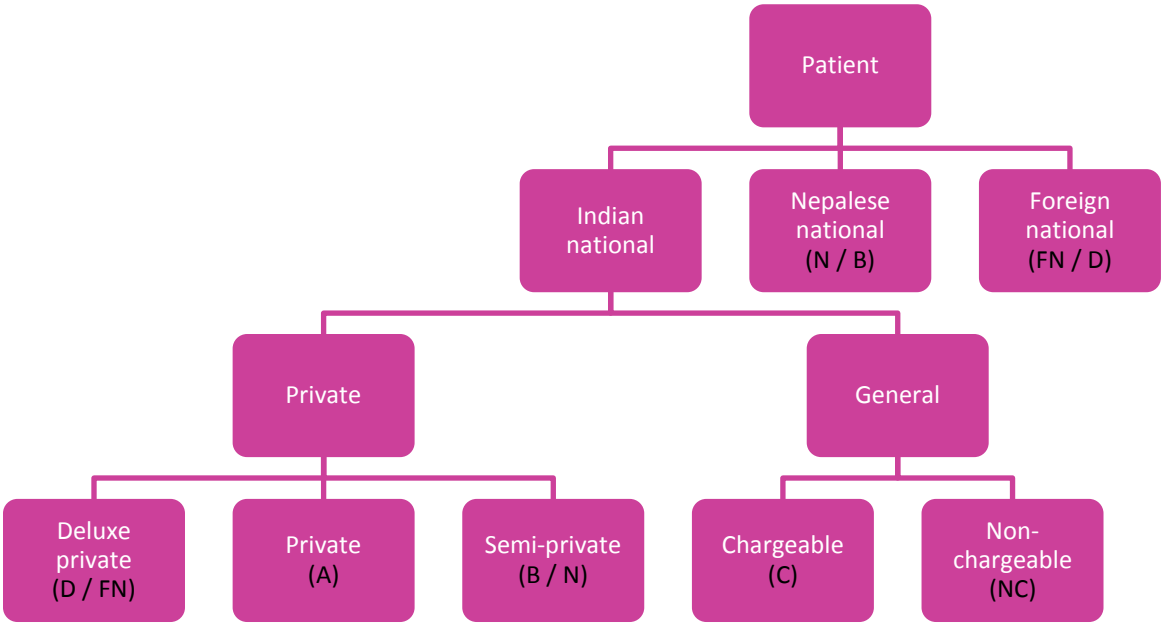
However, this trend could also be explained by looking at the high number of average treatments for a private patient who received free or subsidised procedures. Upon further investigation of patients in this category, it became apparent that private patients were being rewarded with a discounted procedure for continuing their treatment at the TMC. Unless such practices can be shown to generate additional income in the long run, they should not be allowed to divert resources from subsidized patients.

Benchmarking

The Tata Memorial Hospital in Mumbai

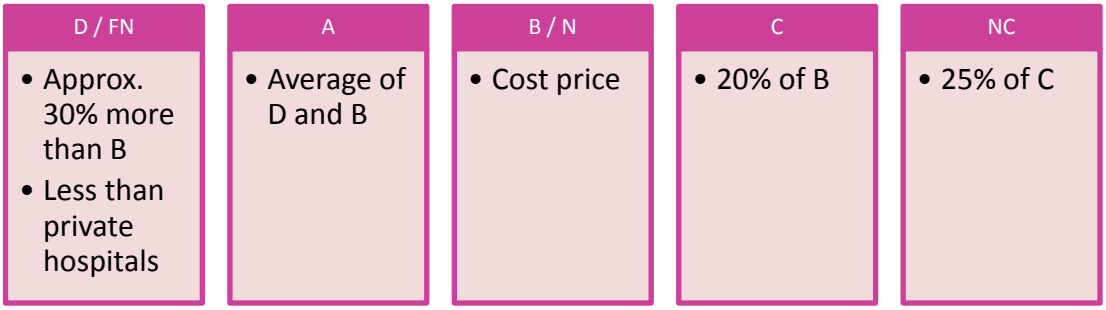
Established in 1941, the Tata Memorial Hospital (TMH) in Mumbai is one of India's leading cancer hospitals. In 1957 the hospital was taken over by the Ministry of Health, making it a government hospital. With 43000 new patients a year, the TMH provides all-round cancer care. The TMH has no profit objective, and is thought to recover approximately 30% of the costs. Patients at the TMH choose between the private and the general class, with approximately 60% of the patients choosing the latter. Patients are allowed one change from private to general, or from general to private. Figure 13 shows the different patient categories at the TMH. There are three private categories; deluxe, private and semi-private. In the general class there are two categories; chargeable and non chargeable. If a patient opts for the general class, s/he is referred to one of the medical social workers. The assigned social worker assesses the financial situation of the patient and places the patient in either the chargeable or the non-chargeable category. Nepalese nationals are automatically assigned to the semi-private category, and any other foreign national will automatically be assigned to the deluxe category.

Figure 13. Different patient categories at Tata Memorial Hospital (TMH) in Mumbai



The charges for every activity are fixed for the five categories, and can be found online. Figure X. shows the rough charges of activities per patient category. Patients are charged for every activity according to their category.

Figure 14. Charges per patient category at TMH Mumbai



We randomly chose five activities that patients are billed for, and compared the charges of the TMH with the charges of the TMC. The charges for the TMH are easily available on the website (http://www.tatamemorialcentre.com/misc/Schedule%20of%20Charges.htm) and the charges of the TMC were provided by the Information Technology Department.

Figure 15. Examples of charges (in Rs.) for activities at the TMH and the TMC

	TMH						TMC	
	NC	**C**	**B**	**A**	**D**	**FN**	**General**	**Private**
Pap smear cytology	0	30	380	460	540	540	250	500
Packed cells	0	200	770	860	945	945	850	850
X-ray IVP	125	500	1610	1885	2155	2155	2000	3000
Chemotherapy intravenous bolus	0	0	550	550	550	550	125/250[a]	250/500[a]
CT brain plain	200	800	1610	1910	2205	2205	1500	2000

[a] First price is for first two boluses, second for three or more.

Several things are interesting when randomly comparing the charges of five activities. Firstly, overall we see that the private charges of the TMC are lower than the D/FN category of the TMH. The charges are more or less comparable to the A category ('normal private') of the TMH. Considering the size of the TMH, as well as the difference in hospital objectives, it is surprising that the TMC charges are not higher. Secondly, the cost price of activities will likely be higher at the TMC than at the TMH (again for scale reasons). Comparing the B category at TMH with the general charges at TMC, we expect to see higher charges at the TMC. This is indeed the case for two activities, but for the other three the charges are actually lower. Furthermore, the TMH charges are not exactly in line with the theory. Charges of category C range between completely free to 50% of the cost price. The charges in the NC category are either free or the announced 25% of C. The D/FN category ranges between the cost price and an added 42%. The A category charges are, as expected, always the average between C and D/FN. The charges at TMC are also not always in line with the idea that private is twice the cost price. The private rates range between the cost price and double the cost price (including an added 33% and an added 50%).

The system of the TMH has several advantages:

- Strict and well-defined charges for activities based on categories (although in practice those definitions do not always apply)
- Charges are widely and easily available (e.g., on the website)
- Only one switch from private to general allowed (only for Indian nationals)
- The medical social worker determines whether the patient should be in the chargeable or in the non-chargeable category
- The categorisation is the first step when patients enter the hospital; patients are assigned to a category without taking into consideration their diagnosis or disease

Limitations to the TMH system:

- Charges for categories D- and A have no theoretical foundation
- The care is differentiated into 4 levels of different privileges; general, semi-private, private and deluxe
- Patients with an expensive kind of cancer are being 'punished'
- The TMH recovers approximately 30% of the expenses in revenue, which is incomparable to the objective of the TMC to recover 100%

The Christian Medical Center in Vellore

In 1900, the Christian Medical Center (CMC) was founded by Dr. Ida Sophia Scudder as a 'hospital' with just one bed in her father's house. In 110 years of its existence the CMC grew to an all-round referral hospital and teaching institute, that has a not-for-profit objective. Every day, the CMC serves about 2000 inpatients and about 5000 outpatients.

At the CMC, patients choose between the private and the general category. When a patient is referred to a new department (for opinion or treatment), s/he has the make the decision between private and general again. As an in-patient, there are three choices between beds; private, semi-private and general.

For poor patients, the CMC can provide financial assistance through granting concessions for treatments. In the patient guide, there is no formal information provided about how to apply. However, patients are advised to seek assistance from the Public Relations Department with any (financial or non-financial) question.

The CMC informs patients who need to undergo highly-specialized treatment to obtain an estimated cost plan before coming to Vellore. Patients should generate funds for those treatments by their own means. Box 3. holds the information in the CMC Patient Guide about this policy.

Box 3. Patient guide from CMC

> "Patients who require open-heart surgery, kidney transplant, dialysis and other highly specialized procedures, **should obtain an estimated cost of such procedures from their doctors before arriving at Vellore**. Such patients should generate funds from their own contacts. However, some economically backward patients have been able to collect money from sources like Prime Minister's relief fund, Chief Minister's relief fund, various charity organizations and appeals in newspapers for expensive treatment."

Doctors make the decision about granting a patient concession, sometimes after consulting the medical social workers. Funds are available department-wise; every doctor in the department knows how much subsidies can be given and how much of the fund has already been spent.

Advantages of the system at CMC

- Great flexibility (switch-over between private and general, doctors can grant amount of concession that they judge necessary)
- Good patient information about private/general categories
- Doctors have an understanding of financial situation of the department

Limitations of system of CMC

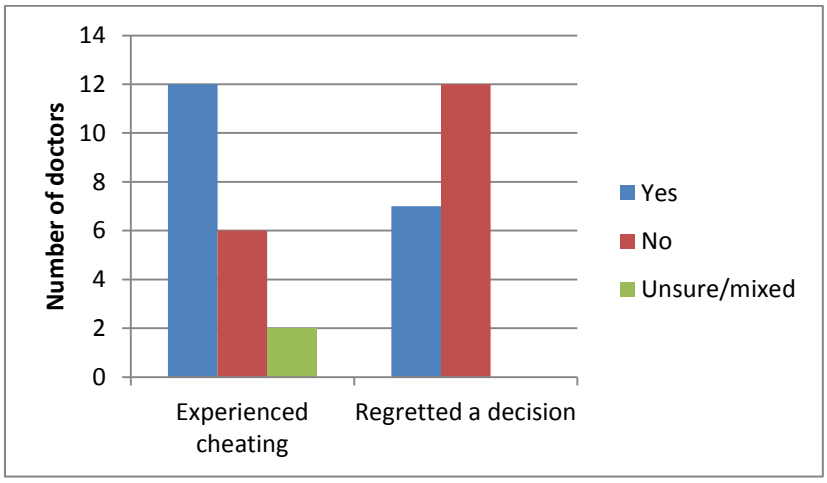
- System is very sensitive to bias
- The doctors makes a qualitative decision about 'return on investment'
- Patients with an expensive disease are 'punished'
- No information on applying for concessions
- System is inefficient and requires a lot of administration

Doctor interviews

We conducted semi-structured interviews with 23 doctors about their feelings towards the current decision process. Of these 23 doctors, 12 were consultants and 11 were fellows. The questions were broadly grouped in five categories; negative experiences, decision making, financial situation of the hospital, information to patients, and revision of the current system. The results are presented below, separated per category[1].

1. Negative experiences

Figure 16.



Twelve people (60%) indicated that they have experienced a patient trying to cheat at the TMC. Six doctors (30%) said this has never happened, whereas 2 (10%) indicated that they did not know if they ever were cheated.
When we asked if they ever regretted a decision about granting or not granting a concession, twelve doctors said they never regretted a decision (63%) and seven indicated that they had (37%).

Doctors expressed different views on the risk of cheating. While one doctor said: “I am very, very wary”, another told us “even if 5 out of 50 patients have cheated, then we still deservingly helped 45 people”.

2. Decision making

In our interviews with the doctors we asked them to talk us through how they make a decision about (not) granting a concession. The parameters that they mentioned were noted down. In Table X. all the mentioned parameters are listed, as well as by how many doctors they were mentioned. They are ordered from the most mentioned parameter, to the least.

[1] Please note that not all doctors were asked all questions. This results in different total respondents per question.

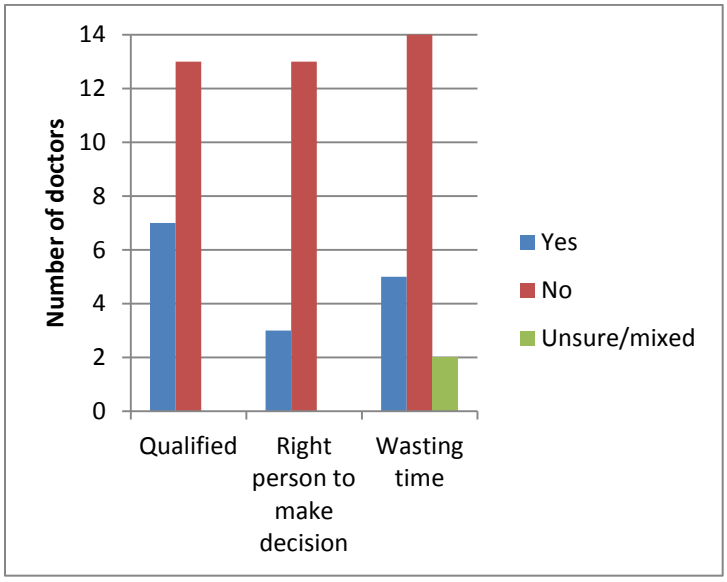
Table 3. Parameters expressed by the doctors to be taken into consideration when making a concession decision

Parameters taken into consideration	By number of doctors
Occupation/income	15
Appearance / dress / way of communicating	9
Curability/prognosis of disease	6
Education	4
Place/location of residence	4
Number of dependents	2
Incurred costs	2
Expected expenses	2
Whether registered as private or general	2
What would happen if no concession was given	2
Age / employability	2

Many doctors commented on the arbitrariness of the system. One doctor explained: "decisions are made just on a hunch", and another one said: "there is no objectivity in the process; it relies on a one to one discussion with us".
Others expressed that they feel they can accurately assess someone's financial status: "I feel that I have built up a good intuition about this".

2. Role of doctor in making decision

Figure 17.



To the question "Do you feel that you are qualified to make decisions about whether/how much concession to give?" thirteen doctors (65%) answered no. Seven doctors (35%) said they did feel qualified to make the decision. Thirteen doctors answered no when we asked if

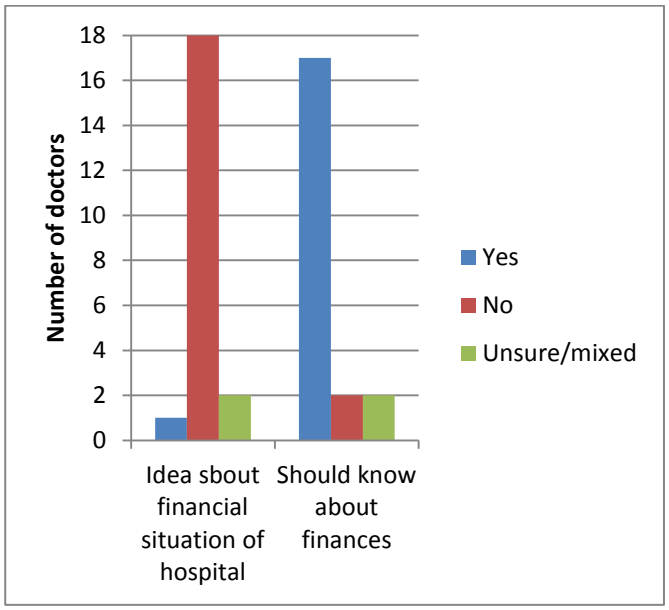
they felt they were the right person to make the decision (81%), whereas three people said yes (19%). 24% of the doctors indicated they experienced the decision process a waste of their time (5 doctors), 67% disagreed with this statement (14 doctors) and the remaining 8% (2 people) were unsure or felt mixed about the statement.

The doctors that indicated that they were not the right person to make this decision explained their reasoning. One consultant said: "I neither have the time, nor the qualifications to make this decision". Another doctor expressed: "It would take a big load off my mind if I didn't have to do it". About feeling qualified a doctor said: "I am frightened to make a decision".
The doctors that felt that the decision should remain with them also explained their rationale. "Economic discussions should be done in detail and are absolutely integrated into the role of a doctor" was one explanation. Another doctor mentioned corruption: "When we distribute the onus between all the consultants, we eliminate the risk of corruption".

Although some doctors called the money discussions a 'waste of their time' others believed this went too far. Several doctors explained that: "Patient welfare as a whole –money included- is part of our job description".

3. Financial situation of the hospital

Figure 18.

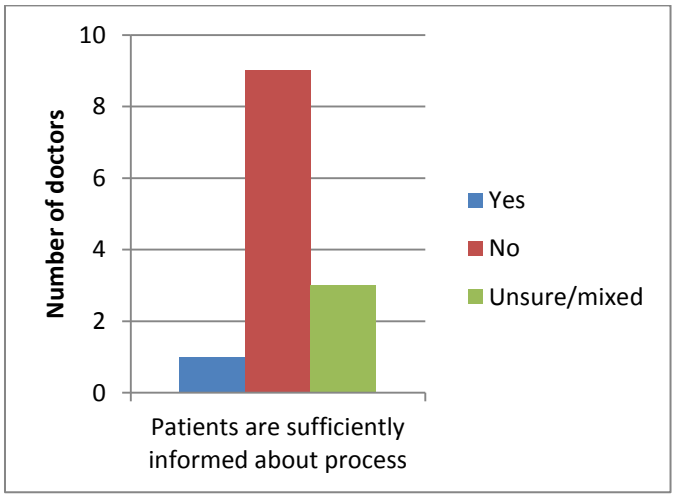


Eighteen doctors said they did not know how the hospital was doing financially (86%), and only one person indicated s/he had a good grasp of the financial situation of the TMC (5%). The remaining 2 people (9%) were not sure or felt mixed. When asked if the doctors thought they should know about the financial situation, the majority answered yes (17, 81%). Two doctors were unsure (10%), and two felt they should not know (10%).

Many doctors said there were oblivious to the financial situation of the hospital: “I’m not sure how much loss we’re making, but I know they are not making a profit”. The majority felt that they should know: “I want to know how much money is allocated to free care and how this works”. As one consultant said: “I don’t want to be responsible for the hospital making a loss”.

4. Patient information

Figure 19.

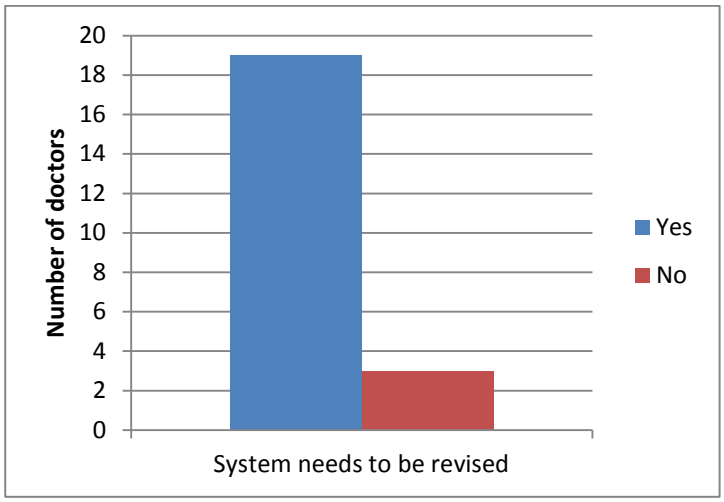


We asked the doctors how they thought about the information that is currently given to patients about the decision process. To the question “In your opinion, are patients sufficiently informed about the decision process?” nine doctors said no (69%), one doctor answered with yes (8%) and three doctors indicated that they did not know (23%).

Many doctors told us that the communication to patients about the decision process should improve. One doctor explained: “If patients know what’s going on, bias and discrepancies between decisions won’t happen as much”. At the same time, some doctors worry that cheating will increase when information becomes more widely available: “If you make it too open it is my apprehension that people will lie and cheat the system. However, more transparency will reinforce the ethos of the hospital”.

5. Revision of current system

Figure 20.



Nineteen doctors (86%) answered yes to the question if they believed that the current system of who receives/ does not receive concessions should be revised. Three doctors (14%) indicated they were happy with the current system.

Improvements

We asked the doctor to give suggestions for improving the decision process. This was an open-ended question and doctors could decide themselves how many suggestions to give, or which part of the decision process their suggestions referred to. We noted all the suggestions and later counted how many doctors made the same suggestions. We divided the suggestions into three categories; about who should make the decision, about informing patients and other suggestions. The suggestions can be found in Table 4, 5 and 6. The suggestions are listed from most often suggested to suggested only once.

Table 4. Doctor suggestions for improvement about who should make the decision about a concession

Suggestion	**Made by number of doctors**
Have more input from social workers, but let doctors have final say	9
Team/ board / committee	6
Let social workers decide completely	6
Have an 'emergency authority' who can quickly authorise concessions when there is no time for a long procedure	1
Have the doctor decide whether to give concession, and let social workers decide how much	1
Have an independent third party decide about concessions	1

Table 5. Doctor suggestions about informing patients

Suggestion	**Made by number of doctors**
Inform patients about decision process at registration	3
Make treatment charges available to patients	2
Inform private patients where their money is going	1
Train front desk employees to better inform patients	1

Table 6. Other suggestions made by the doctors

Suggestion	**Made by number of doctors**
Better verification of documents / cross checking	9
Don't allow free patients	2
For poorer patients reduce the costs of their treatment, for example by compromising on side effects	2
Don't allow switch-over between categories	2
Make categories more nuanced, so that there are more options than 0 or 100%	2
Train the relevant staff how to make the decision	1
Implement a system that minimizes risk of corruption	1
Make changes so that chemotherapy can also be given with concession	1

Patient Navigation Interviews

As a fundamental method of research, we observed a number of patient assessments made through the current system. This not only permitted us insight into the motivations for assessment from the perspective of the patient, but also into the rationale behind the decisions made. This area brought a personal touch to our research, which had so far been somewhat abstract. Being able to interact with patients allowed us to gauge the financial constraints that are faced by many in Northeast India and its neighbouring areas.

The interviews were diverse in all aspects. Of course there were instances where an application was denied or the patient was dishonest; this was to be expected. Without these negative experiences, our research would not have been complete. A major concern voiced by all in the hospital, specifically the consultants and social workers, was the high possibility of being cheated. Therefore, it was integral to undergo this experience first-hand in order to understand the needs of the assessors, as well as those of the patients.

In the interview, the social workers were in fact asking the correct questions of the patients. As well as asking the simple question of income, they examined many other aspects that revealed much about the patient's economic situation. They inquired about the patient's living conditions, mode of transport and other assets, which all have a clear correlation with the patient's capability to pay for treatment. Unfortunately, many of the benefits of asking such questions were lost as a result of there being no objective, quantitative analysis of this data.

We observed that the current system seemed largely based on intuition at all points of the process. The social workers would summarise the whole interview into a minute phone conversation with the consultant. They had no basis for which information to include. One doctor proclaimed that these summaries were of no help in the making of a decision and allowed no guideline for how much discount to give. The doctors were left to their own intuition in deciding this.

The repercussions of the lack of structure were immediately apparent. Different decisions were made even for just one patient alone. For example, the first patient we observed received a discount of 50% from one consultant, no discount from another and then varying discounts for her blood tests. The discrepancy between decisions is not only unsustainable for the hospital; it is also confusing and frustrating for its patients. The patient navigators' aim is to eliminate all the barriers of treatment, including those that are financial. Furthermore, the purpose of the patient navigation department and the mission of the hospital is to foster an environment where the patient can concentrate on their own survival worry free. It is questionable that this can ever happen whilst financially constrained patients continue to worry about which rate of discount the next day will bring.

Even though many worried about the possibility of wrong information being provided, there seemed to be limited verification of data. There were cases where the patient was asked to provide a certification of his claims. However, even though it was asked of him, the decision on a subsidy was made before he had the opportunity to do so. Even if the patient then never submitted the relevant documents, it was doubtful that the discount would be taken away. Obviously, if the hospital continues to give discounts without sufficient verification of documents, it will run a high risk of providing discounts to those who are not in need and have deceived the system. Furthermore, it also seemed unjust that a decision to deny an application would be made on a mere suspicion and without any further investigation or enquiry for documentation.

All of our experiences are captured through a collection of patient profiles titled “Journeys through Patient Navigation” in appendix A. We recommend the reader to study at least a few in order to gain a more personal insight into the system. We hope that our concerns expressed here about the inconsistency of the system are reflected in the reader’s own sentiments when being guided through the profiles. Otherwise, the patient profiles provide an interesting overview of the struggles that patients face at the TMC.

Proposed System

From the outset, our research indicated that the current patient navigation system at the TMC lacked a rigorous and unified approach. While the patients were subjected to the right types of questions, there was no consistent format for assessing the resulting data. The interview would yield a summary which formed the basis for a decision without applying set guidelines. This lack of a quantitative approach meant any thorough collection of patient data was superfluous. The drawbacks of this subjective approach were apparent to us from the first interview. These concerns were further echoed by the consultants, who worried about the repercussions on the hospital and their patients. Our goal therefore became the establishment of a comprehensive system that would assess each patient according to pre-arranged guidelines and would quantify the results.

Research

Once our objective had been determined, we researched various methods of means-testing. We required a quantitative method that was quick and easy to use. We did not want to prolong the time of interview or provide an unnecessarily complicated system that those using it would find difficult. We also needed to find a system that would be within our capabilities to create or adjust for the hospital. Considering this criteria, it was apparent that the most viable option would be a scorecard.

With the method of a scorecard decided upon, we set about finding one that would tailor to the needs of the TMC. For a while, we toyed with the idea of creating our own scorecard in order to provide comprehensive analysis. We discussed in depth between ourselves and with others the parameters to consider and which were the main indications of poverty in West Bengal. Furthermore we researched in academic literature any statistical data and recommendations for parameters of a scorecard system. Consequently, we created the sections of analysis and the main considerations. Our scorecard would provide an assessment through the following sections:

1) Income:

Under this section we planned to consider the total monthly income and the number of people in the household. From this, we would derive an average monthly income per person in the household and attach a score to this number.

We also decided to look at the age of household members and whether they had the capability to work. Therefore, if there were children, elderly or disabled adults in the family, we could add to the final score. This consideration was included in order to give a heavier weighting so to take into account the costs of education and other costly support.

Also, under this section we aimed to assess the loss of earnings. We planned on considering the number of earners, people able to work and whether the patient themself

was the breadwinner or in fact sole earner. This would allow us a complete picture not only of past income, but also short term estimated income or lack thereof it.

2) Assets:

In this section, we aimed to assess shelter, the area or region the patient is from, land, livestock, transport owned and other parameters that provided a reflection of wealth. This would be to ascertain a more complete picture of the patient's economic situation, which just looking at income would not necessarily represent. Furthermore, this would be a method of detracting too much weight on income in order to prevent false declaration of income from cheating the system.
3) Costs:

Finally we would assess expenditure to date and estimated cost of treatment. We decided to evaluate these costs as a percentage of income to prevent penalisation of patients who, by chance, required particularly expensive treatments.

However, once we arrived at deciding the cut-off points and the weighting of each question, we realised that we weren't fully equipped to make such judgements. The decision of assigning these numbers had to be reinforced with statistical analysis of economic conditions in India otherwise the system would become arbitrary. This had to be avoided at all costs, otherwise the system would no better than the current one. We had neither the expertise nor the relevant data to allow us to make this assessment. Furthermore, time restrictions precluded any possibility of continuing with the creation of our own scorecard.

It was at this point that we searched academic literature for a scorecard which had the correct parameters to be applied at the TMC. It was at this point we discovered a poverty scorecard specifically designed for India (Schreiner, 2008). This scorecard was originally designed for assessing microfinance credits. However, the author mentions that it also applicable for other assessment points to quickly and reliably judge a person's wealth. Once it had been decided to adjust the parameters slightly, we discovered that the scorecard fit well with the needs of the TMC.

The registration process

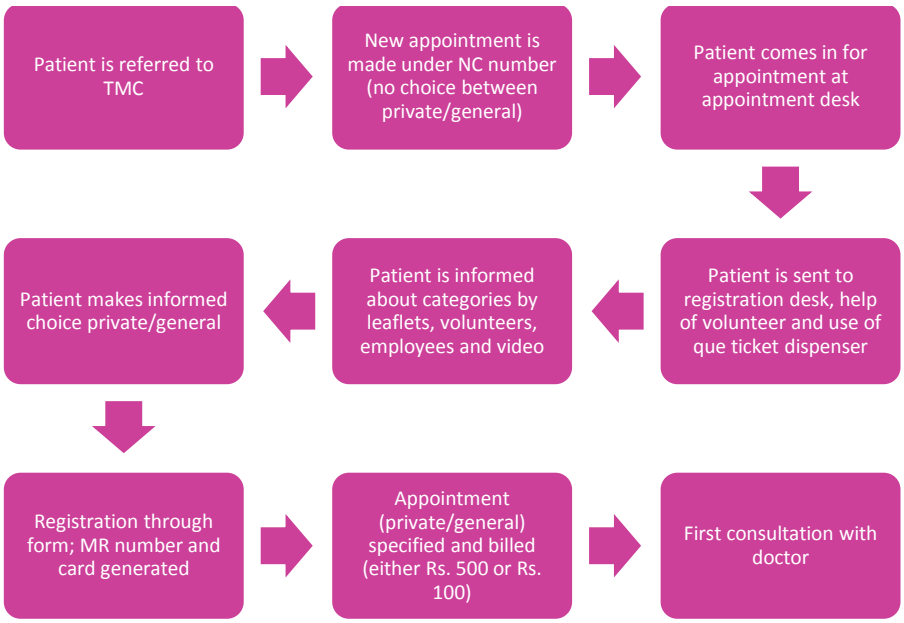
In our new system, the registration process will be a quintessential point in patient navigation. In this section we outline our recommendations for registration, and provide focus points that need special attention when implemented.

When a patient comes in for a first appointment, it is crucial that an informed decision about registering as a private or general patient is made. Switch-overs between categories are to be kept at a minimum, which requires patients to completely understand what to expect. We believe that several methods of patient information are most beneficial. Firstly, a local

volunteer will sit down with the patient and their relatives to explain the procedure. Information leaflets are available that explain the difference between private and general and about the possibility of applying for financial assistance. Example leaflets can be found in Appendix B. A video can play in the waiting area that explains the procedure for when there are no volunteers available and the patients have difficulty reading. Additionally, treatment charges need to be available. The list of charges can be kept at the registration desk, and should also be posted on the website of the TMC. The patient needs to know that they can see the treatment charges before making a decision. Only when the patient fully understands the system and has discussed the matter with the volunteers or employees at the registration desk, can registration be completed.

The current registration form can remain unchanged, except for the addition of a question whether the patient wishes to register as a private or a general patient. Again, the difference can be explained on the form.

Figure 21. The new registration procedure



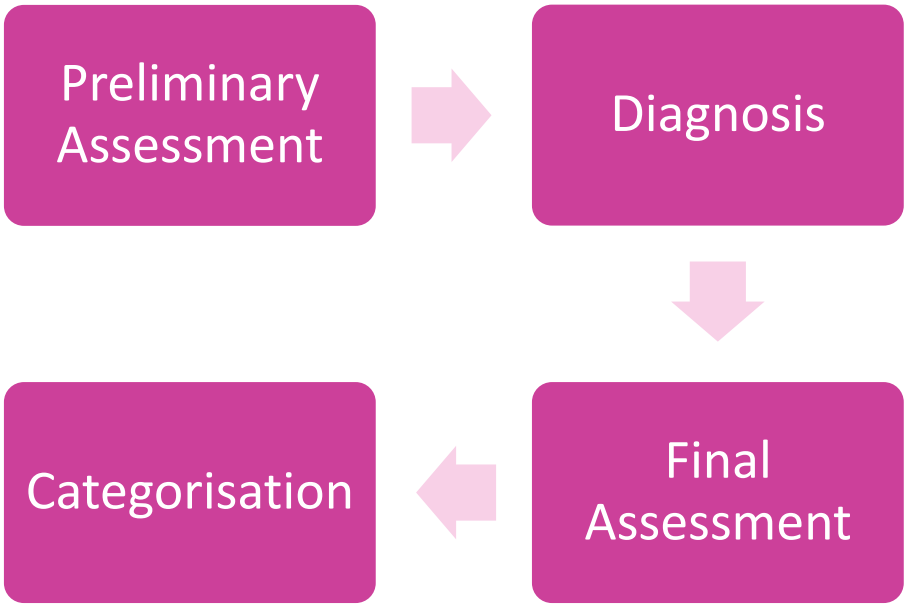
To smoothen the processes at the registration desk, we propose several optimizations. Firstly, a ticket dispenser could be put at the entrance. On this machine, the patient (with help of a volunteer) can select their activity. They can select 'first registration', 'repeat registration', 'billing' or 'application financial assistance/appeal'. A number is then generated, which eases the queuing process. Moreover, the counters are separated for different activities. Some counters are specifically for billing ("cash counters"), while others are only for registration ("registration counters") and one/two counters are reserved for all activities. There is the possibility of making one counter specifically for urgent matters ("the fast counter"), when billing needs to be done as soon as possible.

As mentioned, when a patient selects 'registration' at the ticket dispenser, a volunteer will sit with the patient in the waiting area. Calmly and clearly, the volunteer will explain the procedures – and will direct the patient to the video and the leaflets. For this purpose, volunteers need to be trained and well-informed. The same applies to the employees at the registration desk. A training session should therefore be scheduled for all people involved in this process. When the patient is registered, the front desk employees should make sure that the patient understood everything.

For patients that selected 'application financial assessment/appeal' the front desk employees will have to book an appointment with Patient Navigation. There are three booking options: preliminary assessment, final assessment and appeal. Before booking these appointments on the Information System, the front desk employees will have to see if patients are eligible. Only general patients can make an appointment with the patient navigators, and their documentation has to be checked.

Overview of the new system

Figure 22.



Categorisation of Patients

Before describing the recommended process of assessment, it is important to define a set of categories that should be implemented. This was imperative before any reassessment of the patient navigation system was made. Otherwise, problems such as those found in our "Historical Data" where patients alternate between categories will continue to persist no matter the system.

Keeping the Private category aside, we defined five categories through which all patients registered as general should fall under.

- **G: patients in this category were charged at the "G" rate set by the hospital**
- **C1: patients in this category receive a 25% discount on their treatment prices.**
- **C2: patients in this category receive a 50% discount on their treatment prices.**
- **C3: patients in this category receive a 75% discount on their treatment prices.**
- **F: patients in this category receive free treatment.**

Once the categorisation of patients has been properly defined, the system will become more effective and improvements can be made to the sustainability of the hospital.

Changing the category

The appeal procedure

To account for changes in a patient's situation after the final assessment, we decided to incorporate an appeal procedure in our new system. Patients can appeal the decision about their category in two cases:

1. Their household income went down with 30% or more
2. The estimated treatment cost went up with 20% or more

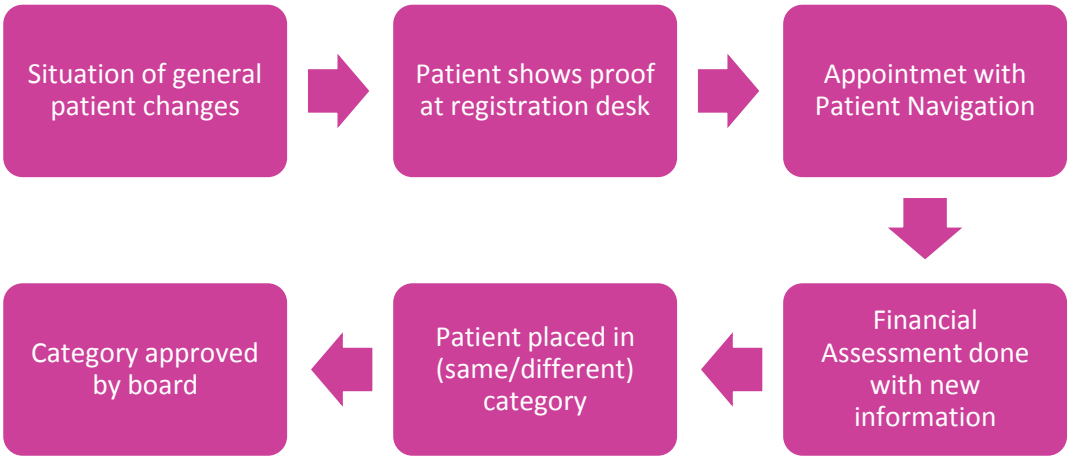
Patients need to show proof (treatment costs estimation by the doctor, income certificate, etc.) of one of the two cases before they can appeal. When proof can be shown to employees of the registration desk, a new appointment with Patient Navigation can be booked through the Hospital Management System. In this interview, the final assessment is done again with the new information. A patient can stay in the same category (and the appeal is hence rejected), or the new information can mean a change of categories. As is the case for normal categorisations, the board of consultants has to approve the category of the patient. Information leaflets as well as information provided by volunteers/registration desk employees can inform patients about the possibility of an appeal.

Doctor requested category change

As many doctors expressed the wish to have a degree of flexibility in the new system, we decided to allow a doctor requested category change in certain special cases. If a doctor believes that a patient has lied in their concession application, the doctor can request the board to have another look at the case. This procedure is intended for situations when the doctor (who sees the patient on a regular basis) has the strong impression that the patient has cheated about their financial situation, for example when they see a F-category patient getting into a car (a situation one doctor told us about). The board makes the final decision about whether or not a category change is in order. As this procedure is only for rare cases,

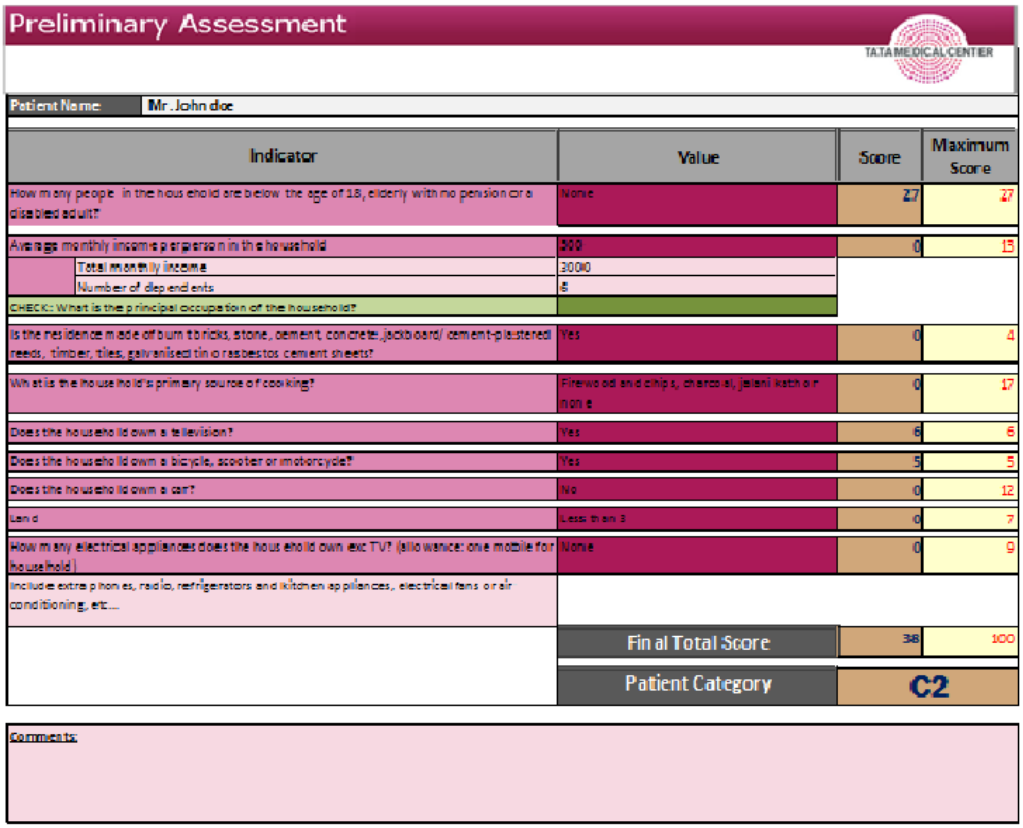
we decided not to specify rules about the procedure. The board will start their own investigation for those cases, and make a (final) judgment based on this.

Figure 23. The appeal procedure



Preliminary Assessment

Figure 24. A prototype of the Preliminary Assessment.



Preliminary Assessment

TATA MEDICAL CENTER

Patient Name:	Mr. John doe		
Indicator	Value	Score	Maximum Score
How many people in the household are below the age of 18, elderly with no pension or a disabled adult?	None	27	27
Average monthly income per person in the household	500	0	15
Total monthly income	2000		
Number of dependents	4		
CHECK: What is the principal occupation of the household?			
Is the residence made of burnt bricks, stone, cement, concrete, jackboard/ cement-plastered reeds, timber, tiles, galvanised tin or asbestos cement sheets?	Yes	0	4
What is the household's primary source of cooking?	Firewood and chips, charcoal, jaleni kitchen or none	0	17
Does the household own a television?	Yes	6	6
Does the household own a bicycle, scooter or motorcycle?	Yes	5	5
Does the household own a car?	No	0	12
Land	Less than 3	0	7
How many electrical appliances does the household own excl TV? (also wanes one mobile for household)	None	0	9
Includes extra phones, radio, refrigerators and kitchen appliances, electrical fans or air conditioning, etc....			
	Final Total Score	38	100
	Patient Category	C2	

Comments:

During a patient's first interview, they are subjected to the "Preliminary Assessment". Through this, they are evaluated solely on their economic situation. Patients are asked questions about their average income, how many in the household are incapable of working, whether they have a car, etc… The different weighting on each category depends upon statistical analysis of how that parameter indicates wealth. For further detail on how the scorecard works, please refer to the excel document where we suggest the reader to try the process themselves.

The scorecard is easy to administer and consists of a user-friendly interface. The drop-down menus allow the user to simply choose the option that is relevant to the applicant and a score is automatically assigned. The whole scorecard is marked out of a maximum of 100 points, with 169 points available. The allocation of scores to each category is defined as follows:

- **A score between 66 and 100 is assigned to the G category.**
- **A score between 51 and 65 is assigned to the C1 category.**
- **A score between 26 and 50 is assigned to the C2 category.**
- **A score between 11 and 25 is assigned to the C3 category.**
- **A score between 1 and 10 is assigned to the F category.**

Comparison of Patients between the Two Systems

Patient	Decision under current system	Score generated by Preliminary Assessment	Category given by score
Patient A	• 50% off radiation • No discount on chemotherapy • Varying discounts on blood tests	47	C2
Patient B	• Free radiation • Charges for chemotherapy were undecided	43	C2
Patient C	• Patient's application was rejected.	64	C1

Patient D	• Patient was given all treatment free of charge.	11	C3
Patient E	• A 50% discount on all investigations and blood transfusions. • Discounts on future treatments undecided.	59	C1
Patient F	• Consultation and day care charges were waived. • Cover of medical charges was being arranged.	9	F
Patient G	• A 43% discount was given on the cost of radiation.	9	F
Patient H	• The application was rejected.	71	G
Patient I	• The final decision from the consultant was still to be decided at the time of writing.	62	C1
Patient J	• A discount will be given, but the amount is still to be decided.	15	C3
Patient K	• Admission and inpatient charges were waived	88	G
Patient L	• A 10% discount was given on the final bill.	43	C2
Patient M	• Day care charges were waived. • The operation charge reduced by Rs 20,000 – approximately 28% discount.	55	C1
Patient N	• Application was rejected.	57	C1
Patient O	• Day care charges were waived.	24	C3
Patient P	• Application was rejected.	40	C2

Analysis

After running the scenarios provided by our patient profiles through our own system, we were provided with a distribution of possible outcomes. This distribution is given by Figure 25. The category that was assigned the largest number of patients was C1.

It was encouraging to perceive that our system had denied some of the applications, especially since the majority of these application matched the decision made under the current system. This implied that the system worked in sifting out patients who weren't in need of financial assistance and that there was some concordance with present decisions.

Furthermore, it was important that the criteria set for patients to be assigned to the F category were high enough so that only the poorest of patients would qualify. Given that the proportion was at one of its lowest points for the F category, it seemed that this had been achieved.

Figure 25.

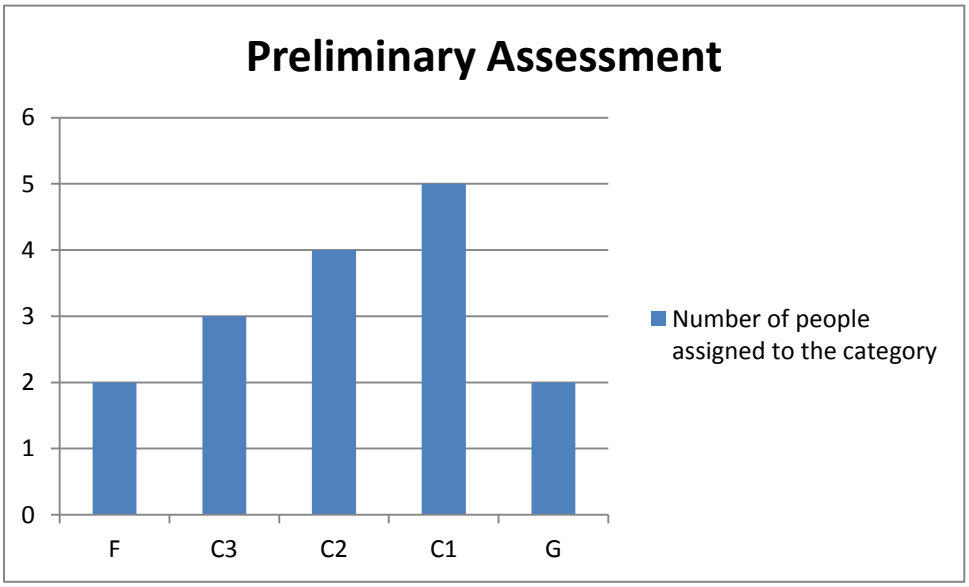


Figure 26.

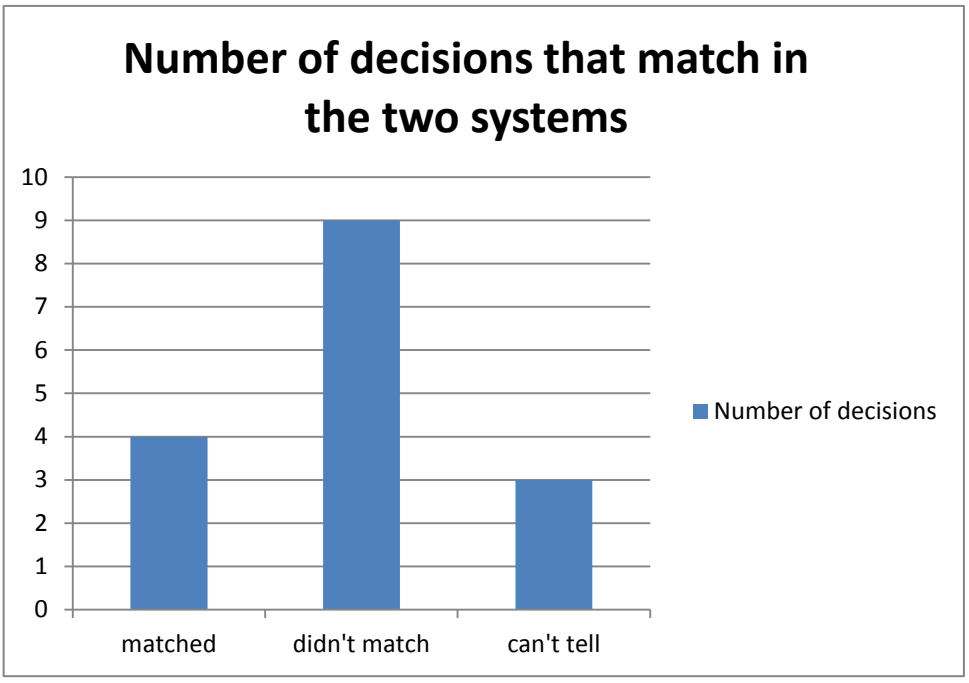


Figure 26 demonstrates the amount of decisions that were matched between the two systems. It was encouraging to see that some of our decisions matched, however the number of mismatches did not concern us. The subjectivity of the current system resulted in

an incapability to use it as a benchmark. For example, one patient had provided false information which categorised her as a C2. However, her consultant realised before a discount was given that the information was indeed false, and denied her the discount. This wrongful categorisation can also be avoided in the same way in our recommended system and furthermore through more thorough verification of claims.

The timing of the Preliminary Assessment is vital to introducing efficiency into the current system. This was an important consideration we encountered when evaluating the system in place and recommending improvements. We had trouble in deciding where to place the assessment. The current system presents the problem that those who are completely financially incapable still have to pay a general rate for their investigations. Only once the patient is post-diagnosis can they apply for a discount. But what happens to those who cannot even afford the cost of diagnosis? We resolved to provide a solution to this by making the preliminary assessment available to patients at registration point. In order to take into account the added parameters which could only be assessed post-diagnosis such as the treatment, we also introduced a Final Assessment.

Final Assessment

Figure 27. A prototype of the Final Assessment.

Final Assessment

TATA MEDICALCENTER

Patient Name	Mr. John doe		
	Patient Preliminary Category	C2	
Indicator	Value	Score	Maximum Score
Total loss of earnings	Between 4 and 8 month's income	4	8
Cost incurred until now	Between a year's and 18 month's income	2	6
Estimated future treatment costs exc. Medicine costs	Between 8 months and a year's income	2	8
Medicine cost	Between 3 months and 6 month's	4	8
	Final Total Score	12	30
	Patient Final Category	C3	

The final assessment was designed to take into account large costs incurred by the patient's illness. It was important to have a system that not only considered patients who were financially incapacitated but also those who were economically stable yet required particularly expensive treatment. This is much the same as the Preliminary Assessment in its format, however the parameters are different. In the Final Assessment, four questions are

asked of the patient – loss of income, previous costs, treatment costs and costs of medicine. The answers to these questions were then framed in terms of a ration of their income instead of absolute values. This allowed the system flexibility in assessing those from various income backgrounds without bias. The screenshot of the Final Assessment is shown in Figure __; for further detail the reader can refer to the live document.

The scorecard builds upon the category generated by the Preliminary Assessment. Instead of assigning the patient to a category, the score generated will assign the patient to an action. Given a patient's initial category, depending on their score in the Final Assessment, they can move up or down one category. This time, the scorecard is marked out of a maximum total of 30 points with 53 points available.

The allocation of scores to each action is as follows:

- **A score between 1 and 12 assigns the patient to move to a category of a higher discount.**
- **A score between 13 and 25 assigns the patient to remain in their preliminary category.**
- **A score between 26 and 30 assigns the patient to move to a category of a lower discount.**

Comparison between the Current System and the Final Assessment

Patient	Decision under current system	Score generated by Final Assessment	Decision given by score
Patient A	• 50% off radiation • No discount on chemotherapy • Varying discounts on blood tests	23	Patient remained in C2
Patient B	• Free Radiation	24	Patient remained in C2
Patient C	• Patient's application was rejected	24	Patient remained in C1

Patient D	• Patient was given all treatment free of charge.	8	Patient moved from C3 to F.
Patient E	• A 50% discount on all investigations and blood transfusions. • Discounts on future treatments undecided.	20	Patient remained in C1.
Patient F	• Consultation and day care charges were waived. • Cover of medical charges was being arranged.	22	Patient remained in F.
Patient G	• A 43% discount was given on the cost of radiation.	20	Patient remained in F.
Patient H	• The application is rejected.	27	Patient remained in G.
Patient I	• The final decision from the consultants was still to be decided at the time of writing.	30	Patient moved from C1 to G.
Patient J	• A discount will be given, but the amount is still to be decided.	22	Patient remained in C3.
Patient K	• Admission and inpatient charges were waived	20	Patient remained in G.
Patient L	• A 10% discount was given on the final bill.	22	Patient remained in C2.
Patient M	• Day care charges were waived. • The operation charge reduced by Rs 20,000.	10	Patient moved from C1 to C2.
Patient N	• The application was rejected.	30	Patient moved from C1 to G.
Patient O	• Day care charges were waived.	16	Patient remained in C3.
	• Application was rejected.	18	Patient remained in C2.

Analysis

We ran our scenarios through the final system to identify final outcomes and changes in categories. The distribution of patients amongst the categories is provided in Figure 28.

Figure 28.

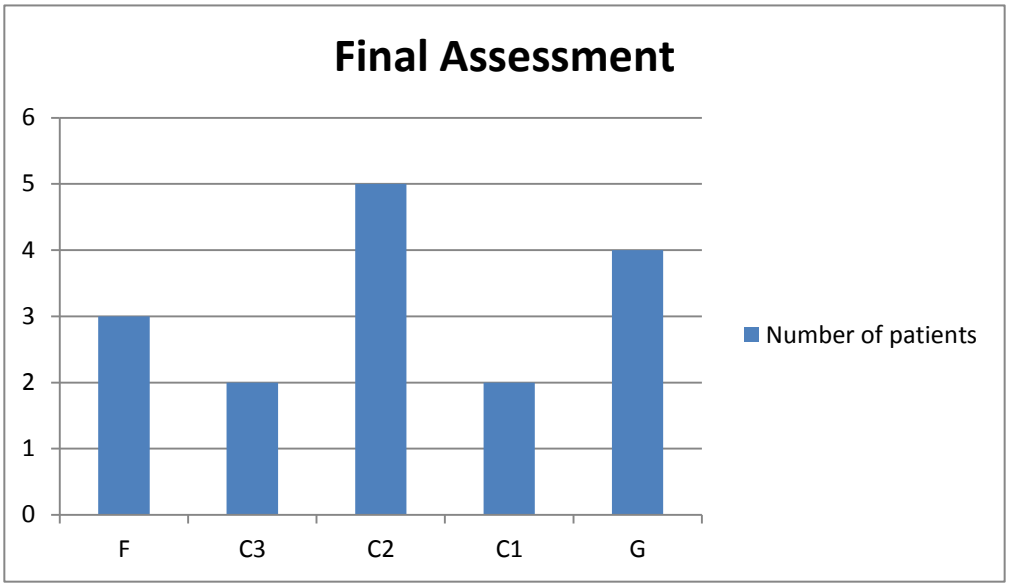


Figure 29.

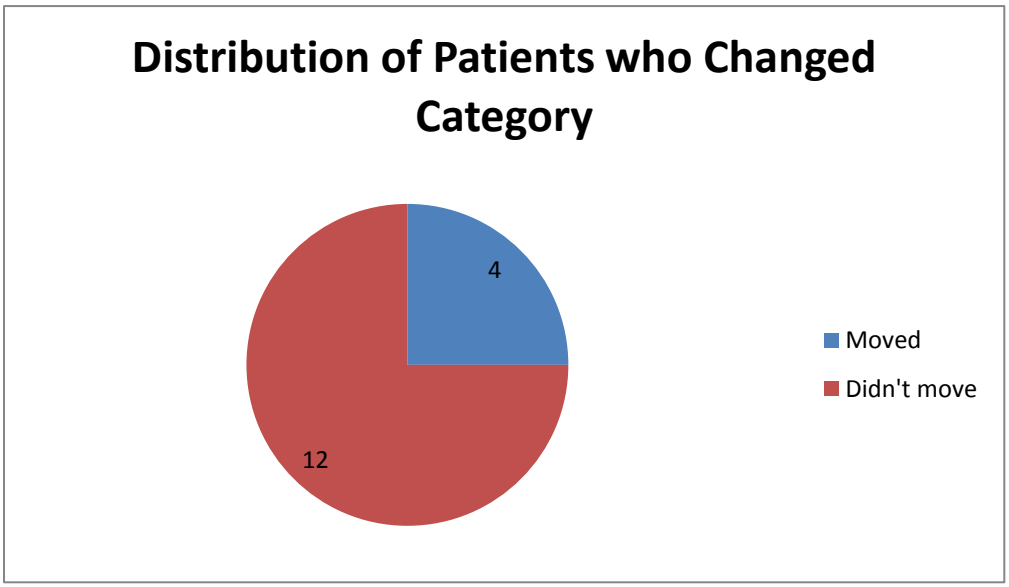


Figure 29 shows the proportion of patients who move category. Four patients changed category, and in most cases were redistributed to a category that matched with the decision under the current data. The criteria seemed high enough in order to maintain most patients in their initial category and only move them to another category in extreme circumstances.

Limitations

As in all systems, there will of course by limitations to using the scorecard. However, it is our belief that we have restricted these limitations to areas that can be easily remedied or will not have grand repercussions on the hospital and its patients.

Since the scorecard system relies on a set number of parameters and options, at times flexibility can be limited. There will be moments when patients do not fit the criteria set by the scorecard and there may be ambiguity in assigning a score to them. For example, when assessing Patient D, a problem arose when considering the first question of the Preliminary Assessment. Since the patient was a child and also disabled, we struggled with whether to count her as "one" or "two". In the end, we decided to count her as two. The rationale behind this decision was that we compared the expenditure to the household of supporting a child and the expenditure of supporting a disabled child. From this, we reasoned that since parents with disable children incur more costs, she should be counted as two. Without a doubt, over time there will be cases which uncover issues in categorising the patient as one option. However, we are certain that by carefully considering the situation and even asking further background questions, the issue can be resolved without too much difficulty.

Another great limitation to the system is that it still largely relies on the honesty of its applicants. This would have been the case with any system, a concern which was voiced by many of the consultants we interviewed. Even though the authentication of claims is not inherently integrated into the scorecard itself, we hope that through thorough verification of documentation, the pitfalls of dishonesty can be limited.

Documentation

The verification of claims was a huge concern to us when evaluating the current system and outlining our approach to a recommended system. This concern was echoed by a large majority of the doctors who were interviewed. Therefore, it was decided that there should be a set guideline of documents that ought to be provided during the Preliminary Assessment in order to substantiate the patient's claims. These documents are listed below:

- BPL card
- MLA certificate
- Income Salary certificate
- A letter from your Gram Panchayat
- Pension Slips
- Any previous medical bills relating to your illness

These documents were the most popular when patients brought documentation to the patient navigation interviews. We have also included this list of documents in our patient information leaflet titled “Financial Help”. It is important that patients are informed on the basic documentation required for their Preliminary Assessment. This will save time and resources for both the Patient Navigation and the patient themselves.

However, in order to avoid the pitfalls of false documentation there should always be protocols set for when suspicions of this arise. In these instances the Patient Navigation team should investigate further and require additional documentation.

The first recommended source of further investigation should be bank statements over the recent time period. This will be especially useful when dealing with borderline cases of lower middle class patients who are affluent enough to have a bank account, but still poor enough to require assistance. This category of patients is likely to have a bank account and so this may be a simple method of verification. However, a drawback of this method in the context of India is that many of those who would require assistance will not have a bank account.

The Patient Navigation team could also check the patient’s tax code. As one consultant pointed out in his interview, checking a patient’s tax code would normally be accurate since it is unlikely patients will be in the wrong bracket. Again, this has limitations when dealing with patients who come from rural areas. Finally, another recommended method of verification of claims would be calls to employers or the patient’s local council. The feasibility of these methods can only be assessed if they are put into practice. Unfortunately, in the context of a country like India where falsification of documents is easy to come by, there is no clear way of verifying data. The Patient Navigation department will have to develop their own protocol through trial and error of several methods.

Implementation

The hospital should seriously consider integrating the financial assessment process into the Hospital Management System. The benefits of doing this are numerous and should be apparent. Integration of Patient Navigation will allow easier communication between a patient’s social worker and their doctors. This will also allow the authorisation of the decision to be much simpler and more efficient.

We recommend that in a year the scorecard system be reassessed to verify it is targeting the right proportion of patients. There may be a possibility that cut off points should be readjusted, or new parameters should be considered. However, this can only be decided once the system has been put to practice and the circumstances of the surrounding population have been clearly understood.

References

Schreiner, M. (2008). A simple poverty scorecard for India. *Microfinance*. Retrieved from: www.microfinance.com/English/Papers/Scoring_Poverty_India.pdf

Summary of all recommendations

'Rules' of the new system

- At registration patients make an informed decision of registering as a private or as a general patient (see below).
- Only doctors can authorise a change between private/general. Overall, it is always allowed to switch from general to private, but patients are only allowed to change from private to general once.
- General patients (and *only* general patients) can apply for financial assistance.
- When a general patient applies for concession, a preliminary financial assessment will be performed by Patient Navigation. Patients are then placed in a preliminary category. This category will determine the charges of the investigations until a treatment plan is made and the costs of further treatment are estimated.
- When the treatment costs are estimated by the doctor, the patient will have to go back to Patient Navigation for a final assessment. This assessment determines the final charges for all following activities.
- A general patient can be placed in one of five categories;
    - G – patients pay the General rate for all activities
    - C1 – a 25% concession on G-rates
    - C2 – a 50% concession on G-rates
    - C3 – a 75% discount on G-rates
    - F – completely free care
- The patient navigators will perform the financial assessments, and a rotating board will approve the categorisation.
- A patient can only be given the concession of their category. For example, a C2 patient will receive 50% (and only 50%) on every activity.
- When the situation of a patient changes, the patient can apply for an appeal (see below).
- Private patients will always be charged the P-rate.
-

Registration

- Every patient has to go to a ticket dispenser / number generator first, where s/he can choose between registration, repeat registration, billing, application financial assessment/appeal and other questions.
- Separate activities per counter; a few counters only do billing, a few only registration, and one/two counters do all activities. A 'fast counter' can be made for urgent matters (billing, etc.).

- Carefully inform patients about the choice between private and general. This can be done with the help of front desk employees, local volunteers, information leaflets, and a video in the waiting area and by making the treatment charges available.
- Postpone the decision for a first private or general consultation till after the patients are fully informed
- On the registration form patients should indicate their choice of private or general.
- Provide training for all the staff involved in the registration process.
- Incorporate a booking system for Patient Navigation on the Hospital Management System. Three types of appointment are possible: preliminary assessment, final assessment, and appeal.

Preliminary assessment

- When the patient meets with Patient Navigation for the first time, a preliminary financial assessment will be performed. This assessment is done on the Hospital Management System.
- The patient should be pre-warned of the basic documentation they are required to bring in order to conduct the assessment. The patient navigator should verify these documents.
- The patient is assessed solely on parameters relating to her economic status.
- The patient is given a score out of 100. This score will then assign the patient to a particular category.
- The patient navigator should request further documentation where applicable; no category should be assigned if there are doubts over eligibility.
- All investigation procedures following the assessment will be charged at the patient's assigned category rate.

Final assessment

- The Final Assessment will be conducted once the patient has been diagnosed and knows the cost of her treatment plan.
- The assessment will consider only the loss of earnings and the total cost incurred to the patient through the illness.
- Patients can stay in their preliminary category, but may also move up or down depending upon their score.
- Once the score has been given and the action decided upon, the patient will stay within their reassigned category for the duration of their stay at the TMC

Appeal

- Patients can appeal the decision about their category in two cases; their household income recently went down with 30% or more, or the estimated treatment costs went up with 20% or more.

- When a patient can show proof of one of those two cases at the registration desk, a front desk employee will book a new appointment with Patient Navigation.
- The final financial assessment will be performed again by the patient navigators. The outcome of this assessment is final; a patient could stay in the same category, or there could be a change of categories.
- Doctors can also request an appeal to the category of their patients. When a doctor has the strong suspicion that a patient lied in their application, s/he can request the board to look at the case.
- The board will start an investigation and make a final decision.

Patient Navigation Approval Board

- After every financial assessment, the decision needs to be approved.
- A board, made up of a number (or all of the) consultants, will rotate to have 'Patient Navigation duty' – whoever is on duty will have to approve the categorisation as done by the patient navigators. The rotating nature will eliminate the risk of corruption and spread the burden of making a decision.
- The approval can be done on the Hospital Management System, and –for reasons of speed- only requires one click.
- One person, such as the director of the TMC, will be granted the authority to make emergency categorisations. When there is no time to complete the whole Patient Navigation process, this person can immediately decide the category of a patient. This category can be adjusted when there is more time to make an informed decision.

Long-term plans

- Expansion of the Patient Navigation team.
- Patient Navigation will perform house visits to get a more accurate picture of the financial situation of a patient
- The costing for all the treatments will be done so that the G-rate will be the cost price and G will be double this amount.
- Outreach program involving staff and volunteers to rural villages to promote awareness of the disease and also of the hospital.

Concluding Remark

We understand that the hospital is in its nascent stages and although it is difficult to begin with a perfect system, we believe that the hospital requires a clear strategy and strong procedures to be effective in its mission. Given the hospital's infancy, it is an optimal time for taking corrective actions in this regard. We believe our recommendations form a strong basis

During our review it became evident that the current system was failing to meet fully the expectations from the original motivation for the hospital's creation; that is, providing cancer care to all regardless of means. The apparent ad-hoc system in operation today if continued will inevitably create issues in future if the opportunity is not taken to correct it today.

Furthermore, the hospital cannot claim to understand the needs of its patients through the current system. In a system where decisions are subject to interpretation, bias and possibly nepotism, patients are left uninformed and ultimately distressed. The hospital should eliminate complexity for the patient interaction, and also for consultants. The administration cannot expect their consultants to make a correct and well informed decision when there are so many other pressures due to ill-defined procedures. The lack of clear guidance punishes the doctors not only through the extra workload, but also through the emotional trauma that accompanies such a responsibility.

We hope that through adopting our recommendations, the hospital will be able to strive forward with their promise of providing a "holistic approach in our crusade against cancer".

Appendix A. Journeys through Patient Navigation

Foreword

As part of a review of the Patient Navigation department at the Tata Medical Center, we observed the process by which their patients could apply for financial assistance. We experienced each patient's journey from their first petition for monetary support until the final decision made by their physician. These profiles shed insight into the diverse backgrounds from which cancer sufferers emerge, and the particular circumstances leading them to seek financial support.

Many thanks to Mrs Trishna Dey, Mrs Ananya Mukherjee and Miss Rupsa Datta, who led us through the patient navigation process and without whom this collection would not have been possible.

Patient A

Patient A is a 34 - year old housewife suffering from oral cancer. She was diagnosed on 13th May 2011. Before coming to the TMC on the 11th July, she had two cycles of chemotherapy and surgery on 24th June 2011. The family are from North Kolkata and travel to the TMC by bus. They have one daughter who attends a Bengali medium school, for which the family pays tuition. They speak Bengali, but the husband speaks and reads English as well (can possibly write too). The husband spoke to the patient navigator, whilst the patient herself waited outside.

Treatment Costs

- Previous chargeable treatment from other hospitals is Rs 44,000
- Patient A's husband has already paid Rs 7,000 to the TMC, which covers the cost of his wife's first private consultation and a diagnostic biopsy (given at a discounted rate).
- Estimated cost of future treatment at the TMC is Rs 47,000, of which Rs 35,000 for radiation treatment and Rs 12,000 for six cycles of chemotherapy.
- Patient A already has Rs 11,000, which he has agreed to pay.

Financial Assessment

- Patient A's husband says he earns Rs 7,000 a month in private pest control company, although is unsure as to whether he can provide a "Salary Income Certificate".
- He has been given leave to take care of his wife, but does not know whether it will be paid or indeed if he will have a job when he goes back.
- The family have their own property which is inherited from Patient A's father-in-law. The house has four rooms; three of which have a permanent roof. The floors and walls are cemented. They have electricity and a gas stove.
- Patient A's husband is the sole earner and has four dependents: his wife, his nine year old daughter, and his two elderly parents.
- The family doesn't have a car, so they must travel to the hospital by bus.
- They have a television at home and the husband has a mobile phone.
- Patient A is a graduate from high school.

Final Decision

The final comment from the patient navigator is that Patient A seems reasonably fine, but that her application cannot be rejected entirely.

The radiotherapist decided to give Patient A a discount of Rs 17000 which would amount to slightly less than a 50% discount on the total cost of Rs 35,000.

The medical oncologist decided to give no discount on the cost of chemotherapy. However, Patient A was given varying discounts on her blood tests. In total, she needed six blood tests – two were charged at full price, one was given at a 50% discount, two were given at a 30% discount and the price of the final test is to be decided. The patient hopes that maybe it will be given at a 30% discount.

Patient B

Patient B is a 50 - year old man suffering from Adenocarcinoma in the right lung at stage T4 N2 M0. He was diagnosed in June 2011 at the TMC. Patient B has a primary level of education and can only speak in Bengali. He lives and works in Kolkata. The patient came with his employer to meet with the patient navigator on the 16th August 2011. His employer assisted through the process, saying that he wanted to help as much as he could since the patient had been with him for over ten years and they had built a good relationship.

Treatment Costs

- Patient B has no previous costs from other hospitals.
- The patient's treatment plan involves radiation and chemotherapy.
- The cost of future treatment has been estimated at Rs 45, 000 in total, including Rs 6,000 for the cost of chemotherapy.

Financial Assessment

- Patient B works privately as a driver to a family living in Kolkata. This is his only source of income. He is the sole earner of the family, earning Rs 4,500 a month.
- The patient came with a certificate from the local council confirming that his average monthly family income is less than Rs 900, however this did not match with his stated monthly income.
- Patient B lives with his wife and his two sons. His sons are in private school, so if he stops earning they will have to leave school.
- The family have their own permanent property with one room, a kitchen and a toilet. The house has electricity and they have gas cooking facilities.
- The family own no other assets such as land or livestock
- The family doesn't own any form of transportation, not even a bicycle.
- They have a TV at home and the patient owns a mobile phone.

Final Decision

The patient navigator believes that this is a good case for a subsidy to be given – maybe a 50% or 75% discount. She advised that the employer provides a certificate of monthly income for the next time the patient meets with the consultant.

It was decided that the patient should receive all radiotherapy treatment for free. However, unfortunately this decision became irrelevant when the procedure was then cancelled as the patient was unable to take it.

Charges for chemotherapy were still to be decided at the time of writing.

Patient C

Patient C is a 59-year old woman from Kolkata. On June 27th 2011 she was diagnosed with an ovarian carcinoma at a government hospital. Before diagnosis, Patient C's left ovary was removed at a government hospital. When her complaints did not diminish, the doctors performed a biopsy. This biopsy revealed that the patient suffered from cancer, and she was referred to the TMC. After seeing the consultant, it was initially decided to remove the right ovary as well. However, the consultant later decided that treating with just chemotherapy would be more beneficial. Patient A used to work as a school teacher, but took voluntary retirement. She speaks Bengali, and can read and write. After high school, she completed another 3 years of education. The patient met with the patient navigator on the 11th August 2011, a day before the start of her chemotherapy. In the meeting, her husband, her brother and her 8-year old adopted daughter were also present.

Treatment Costs

- Previous chargeable treatment from the government hospital came down to approximately Rs 2,000 to Rs 3,000. These costs were only for medications and investigations, as the rest was subsidized by the hospital.
- Estimated cost of future treatment at the TMC is Rs 90,000 for six cycles of chemo (each cycle costs Rs 15,000).

Financial Assessment

- Patient C's household consists of herself, her retired husband, and their 8-year old adopted daughter, who goes to an English medium private school.
- The patient's husband worked as a government clerk, and receives a government pension of Rs 9,000 a month. He could not show his pension certificate at this point, but would bring it the next day.
- The family own a flat in a middle class area of Kolkata. The flat has two rooms, a kitchen and a bathroom.
- They have electricity and a gas cooker.
- The family don't have any other assets. They also don't have a car or another form of transport.
- They own a television, fridge and a landline.

Final Decision

The application for concession was denied.

Patient D

Patient D is a 3-year old girl with Down Syndrome, diagnosed with acute leukaemia. She was diagnosed in April 2011 at the Christian Medical Centre in Vellore, where she also had a blood transfusion. The CMC referred her to the Tata Medical Center, by telephone via the director of the hospital. The family, consisting of the patient, her mother, father and grandmother, live in Midnapur – in a village called Khejuri. The father of the girl can read and write Bengali at a basic level, and attended primary school up to class 5. The father and grandfather of the girl met with the patient navigators, whilst the mother and the patient waited outside.

Treatment Costs

- Previous chargeable treatment from the CMC is Rs 42,000; this was paid by taking out a loan (against a 6% interest rate).
- The family received no subsidies from the CMC.
- Estimated cost of future treatment at the TMC is Rs 350,000.

Financial Assessment

- The patient's father is the sole earner, and he has 3 dependents; his wife, mother-in law and the 3-year old patient.
- He works as a carpenter, on contract, and earns about Rs 2,000 a month.
- The family owns a temporary mud house. The house has 1 room and the condition is poor. They have no bathroom, no electricity, and they cook using firewood.
- They own 5 cottah of land (approx. 355 m^2), and 2 cows.
- The family doesn't own any mode of transportation.
- They do not own a TV and the father is in the possession of a mobile phone.

Final Decision

The director of the hospital told the paediatric oncologist and patient navigation that every treatment should be given free of cost to the patient.

Patient E

Patient E is a 56-year old man suffering from oral cancer at an advanced stage. He is a recently retired engineer. The patient comes from the Haldia Municipality and was referred from the Tata Memorial Hospital in Mumbai. The patient was first registered at the TMC as a private patient but then changed to the general category when he realised that he could not afford treatment at the private rate. Patient E's son met with the patient navigator on the 17th August 2011 on his behalf. His son brought with him a local MLA certificate and all bills of past treatment. The patient's son claims that they have no resources left since they have already spent so much on previous treatment and is asking for free treatment.

Treatment Costs

- Previous chargeable treatment from the Tata Memorial Hospital amounts to Rs 250,000 and the patient received a Rs 20,000 concession. The patient was treated under the private category at the TMH.
- The patient's estimated cost of treatment is Rs 35,000 for radiation and Rs 15,000 for chemotherapy.

Financial Assessment

- Patient E speaks Bengali, Hindi, and English. He can read and write in all three languages.
- The patient has a diploma in Mechanical Engineering and worked as an engineer for a central government organisation. The patient is now retired, but has a pension of Rs 3500 a month and receives Rs 2,500 a month through a savings program.
- Patient E lives with his wife and his two sons. One of his sons is in class 8 and the other has just completed an engineering degree but is jobless.
- They lease a permanent, cemented house. The house has three rooms, a kitchen and a toilet.
- The house has electricity and they have gas cooking facilities.
- The family doesn't own any mode of transportation.
- The family have no other assets and their only mode of transportation is a bicycle.
- They own a TV, a fridge and a mobile.

Final Decision

The patient navigator concludes that the patient does not belong to the poor category. However, the patient navigator believes that some subsidy should be given considering the huge amount of money already spent.

Due to the substantial expenditure, their consultant decided to give them a discount of 50% on all investigations and blood transfusions.

At the time of writing, discount on future treatment was still to be decided.

Patient F

Patient F is a 15-year old girl suffering from ovarian cancer. She has a primary level of education and her family speak only in Bengali. She was diagnosed the day before her father met with patient navigation on the 23rd August 2011. Her doctor had already waived day care charges for her chemotherapy starting on the 29th August 2011. The father tells the patient navigator that he can afford only the cost of medicines and has already invested all their savings into previous costs.

Treatment Costs

- Patient F previously underwent an operation at another hospital for which the cost was Rs 10,000.
- The doctor has advised three cycles of chemotherapy, each costing Rs 15,000.

Financial Assessment

- The patient's father is the sole earner, working as a labourer on contract. He earns no more than Rs 3,000 a month.
- There are seven members of the family - mother, father and five daughters. One of their daughters is married and no longer lives with them. The other four daughters are in school and are five, eight, thirteen and fifteen years old.
- The family owns a temporary mud house on a plot of land donated by the government. The house consists of one room where they sleep and another which they use as a kitchen. They have a temporary toilet outside in a tented area.
- The house has electricity and they use coal to cook.
- They have no land or livestock.
- The family has no car but owns a bicycle.
- They do not own a TV or any other electronics apart from the father's mobile phone.

Final Decision

The final statement from the patient navigator was that this patient was truly in need of financial help. It was her suggestion that all treatment should be given free of charge.

The patient's doctor agreed entirely with the patient navigator. The consultation charges and day care costs were waived completely. The doctor was still trying to arrange for the medical charges of chemotherapy to be waived at the time of writing.

Patient G

Patient G is a 50-year old man suffering from neck cancer. He comes from a village in the rural district of Nadia in West Bengal. He speaks only Bengali and has no level of education. The patient underwent investigations at the Christian Medical Centre in Vellore, but was then referred to the Tata Medical centre. Patient G declared he could raise around Rs 20,000 by mortgaging his land, selling assets and asking for donations from his local community. He is requesting that the rest of the treatment cost be waived. The patient met with the patient navigator on the 23rd August 2011 where he was accompanied by a neighbour, his father and son.

Treatment Costs

- Patient G spent Rs 8,000 on the investigations from the CMC. The investigation costs were given at some subsidy by the hospital and he managed to pay for the RS 8,000 through community based help.
- His treatment plan consists solely of radiation which will cost around Rs 35,000.

Financial Assessment

- Patient G is the sole earner of the household, working on contract as a labourer which brings in around Rs 3000 a month. He is currently jobless due to his illness.
- The patient lives with his wife, his father, who is retired with no pension, and three children who are all in school at a primary level.
- The patient also has another son who no longer lives with them. His son also works as a labourer earning the same amount, but has his own wife and two small children to support.
- Patient G has no Below Poverty Line card but can arrange for a Panchayat certificate to be given from the local council.
- The family own a mud house of poor condition. The house consists of just one room including kitchen. They have a common toilet outside the house in a tented area.
- They have access to a temporary source of electricity and cook using “Jalani Kath” (wood fire).
- They own one cottah of land but no livestock. Their only means of transportation is a bicycle.
- When asked if they own a TV, they replied “We don’t have a proper house to live in, how could we have a TV?” They have no electrical appliances other than the mobile phone shared between the six household members.

Final Decision

Even though the patient is only asking for a fraction of the treatment cost, the patient navigator believes that Patient G is a candidate for free treatment. Otherwise, if they mortgage and sell what little they have, they will have trouble in the future.

The patient’s doctor granted the request for a discount of Rs 15,000 on the cost of Rs 35,000 of radiation.

Patient H

Patient H is a 58-year old housewife suffering from Endometrial Adenocarcinoma (stage two). She lives about two and a half hours outside of Kolkata in the city of Kanchrapara. She was diagnosed in July 2011 at the Kalyani Hospital in Chennai, where she was then referred to the TMC. She underwent all investigations at Kalyani and was supposed to undergo an operation at the TMC, but since the hospital's theatres were not ready at the time she had to go elsewhere. Patient H's daughter met with the patient navigator on the 18th August 2011, speaking on behalf of her mother.

Treatment Costs

- Patient H previously spent Rs 95,000 on investigations and an operation at other hospitals. She was given no subsidy.
- The estimated cost of future treatment of the Brachytherapy which the doctor prescribed is between Rs 40,000 and Rs 45,000.

Financial Assessment

- Patient H's husband is the sole earner of the family. He is recently retired and has a pension of between Rs 15,000 and Rs18,000 a month. They have no savings or insurance.
- The patient's daughter is recently married, but still lives with her husband in her parent's house. She is a graduate from high school but does not work.
- There are five people living in the household, all adults – the patient, her husband, her daughter, her son and her son-in-law. The patient's son is a student and is in the second year of his MBA from a private college.
- They own a permanent house in a middle class area consisting of two rooms, a kitchen and bathroom.
- They have electricity and they use a gas cooker.
- They have no mode of transportation, and use the bus and train to get to the TMC.
- They have a TV, fridge and a mobile phone.
- They have no supporting documents.

Final Decision

The patient navigator believes that possibly a 25% discount would be fair.

The application for concession was denied.

Patient I

Patient I is a 30-year old woman suffering from Adenocarcinoma in her right upper lung. She comes from the Mullich Colony in Kolkata. The patient was previously a schoolteacher and received a higher level of education, but retired and has been a housewife for the past year. She speaks English, Bengali and Hindi and can read and write in all three languages. Patient I was diagnosed in May 2011 and was treated at a private hospital in Mumbai. The patient is registered under the private category at the TMC, but would like to switch to general. The hospital then referred her to the TMC. The patient's husband, accompanied by a friend, met with the patient navigator on the 22nd of August 2011.

Treatment Costs

- Patient I's previous costs at the hospital in Mumbai total around Rs 260,000 including the cost of investigations and chemotherapy. She was treated privately and received no subsidy.
- He doctor has recommended surgery. Future estimated cost of treatment is unknown at the time of interview

Financial Assessment

- Patient I no longer earns now that she is a housewife. Her husband works for Kolkata Police and earns a salary of Rs 15,000 a month. His father, who lives in the household, is retired and receives a monthly pension of Rs 3,000. This totals the household income to Rs 18,000 a month.
- There five people living in the house – the patient, her husband, their son, her father-in-law and her mother-in-law. Their son is four years old and is at an English medium private school.
- The patient had an insurance of Rs 100,000, which was used for her previous treatment, and her husband says that previous treatment has exhausted all their savings.
- They own a permanent house with two rooms, a kitchen and a toilet.
- They have electricity in the house and use a gas cooker.
- They have no other assets such as land or livestock.
- The government has provided them with a motorcycle for the husband's job, which is their only mode of transportation.
- They have a television, fridge and a mobile phone.

Final Decision

The final statement from the patient navigator is that Patient I can afford the treatment cost of operation. They have already paid for the best possible private care in Mumbai, so it isn't reasonable that their request for free treatment at the TMC should be granted.

The final decision from the consultants was still to be decided at the time of writing.

Patient J

Patient J is a 22-year old man suffering from a neural crest tumour .He lives in the Howrah District of Kolkata and travels to the TMC by bus. He speaks Hindi and Bengali, but has received no education so can neither read nor write. He underwent an operation the previous year at a private hospital and has been unable to work since. The patient heard about the TMC from someone who read about it in the newspaper and he came through a general consultation. He was accompanied by his employer when he met with the patient navigator on the 16th August 2011.

Treatment Costs

- Patient J incurred a cost of Rs 40,000 from previous treatment at another hospital. His community came together and collected enough money to pay for this.
- The cost of the patient's investigations at the TMC has already been heavily discounted by the consultant. Total cost incurred to the patient for investigations was Rs 1,500.

Financial Assessment

- Patient J worked in a tailor shop in Barabazar earning Rs 4,000 a month, but has been unable to work for the past year. His brother and father both work as labourers, earning Rs 3,000 a month each. Currently, household monthly income totals to Rs 6,000.
- There are eight people in the household – the patient, his mother and father, four brothers and a sister. His mother is a housewife and the rest of his siblings are below the age of eighteen.
- He has no Below Poverty Line card.
- The family rent a concrete house with a corrugated metal roof, which consists of two rooms, a bathroom and a kitchen. They have no other assets.
- They have electricity and use coal to cook with.
- The family's only mode of transportation is a bicycle.
- They have a black and white television at home, but own no mobile or landline telephone.

Final Decision

The final statement from the patient navigator was that the patient was really poor and in need of help. Any previous charges were paid for by community based help and assistance from his employer, so Patient J will certainly be unable to afford the cost of future treatment.

The doctor advised a review once treatment has been decided; however the patient has yet to appear for another consultation. All his doctors agree that a discount is necessary, however how much is still to be decided.

Patient K

Patient K is a 52-year old housewife suffering from Leiomyosarcoma, diagnosed in May 2011. She was previously treated at the Amri Hospital and the Thakurpukur Cancer Hospital, both in Kolkata. The patient lives in the Karaya District of Kolkata, a middle class area according to the patient navigator. She speaks Bengali and Hindi and is of a higher secondary level of education. Her husband and son met with the patient navigator on the 17th August 2011.

Treatment Costs

- Patient K incurred previous costs off Rs 400,000 including an operation, MRI and cycles of chemotherapy. She was treated under a general category and no subsidies were granted at either hospital.
- Her consultant has recommended an operation for tumour removal and an exploratory laparotomy. The estimated cost of future treatment is around Rs 160,000.

Financial Assessment

- Patient K has no income of her own as she is a housewife. The sole earner in the family is her husband who works as a consultant and earns around Rs 250,000 a year. This figure also includes income from a savings program.
- Four people live in the household - the patient, her husband and her two children. The patient's children are above the age of eighteen and are both students.
- The family own a flat which consists of two rooms, a kitchen and bathroom.
- They have electricity and have gas cooking facilities.
- They own neither land nor livestock, but have they own a car.
- At home, they have a television, fridge and a landline.

Final Decision

The patient navigator states that it is clear that the patient is from a middle class background. However, taking into consideration the huge amount of previous costs, the patient may not be able to afford the full cost of future treatment.

The doctor decided to waive the admission and inpatient charges.

Patient L

Patient L is a 9-year old boy suffering from cancer in his tonsils. The patient lives in Dhaka, Bangladesh. He was diagnosed mid-May 2011 at a hospital in Bangladesh. Originally they had planned to travel to Mumbai for treatment, but upon hearing about the new hospital in Kolkata, they came to the TMC. The patient had been admitted to the TMC for almost a month as an inpatient. Initially he was admitted as a private patient, but after a couple of weeks the family decided to transfer the patient to the general category. His mother was unable to accompany him due to the travelling cost and the expense of accommodation. His father met with the patient navigator on the 23rd August 2011 to discuss the possibility of a discount on their charges. His father says that he had not budgeted for the expense of a port insertion, and will not be able to continue paying for treatment until he returns to Bangladesh to arrange more money.

Treatment Costs

- Patient L previously spent Rs 10,000 on investigations at a hospital in Bangladesh. Patient L also incurred a cost of Rs 45,000 for a port insertion at another hospital in Kolkata.
- The estimated cost of future treatment at the TMC is Rs 175,000. This cost includes four cycles of chemotherapy.
- In addition to the cost of treatment, the patient will incur travel and living expenses in Kolkata. This is estimated at around RS 75,000.

Financial Assessment

- Patient L's father is the sole earner of the family. He owns a shop in Bangladesh, earning around Rs 15,000 a month. His mother is a housewife
- There are five people in the household – the patient, his mother, his father, his younger brother and his grandmother.
- They own a concrete with a tin roof which is a share of their joint family home. There is one room, a kitchen and a toilet in their portion of the house.
- They have electricity. They use coal and bricks to cook.
- The patient's father states that he has sold some of his land to pay for treatment in Kolkata. Around four cottahs of land remain.
- They have no mode of transportation, not even a bicycle.
- The family have a TV, fridge and a mobile phone.
- They have no supporting documents.

Final Decision

The patient navigator believes that he has only asked for a discount because he has seen that other patients are receiving free care. Otherwise he would have had sufficient funds to pay for treatment, particularly since they had originally planned to go to Mumbai.

The final decision from the paediatrician was that the patient should receive a 10% discount on his final bill.

Patient M

Patient M is a 42-year old man suffering from cancer in his stomach. The patient comes from the Baranagar area of Kolkata. He was diagnosed in April 2011 at Apollo Hospital in Kolkata. Patient M is a vinyl floor worker where he is exposed to chemical fumes, and the doctors have attributed this as the cause of his disease. After his diagnosis, he was referred from Apollo to the TMC. He has been treated under the general category at both hospitals. The patient has a high school level education and speaks only Bengali. He met with the patient navigator in July 2011 to discuss the possibility of free treatment.

Treatment Costs

- Patient M previously spent Rs 6,000 at the Apollo Hospital on an MRI scan.
- The treatment plan involves six cycles of chemotherapy and an operation on his stomach. The total cost of treatment will be approximately Rs 195,000, which involves Rs, 70,000 for the operation and Rs 125,000 for his chemotherapy.

Financial Assessment

- Patient M is the sole earner of the family; however he has been unable to work for the last six months. As a contracted vinyl floor worker, he earns between Rs 10,000 to Rs 12,000.
- He lives with his wife, a housewife, and his son, who is in class 6 at school.
- The family rent a permanent house in Kolkata, for the sake of work and the education of their son. The house has one room, a kitchen and a bathroom. However, they own a mud house in a village 150 km outside of Kolkata.
- They have electricity and have a gas cooker.
- They have no mode of transportation, not even a bicycle.
- The family have a TV and a mobile phone for the family.

Final Decision

The patient navigator states that Patient M is certainly in need of a discount due to the fact that he is the sole earning member of his family and has not been working for a while. She also voices concerns about the fact that he will be unable to re-join his profession even when fully cured.

The chemotherapy charges could not be discounted, but it was decided that day care charges should be waived.

The surgeon reduced the charge of the operation to a flat fee of Rs 50,000, even if the cost of the procedure increases. This was a discount of approximately Rs 20,000.

Patient N

Patient N is a 53-year old woman suffering from nasal cancer. The patient lives in an area of South Kolkata. She was diagnosed in June 2011 at another hospital in the city, where she underwent biopsies and other investigations. After hearing about the TMC from friends and family, she came to the hospital through her own accord because the quality of treatment would be better. Patient N has a secondary level of education and can speak only Bengali. Her son met with the patient navigator on the 24th August 2011.

Treatment Costs

- Patient N received free treatment from another hospital in Kolkata.
- The patient requires a surgery for the excision of her right nasal cavity and reconstruction. The estimated cost of this procedure is Rs 8,000.
- Exact medical costs are unknown, but are approximately between Rs 6,000 and Rs 7,000.

Financial Assessment

- Total household monthly income is Rs 8,000. This is made up of her husband's pension and her son's earnings from an office job.
- The patient's husband is retired and now paralysed. The couple live with just their son.
- The family own a flat in a middle class are of Kolkata. The flat has two rooms, a kitchen and a bathroom.
- They have electricity and a gas cooker.
- The family do not own any other assets such as land or livestock.
- They do not have a car or a bicycle.
- The family have a TV, fridge and a mobile phone.

Final Decision

The final statement from the patient navigator was that Patient N may not require any help.

The patient's consultant denied the application. No discount was given.

Patient O

Patient O is a 32-year old woman suffering from colon cancer. The patient lives in Midnapore, a village in West Bengal about 180km outside of Kolkata. She was diagnosed around eighteen months ago at Apollo Hospital. The patient underwent treatment, including an operation, at Apollo until they referred her to the TMC in May 2011. The cancer has now spread too much and so, with little chance of survival, she is receiving only palliative care. The patient is a graduate from high school and speaks only Bengali. Her husband met with the patient navigator on the 24th June 2011 to discuss the possibility of a discount.

Treatment Costs

- Patient O incurred previous costs of almost Rs 110,000 at Apollo Hospital, including the cost of an operation.
- The patient's treatment plan at the TMC is purely palliative, costing almost Rs 80,000.

Financial Assessment

- The patient's husband is the sole earner in the family, working as a private tutor. This amounts to a total household monthly income of Rs 2,000.
- Patient O has insurance of up to Rs 10,000.
- The patient has two twin daughters aged five. She lives with her husband, children and her mother-in-law.
- The family own a mud house of poor condition with two rooms, including their kitchen.
- They have electricity and use "Jalani Kath" (wood fire) to cook.
- The family do not own any other assets such as land or livestock.
- They do not have a car or a bicycle.
- The family share a mobile phone between them, and have no other electricals at home.

Final Decision

The final statement from the patient navigator is that the patient is very poor. She believes that Patient O is truly in need of assistance, especially since the family have two young children to care for.

It was decided by the patient's doctor that all day care charges after the date of assessment should be waived. Medical costs could not be discounted.

Unfortunately, on the 25th August the patient's husband came to patient navigation stating that they were still having to pay the day care charges. The patient navigator met with the doctor and rectified the situation.

Patient P

Patient P is a 51-year old woman suffering from cancer in her left ovary which has also spread to her fallopian tube. She was diagnosed six months ago at West Bank Hospital in Kolkata, where she also received an operation. She came to the TMC after hearing through her relatives about the possibility of subsidised treatment. The patient lives in the area Chandannagar of West Bengal, which is around a four hour journey from Kolkata. She is not educated and can speak only Bengali. Two of her sons met with the patient navigator on the 29th July 2011 to discuss the possibility of free treatment.

Treatment Costs

- Patient P incurred previous costs of Rs 40,000 at West Bank Hospital for investigations and an operation.
- Estimated costs of future treatment are Rs 90,000 for six cycles of chemotherapy.

Financial Assessment

- Two of the patient's sons are the earners for the household. They work as hawkers and generate an income of Rs 3,000 between them. Their claims were dubious and when pressed for documentation, none could be provided.
- Initially the patient's son claimed there were seven people in the household. Later, he changed this to three and then five. The number of people in the household remains ambiguous.
- The family own a permanent property, which the patient has inherited. The house consists of one room and a balcony, which they use as a kitchen. There is a toilet outside of the property in a tented area.
- They have electricity and use a stove to cook their food.
- The family do not own any other assets such as land or livestock.
- The family has no car, but share a bicycle between them.
- The family share a mobile phone between them, and have a black and white television in the home.

Final Decision

The final statement from the patient navigator was that the patient's family was not at all poor and that there was no proof to support their claims. She believed that they would be able to pay for the cost of treatment themselves.

The application for concession was denied due to the ambiguity of the patient's claims and lack of proof.

APPENDIX B. PATIENT INFORMATION LEAFLET

TATA MEDICAL CENTER

FINANCIAL SUPPORT

At the Tata Medical Center we are committed to providing first-rate cancer treatment to everyone, regardless of any financial constraints our patients may face. It is part of our mission to provide comprehensive help to all patients, be it medical, emotional or financial. We believe that a lack of funds should not be a barrier to your recovery.

Depending on how we assess your economic status, you may qualify for one of the following categories:

- **C1: patients in this category receive a 25% discount on their treatment prices.**
- **C2: patients in this category receive a 50% discount on their treatment prices.**
- **C3: patients in this category receive a 75% discount on their treatment prices.**
- **F: patients in this category receive free treatment.**

Discounts can only be given on treatment prices, and ALL patients will have to pay for their medicine costs, regardless of their category.

WHO IS ELIGIBLE?

To apply for support, you must be registered under the General category – no private patients are eligible for discounts.

Before you apply, we urge you to carefully consider whether you are truly in need of a subsidy. We regret that we are only able to provide assistance to a limited number of patients and aim to target those who are financially destitute. Therefore, our system assesses each patient thoroughly and we appreciate your transparency in this matter.

Patients who are eligible to apply:

- **Patients in the General category.**
- **Patients who live below the poverty line and barely above the poverty line.**
- **Patients who have incurred large expenditures from previous treatment.**
- **Patients who have exhausted all other options of funding.**

Patients who are NOT eligible to apply:

- **Patients in the Private category.**
- **Patients with insurance.**
- **Patients who able to raise their own funding for treatment.**

HOW DO I APPLY?

Begin your application by speaking to the team at the registration desk. They can provide you with further information and help you to make a decision that is right for you. Once you have decided to apply for concession rates, they will be able to book you an appointment with our Patient Navigation team.

Preliminary Assessment

During your first interview with the patient navigator, your financial situation will be discussed and relevant documents will be checked. Depending on how this goes, the patient navigator may require further documentation. By the end of this assessment, you should be given a preliminary category. This will be used to bill your investigation charges

Final Assessment

Once you have been diagnosed and the physician has estimated your future treatment cost, you will be asked to return for a second interview. In this assessment, the cost of treatment will be taken into consideration to arrive at a final category. This category will be used to bill all future treatment at the Tata Medical Center.

WILL I HAVE TO PROVIDE ANY DOCUMENTS?

Yes. Once you have booked your appointment with our Patient Navigation team, you will need to bring documents to support your application. Please bring any relevant documents with you to the first meeting, as this will make things easier and speed up the process of your application.

We suggest that you bring the following documents, if you have them, to your first meeting:

- BPL card

- MLA certificate
- Income Salary certificate
- A letter from your Gram Panchayat
- Pension Slips
- Any previous medical bills relating to your illness

Please note that verification of your application is essential and it is not limited to this list. Your patient navigator will ask you for additional documentation once your situation is identified.

WHAT IF CIRCUMSTANCES CHANGE?

With a disease like cancer there is always the possibility of unforeseen complications. Here, at the Tata Medical Center we understand this and can modify your category accordingly. We have an appeals process for when circumstances change and the category you are in no longer applies. There are two instances under which you will be eligible for reassessment:

1. Your household monthly income changes: if your household income decreases by a substantial amount due to your illness, you will be eligible for appeal.
2. Estimated cost of future treatment rises: if the cost of your future treatment rises by a substantial amount due to unexpected changes, you will be eligible for appeal.

You will need to provide verifiable proof of these claims in order to be revaluated by our Patient Navigation team. Please note that even if you are eligible for appeal, this does not automatically qualify you for a change into a different category. This will depend upon the revaluation with the patient navigator. To apply for appeal, speak to the registration desk and they can help you to assess whether you are eligible.

MORE INFORMATION

Should you have any further questions, please do not hesitate to ask at the registration desk.

Preliminary Assessment

TATA MEDICAL CENTER

Patient Name	Mr. John doe

Indicator		Value	Score	Maximum Score
How many people in the household are below the age of 18, elderly with no pension or a disabled adult?		Two	13	27
Average monthly income per person in the household		1000	0	13
	Total monthly income	4000		
	Number of dependents	4		
CHECK: What is the principal occupation of the household?				
Is the residence made of burnt bricks, stone, cement, concrete,jackboard/cement-plastered reeds, timber, tiles, galvanised tin or asbestos cement sheets?		No	4	4
What is the household's primary source of cooking?		Others - stove	5	17
Does the household own a television?		Yes	6	6
Does the household own a bicycle, scooter or motorcycle?		Yes	5	5
Does the household own a car?		No	0	12
Land		Less than 3	0	7
How many electrical appliances does the household own exc TV? (allowance: one mobile for household)		One	5	9
Include extra phones, radio, refrigerators and kitchen appliances, electrical fans or air conditioning, etc...				
		Final Total Score	38	100
		Patient Category	C2	

Final Assessment

TATA MEDICAL CENTER

Patient Name	Mr. John doe

	Patient Preliminary Category	C2

Indicator	Value	Score	Maximum Score
Total loss of earnings	Between 4 and 8 month's income	4	8
Cost incurred until now	Between a year's and 18 month's income	2	6
Estimated future treatment costs exc. Medicine costs	Between 8 months and a year's income	2	8
Medicine cost	Between 3 months and 6 month's	4	8
	Final Total Score	12	30
	Patient Final Category	C3	