PUBLIC SERVICE EXCELLENCE AWARD 2018

ENTRY FORM

Theme:
“Embracing Innovative Technologies and Processes for Public Service Enhancement”
ENTRY FORM

1. PROFILE OF ORGANISATION

Name of organisation: Flacq Hospital Haemodialysis Unit
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Title of the Best Practice: Health Promotion Among Dialysis Patients
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FLACQ HOSPITAL HAEMODIALYSIS UNIT

The Flacq Hospital Haemodialysis Unit, operational since August 2003 and situated at Riche Mare, Central Flacq, is an annex of Flacq Hospital. It is equipped with 33 Dialysis Machines and operates six days a week, starting from 07.00hrs to end around midnight. It is closed only on Sundays but emergency services are offered round the clock.

Haemodialysis is a treatment prescribed for patients with Chronic Kidney Disease (CKD). It is a condition whereby kidneys fail to remove waste products and toxins from the body. Therefore, Haemodialysis is a process whereby waste products, excess salt and water are removed through the blood of the patient. During this treatment the patient is connected to a Dialysis Machine whereby blood is purified by being continuously pumped through an artificial kidney (dialyser) and returned to the patient.
We cater for more than 200 patients from 42 villages of the Eastern region of the island who attend the Unit three times a week for treatment. Free transport facilities are being provided to one and all.
AREAS OF BEST PRACTICE

Organisations are requested to submit a well-defined Best Practice that has contributed to make substantial changes/improvements in management practices inspired by a combination of any of the ten pillars below. *(Pillars concerned by the practice must be selected from the list below)*

<table>
<thead>
<tr>
<th>Pillar</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td><strong>Growth and Development</strong></td>
<td>Public Sector business, programme and service delivery solutions that facilitate the inclusion of social and economic growth, keeping pace with the way society is evolving and are reflective of the diverse Nation we serve.</td>
</tr>
<tr>
<td><strong>Business Transformation</strong></td>
<td>Anticipation and responsiveness to the evolving client needs through modernisation and business transformation including the efficient use of resources and effort in developing a new workplace, culture and ethos.</td>
</tr>
<tr>
<td><strong>Innovation and Acceleration</strong></td>
<td>Making use of science, research, technology, innovation, institutional knowledge, data analytics, smart practices, shared information and knowledge for ideas generation and concept mapping.</td>
</tr>
<tr>
<td><strong>Digital Transformation</strong></td>
<td>Making use of technology, E-platforms (such as e-procurement, etc), tools and applications as an accelerator for improved quality service, efficiency, productivity, performance and results.</td>
</tr>
<tr>
<td><strong>Smart Process</strong></td>
<td>Making use of objective-oriented systems to simplify and automate business processes to be forward-thinking, rapid, responsive and efficient.</td>
</tr>
<tr>
<td><strong>Strong Governance and Institutional arrangements</strong></td>
<td>Ensuring that the right oversight and guidance for good governance, compliance, ethics, integrity, transparency, accountability, legal, operational and performance frameworks are in place.</td>
</tr>
<tr>
<td><strong>Performance</strong></td>
<td>Ensuring greater coordination and clarity of objectives, goals, roles and responsibilities and performance outcomes and providing the right tools, resources equipment and physical environment to enhance efficiency, productivity and employee commitment and motivation.</td>
</tr>
<tr>
<td><strong>Capacity Building and Capability Development</strong></td>
<td>Developing capacity, capability and learning to ensure that employees are continuously adopting and developing new skills, capabilities and technical/behavioural competencies while giving high priority to digital skills.</td>
</tr>
<tr>
<td><strong>Implementation</strong></td>
<td>Planning, design and implementation of projects, programmes and priorities are integrated so that the right people, funding, resources, logistics, infrastructure are in place and there is a shared ownership of outcomes.</td>
</tr>
<tr>
<td><strong>Customer Satisfaction: The Bottom line</strong></td>
<td>Improvement in customer experience and making public services efficient, transparent and equitable based on consultation and feedback from clients. The public and clients are at the heart of policy development, programmes, services and actions.</td>
</tr>
</tbody>
</table>
3. EXECUTIVE SUMMARY

3.1 Provide an executive summary of the Best Practice successfully implemented by your organisation. (Not more than 300 words)

Dialysis treatment started well before World War II and many improvements have been made in this field since then in order to produce better outcomes in the patients suffering from Chronic Kidney Disease. Since years this life saving treatment has evolved from a hospital-based therapy to a safe, effective and widely available outpatient procedure. Our purpose is to offer a new viewpoint that highlights ongoing advances in the safe and effective care at our Unit. Innovation and Best Practice have always gone hand in hand but innovation is not only new inventions, but also the successful incorporation of new technologies and techniques into the care delivery system.

On average a patient on Dialysis treatment takes 19 tablets a day – tablets to treat anaemia, muscle cramps, Diabetes, Hypertension, to remove excess fluid, excess salt and excess phosphates. Though dialysis treatment has therapeutic effect on Chronic Kidney Disease the patients are faced with physical, psychological and social stressors which give rise to emotions of fear, helplessness and depression.

Dialysis involves limitations in the manner of eating and drinking as well as in physical activities. In turn, the intensity of mental and somatic symptoms largely affects the Quality of Life of patients. At the same time the occurrence of the negative symptoms of this therapy (such as pain, sleep disorder, depression, the
weakening associated with fluctuations in blood pressure, and stomach ache) or limitations resulting from the illness further lead to poor *Quality of Life* and cause the illness to be perceived as burdensome with limited activities such as sports, hobbies, social activities and personal development.

At the Unit we empower and encourage our patients to live a life with coping mechanism like self-care, interpersonal skills, self-efficiency, positive response to problems and social support networks. All these, combined together, have shown to improve patients’ response to illness. At the Unit it has been found that giving sufficient attention to health-promoting behaviors such as advice on good nutrition, self-realization, stress reduction, proper sports, and fitting leisure time can improve the *Quality of Life* of patients. Ignorance of such health promoting behaviours leads to depression, poor compliance to treatment, increased hospitalization rates, morbidity and mortality and even suicidal behaviours. Hospitalizations are frequent among dialysis patients, and reducing repeated hospitalizations decrease costs and improve outcomes. Implementation of the Best Practice at the Unit has decreased the number of admissions of patients by 71%.

Health promotion has been the desired objective of all team members at the Unit. Achieving the highest level of functioning not only improved the *Quality of Life* of the patients but rewarded the staff through positive feedbacks that improvement produced. This therapeutic environment has been improved through innovative
practices, better communication and positive attitudes through systematic application of the *Clinical Guidelines for Practice* introduced at the Unit in year 2017 and reviewed last year. This innovative practice has led to more active participation of patients in their care, which is also known as **self-care**. It has been observed that when maximum health is the focus of care, activities to achieve health are part of routine clinical contact, not additional effort requiring more staff. Fundamental to achieving health is **Evidence Based Practice**, infection control, adequate dialysis, control of anaemia, good nutrition, and attention to comorbid conditions.

**3.0 MOTIVATION FOR THE ADOPTION OF THE BEST PRACTICE**

**1.1 What were the problem areas faced by the organisation and how were beneficiaries affected? (Not more than 300 words)**

**Patients and their Relatives Complaining about Ambulance Services**

There are three 15 - seated vans attached to the Unit to provide transport facilities to all patients; but those who were not able to mobilise were being brought to the Unit by Hospital ambulances which were not punctual at all. Patients had to wait for hours before they were conveyed back home after treatment. This gave rise to many complaints and the patients’ relatives who, very often, lost patience and did not hesitate to use abusive language. We requested the Regional Health Director, Dr Mrs S. Ramsewak, to make provision for an ambulance to be attached to the Unit so as to bring about satisfaction among these categories of patients and their relatives. After much effort a new ambulance has been attached to the Unit and
with good daily planning we have been able to reduce the complaint rate to zero percentage.

Patients Admitted to Hospitals with Infected Catheters

For Dialysis to take place the patient should have blood access in order to be connected to the machine and the timely creation of an Arteriovenous fistula is a more effective and more economic strategy in the long-term outcome of the
dialysis patients as it is less prone to infections and stays longer; but unfortunately, 80% of patients start treatment with catheters and present as emergency cases rather than planned cases. The Dialysis catheters are prone to infection leading to serious complications like chills, fever, loss of appetite and infection in the blood system (also known as Catheter Related Blood Stream Infection- CRBSI) and eventually leading to death.

In fact, infection is the second cause of death among dialysis patients as their immune system is compromised due to diseased condition, poor nutrition, poor hygiene due to lack of familial support and poor Quality of Life. The last thing a patient wants when going to a hospital for treatment is a hospital-acquired infection also known as nosocomial infection.

Nurses at the Unit were more evidence-based orientated but there was still some room for improvement. In year 2017, 15 patients were admitted to hospital with
infected dialysis catheters and this had a negative impact on their health and Quality of Life.

As usual the dialysis nurses play a key role in helping to prevent illness before it happens by adhering to evidence-based infection-control policies. This included keeping the healthcare environment clean and free from infection through use of strong floor disinfectant and detergent, use of new skin disinfectant, disposable catheter caps, applying antiseptic cream at catheter exit site, wearing of personal protective clothing, using barrier precautions, practising correct hand washing and using paper hand towel to dry hands. Although nurses are busy with many tasks, the time it takes to control infection is well worth the effort.

**Stressors Affecting Quality of Life of Dialysis Patients**

Although hemodialysis has a therapeutic effect on Chronic Kidney Disease, these patients encounter many physical, psychological and social stressors that are not controllable even with new technologies. Many studies have shown that the patients who are treated with hemodialysis face many stressful factors in every aspect of their life such as family problems, change in sexual function, become dependent on others for surviving, social isolation, altered body image, mental stresses, life depending on machines and suicide. All these factors lead to depression and poor compliance to treatment regime leading to frequent hospitalization with poor nutrition, hypertension, anaemia and breathlessness associated with fluid overload.
2.2 Describe the plan or strategy adopted to address the problem areas using the ten pillars at Section 2. List down and describe the main elements of the plan or strategy, focusing especially, on their innovative feature(s) and the expected or intended effects. (Not more than 500 words)

The strategy adopted by the Unit was based on Innovation and Acceleration (Pillar No 3) and Customer Satisfaction: The Bottom line (Pillar No 10)

Innovation is not only inventions but is the successful incorporation of new technologies and techniques into the delivery system. Nursing is not a static, unchanging profession but is continuously growing and changing as society changes.

The team members of the Unit wanted to bring about innovative practice through adoption of Evidence Based Practice in order to improve patients outcomes. Moving from Experience Based Practice to Evidence Based Practice required a lot of planning and training empowered with a philosophy of change.

Change is important in organizations to allow employees to learn new skills, explore new opportunities and exercise their creativity in ways that ultimately benefit the organization through new ideas and increased commitment. Preparing the team members to deal with these changes involved an analysis of the tools and training required to help them learn new skills.

Today, evidence based knowledge translation has become an imperative component for healthcare disciplines and identified as one of most important priorities of present millennium. Evidence-based knowledge translation is a simple and feasible way to bridging the gap between evidence-based knowledge and clinical practice that can be carried out through utilization of current conceptual framework.
Challenging the Status Quo

Innovation generates sustainable competitive advantage and helps to lower cost. Simply asking the question "Why?" has led to new ideas and new innovative practices that can directly impact the bottom line. The Unit wanted to benefit from changes that result in new ways of looking at customer needs, new ways of delivering customer service, new ways of strengthening customer interactions through feedback mechanism.

Use of High Surface Area Dialysers (Artificial Kidneys)

High Surface Area Dialysers have been introduced at the Unit with a view to increase toxin clearance from the blood. Studies have shown that high surface area dialyser showed a significant survival benefit of 37%. Other studies have shown that use of such dialysers reduce the risk of death from cardiac causes but also shown to have reduced the risk for Cerebrovascular Accident (Cerebral stroke) and produced good outcomes among Diabetic patients.

Increasing Treatment Time

Many studies in Europe, Australia and Japan have shown that longer treatment times per session time significantly reduce mortality among dialysis patients. It was calculated that mortality rate fell by 7% for each 30 minutes increase in session duration. At the Unit, increase in treatment time of patients not only increased clearance but also maintain good Haemoglobin level and reduce resistance to EPO (an injection given to patients to raise their haemoglobin level to optimum level). An increase in treatment is important to maintain a neutral
phosphate balance in the blood and prevent calcium depletion, itching and cardiac complications. Patients who have shown compliance to the prescribed dose of Dialysis have been found to be healthier and have good appetite (see Annex 1).

**Introduction of New Dialysis Machines**

New machines with *on line monitoring device* have been introduced at the Unit that are user friendly. These machines have software that can automatically give good clearance when the data are fed and there arises no need for frequent blood test to check pre dialysis and post dialysis blood results. All pre- and post-dialysis based methods which involve extra blood sampling induce additional costs, certain logistic requirement (chain of cold storage units) and demand stringent correctness of staff work. On line clearance has been found to be more accurate and is a good *Quality Assurance Tool* in the control of Dialysis Adequacy

**Second Home Concept**

The patients attend the Unit three times a week for treatment and each time they stay for around 5 hours with us; thus they were encouraged to believe that this place is their second home. The *décor* of our Unit is very conducive; together the warm welcome brings along a sense of belonging where all patients feel at ease and free to express their feelings, opinions and ideas. All patients are treated with respect, without any prejudice, and it is ensured that each and every patient should *leave the Unit happy* (see Annex 2). We, as advocates, give special attention to
those patients who need extra support system, extra pensions so that they can cope with their diseased conditions.

**Team Work and Organizational Culture**

New employees joining the unit have been especially valuable because they pointed to areas of opportunity for improvement and even existing employees had been encouraged to question why things are done a certain way and look for new ways to get work done faster, better and with higher levels of quality service. All team members were assigned specific tasks so that they could shoulder responsibility and display professional accountability.

Simply providing additional training to familiarize employees with organizational changes was not sufficient to motivate team members and increase knowledge. Focusing on their development in terms of emotional maturity, integrity and compassion allowed them to feel personally invested in the organizational changes. Members of staff who felt more invested in the process of practice change showed higher levels of motivation and internalized new methods of operation. This allowed for a smoother transition and helped our Unit to adopt Best Practice.

**Dialysis Treatment during Cyclonic Conditions**

Climate change, be it cyclone, torrential rain or heavy rainfall, has been perceived as an unpredictable phenomenon round the world and our island is not an exception. Dialysis patients are more concerned as ever as they are afraid whether they will receive their treatment or suffer from breathlessness due to fluid
overload or have symptoms of toxins accumulation in the body if they miss their treatment.

We have special provision during such instances as the Unit is open to provide our services to all those who turn up for treatment and one Nurse is present at the Intensive Care Unit round the clock to deal with emergency cases (see Annex 3).

**Feedback from Patients**

Patients were encouraged to provide feedback on the level of practice and care so that appropriate remedial measures could be taken within short delay. The team leader even asked the views of patients’ relatives and friends as patients might hesitate to come out with complaints for fear of blame and shame.

**Reviewing of the Guidelines for Practice**

Brainstorming sessions concerning Evidence Based Practice and patients’ satisfaction had been carried out, as usual, during the morning meetings. The major stake holders were the team leader, the Nephrologist together with his assisting doctors and all team members present on roster. All technical tasks like cannulation of veins, catheter care, care of vascular access and other non-technical issues were reviewed in minute details following which the set of guidelines for doctors and nurses had been modified with user friendly approach. The reviewing of the guidelines allowed full participation of all team members towards betterment of care delivery.

*“The Secret of Change is to Focus all Your Energy, Not on Fighting the Old, But on Building the New”*  

_Socrates_
2.0 METHODOLOGY

5.1 What were the quantitative and/or qualitative targets or key performance indicators that were set for the implementation of the Best Practice? (Not more than 300 words)

The study was set out to see how Best Practice, that is, health promotion measures like second home concept and evidence based practices, can affect care delivery among dialysis patients at our Unit. Our aim was, through dialysis, to replace the function of the failed kidneys as completely as possible with full rehabilitation of the patients with minimal cost to society. Innovative measures had been adopted to improve practice in order to satisfy patients’ needs and bring about self-satisfaction among care givers.

Sometimes we have to think that whether investment should be made in more technical innovations or in more education of patients, nurses and doctors so as to lower the hospitalization rates of dialysis patients. One aspect that was taken on board was the concept of self-care among dialysis patients. Regard to Orem’s theory, self-care is a learnable behaviour that would solve client’s general, developmental and health deviation needs. Orem wrote that self-care ability is the continuous efforts that people do themselves to continue their life, and to provide health and welfare. Healthy adults have this ability but infants, old people, patients, and disabled people cannot perform self-care. Many studies showed that there is a positive relationship between Quality of Life (QOL) and self-care ability.

Through teaching self-care the nurses at the Unit wanted the patients to accept the responsibility of their own health. Health Education had been consistently carried
out on their diet, fluid intake, medications, foot care and healthy behaviours like exercise and restriction of cigarettes and alcohol intake. In so doing the nurses wanted to act as advocates of patients and help them to adapt to their diseased conditions thus moving towards health promotion.

The Quantitative targets set at the Unit were:

(a) To reduce the number of admissions of dialysis patients with the following complications:

(i) Infected catheters

(ii) Fluid overload

(iii) Anaemia

(b) Reduce the number of blood transfusions.

(c) Raise Haemoglobin level of all patients to around 10gms.

(d) Aim a Urea Reduction Ratio of above 65% for all patients

The Qualitative targets were as follows:

(a) To assess their level of satisfaction through a set of new questionnaires.

(b) To assess our level of empathy towards our patients through observations and progress of patients.

5.2 (i) Describe in details the involvement of employees and, if any, other stakeholders in the identification of the problem areas. *(Not more than 300 words)*

Catheter care was of major concern at the Unit as losing a patient following catheter infection was perceived as a major blow to our practice. Many
brainstorming sessions had been carried out with all team members to find out ways and means to keep our patients safe.

1. The following changes in practice had been proposed to the Dialysis Coordinator at the Ministry of Health Head Quarters and were as follows:
   (i) Introduction of Chlorhexidine dermal solution (skin disinfectant).
   (ii) Use of disposable Catheter Caps.
   (iii) Introduction of Betadine Gel as antiseptic cream at catheter exit site.
   (iv) Introduction of water proof sterile dressing (local purchase)
   (v) Encourage change of sterile gloves if non sterile surface has been touched.

2. A Check List for catheter care has been introduced and is as follows (see Annex 4):
   (i) Catheter exit site care.
   (ii) Catheter connection.
   (iii) Catheter disconnection.

3. The patients and their relatives were involved in catheter care:
   (i) Requested to keep dressing clean.
   (ii) Not to soak the dressing as a damp dressing may attract infection.
   (iii) To attend hospital immediately in case of fever, chills, nausea and vomiting which are considered as early signs and symptoms of infection.

(ii) How far were employees and, if any, other stakeholders involved in problem solving and decision making? (Not more than 300 words)

In our context there has been rapid rise in the number of patients coming on dialysis treatment. More than 100 Dialysis sessions, from 07.00 hours to 23.30
hours, are being carried out daily in order to accommodate all patients. Many patients were not happy to attend late sessions and the same applied to our team members who were feeling tired. Feedback was given to the Dialysis Coordinator, through the Regional Health Director and in return a meeting was held involving all the major stakeholders concerned, that is, the Regional Health Director, the Medical Superintendent, the Nephrologist, the Regional Nursing Administrator, the Dialysis Coordinator and the Nurse in Charge. 5 additional new machines were supplied in the month of April following which the 4th shift is still on but with fewer patients.

Moreover, all the stakeholders involved ensured that all the existing Dialysis machines are on Maintenance Contract and if it happens that any machines have got technical problems, the contractors should be contacted without delay so that the machines are repaired within 24hrs as Dialysis is a life-saving treatment.

**Lack of Space in the Unit**

It was not an easy task to accommodate new machines in the Unit and bed spacing became an issue. Lack of bed spacing increases infection rate and provision was made for Dialysis Chairs which were less space occupying and motorised to suit patients’ comfort.
5.3 How was team work and team spirit fostered to achieve objectives? (Not more than 300 words)

Managing a Dialysis Unit is not an easy task. The leader needs to have people to support him as teams do not come readily formed. He has the ability to create and generate a work environment where all team members feel fully integrated in the Best Practice, respected and recognised as individuals working towards the same goals. Besides when we build teams, we are enabling others to act and lead, thus increasing their self-esteem. Regularly, we ask ourselves the following questions:

1. What are we here for? (Purpose)
2. What is important to us? (Values)
3. What are our objectives? (Task)
4. What are our strength and weaknesses? (Strategic Capability Analysis)
5. How are we going to work together? (Procedures and Processes)
6. How is it going? (Monitoring)
7. Did we achieve our purpose? (Evaluating)
8. What have we learned? (Review)

Role delegation has been a vital management skill as it is a process by which the team leader, possessing Resources, Authority, and Responsibility transfer these to other team members for the purpose of undertaking a task and creating a subsystem of accountability for the results. Delegation has been a very powerful learning tool since team members learned to do the tasks while being on the job. Role delegation is a kind of ‘on the job training’. It also acted as a powerful motivator and enabled team members to act as Nurse Leaders and it worked well when it included responsibility and empowerment. In return, it allowed room for creativity and innovation in practice.

The team leader establishes a culture of innovation so as to build a strong foundation of values (trust and collaboration) and resources that encourage it-so caregivers are engaged and know they work in an environment that appreciates their creativity and teamwork—both of which inspire innovations.
5.4 What were the measures taken to ensure that resources were used optimally? (Not more than 300 words)

Resources can be described as all the elements - Human, Physical (material) and Financial - available to ensure that our Unit meets its objectives and goals set. The Unit, in its ideal form, represents an active area which, despite heavy workload, functions smoothly with the collaboration of one and all. Activities and programs of the unit are possible when there are a variety of resources-human, physical and financial.

**Human Resources**

The Head of the Unit, the Nursing Staffs and the General Workers which include the Office and Support Staff, the Patients, the Parents, the Community and the Dialysis Coordinator from the Ministry of Health and Quality of Life, constitute the Human Resource of the unit. The Head of the Unit interacts with all these stakeholders especially the Nursing Staffs and the Patients on a regularly basis. Maintaining good relation with all team members and patients and attending to their needs are an effective way to enlist their full support and active participation in proper utilisation and maintenance of all the physical resources.
of the Unit. The team leader ensures that the team members are happy with their working environment so that they can feel motivated and valued in their role. Equal opportunities for **special request offs, overtime, vacation leaves and Casual Leaves** have been well established so that **their work life balance** is respected.

**Physical Resources**

The physical resources of the Unit include the whole infrastructure that is the building, the treatment area, beds, furniture, toilets, water tanks, equipment, dialysis machines, electronic appliances, power generator, air conditioners and dialysis consumables among others. The Head of the Unit is responsible for providing, organising and supervising the proper and utmost utilisation and maintenance of all these physical resources. It is also ensured that there is no wastage of resources.

**Financial Resources**

As Nurses are not directly involved in financial matters, the Head of the Unit verifies and certifies all the Statement of Accounts incurred in the smooth running of the service, for e.g. the Dry Cleaning bills, the Central Electricity Board bills, the Central Water Supply bills and the Waste Water Services bills. The certified bills are sent to Finance department of Flacq Hospital for payment. There are many items that are purchased through the Committee of Needs which are held every week at hospital level and chaired by the Regional Health Director.
4.0 IMPLEMENTATION OF THE BEST PRACTICE

6.1 Explain how the Best Practice was implemented. *(Not more than 300 words)*

Recent studies showed wide variation in the extent to which guidelines and other types of Best Practice have been implemented as part of routine health care. This also holds true for the delivery of dialysis treatment. The reviewed guidelines (Annex 6) were used as a powerful tool to foster Best Practice at the Unit.

The guidelines were divided into subsections and were as follows: **Physician Practices, Staff Working Climate, Facilities Characteristics and Amenities, Facility Based Health Maintenance, Technician Practices, Nursing Practices, General Dialysis Care Practices and Miscellaneous Practices**

All the 8 subsections of the guidelines were validated by the Nephrologist. The guidelines covered all the aspects of dialysis facilities.

A comparative study was carried out again last year with a view to see the effect of Best Practice on the frequency of admissions among dialysis patients taking into consideration the different causes of admissions related to care delivery at the Flacq Hospital Haemodialysis Unit.

The target population of this study was the patients who were receiving hemodialysis at the Unit. The guidelines implemented at the Unit were used to deliver standard practice to all patients and it was evidence based. The inclusion criteria were as follows: they should receive hemodialysis 2-3 times a week. We excluded patients who had less than 60 days of follow-up after initiation of dialysis (due to death, recovery of kidney function or dialysis started within 60 days of the end of the study). The 60-day criterion was used to ensure that only maintenance dialysis patients were included and to ensure that our patient population was comparable to other long-term dialysis cohorts.

All team members were fully involved in the study and were requested to take note of all activities that influenced patients’ outcomes.
6.2 How were obstacles/bottlenecks resolved? *(Not more than 300 words)*

Two greatest barriers to implement Best Practice were:

**(i) No Water - No Dialysis treatment**

120 litres of water are used per patient for treatment and it can be imagined how much water is needed for more than 100 sessions daily. We have two 10,000 litres water reservoirs for the smooth running of the services and it happened quite often we were not aware when there was no water supply from the CWA. We were left with emptied tanks and this caused frustration and disruption in the care delivery. This obstacle in the delivery of care was reported to the Energy Services Division, through the Regional Health Director, and a sensor alarm was installed which now allows us to know when water level in the tank is low and we have enough time to make provision through the CWA cisterns.

**(ii) Resistance to Change**

While change is inevitable, people handle it in different ways. Some nurses were enthusiastic and embraced the opportunity for new challenges; others were fearful or set in their ways and resisted change. Most nurses used experience-based knowledge for use in practice rather than evidence gained from research studies. They became comfortable with their way of doing things. When a major change
disrupts their familiarity, some nurses become upset. They did not want to relearn new techniques and they became barriers for standard practice.

Resistance to change had been tackled through communication and positive feedback on the benefits of evidence based practice. By creating a supportive and learning environment the Nurse Leader carried out additional training sessions to rule out uncertainty and to invite these nurses to be part of the change process. The nurses had been kept updated regularly about the plans and progress towards the implementation of change. All team members had been fully involved in the planning phase.

“There is No Good Idea that Cannot Be Improved”

Michael Eisher

6.3 State specifically how the health and safety issues and environment-friendly concepts were taken on board while implementing the Best Practice. (Not more than 300 words)

The Unit had embarked in the Implementation of the Occupational Safety and Health Management System in January 2014 with a view to ensure a Clean, Safe and Healthy environment for our patients, staffs and other stakeholders like contractors and visitors. To create a culture of safety, the Unit has built a Care Delivery System that prevents errors, learns from the errors that do occur and recognises it as a partnership among nurses, doctors, patients and family members.

A Steering Committee was set up in January 2014 under the supervision of Mr Sohun Rajkumarsing, Senior Safety and Health Officer from the Ministry of Civil Service and Administrative Reforms. Emphasis was laid on the training of all staffs whereby all Team Members attended a three day’s course in year 2014, 2015, 2016, 2017 and 2018 so that the implementation of the Occupational
Safety and Health Management System could be smooth and easily accepted and adopted.

It is ensured that all Team Members wear their Personal Protective Equipment (PPE) while handling chemicals. Emergency Exits have been affixed to facilitate evacuation in case of emergencies and there is ongoing training on use of Fire Extinguishers. The Unit has launched its OSHMS Policy on 22nd August 2014 in the presence of Mr Coolen, Director of the Occupational Safety and Health Unit and at present we are in the preparation phase (third phase) of our OSH manual which is being vetted regularly by the Officers from the Civil Service.

Water samples, for Dialysis treatment, are sent for bacterial count every month in order to ensure safe practice. Biochemical tests of the treated water are also carried as there are certain minerals that are toxic to Dialysis patients. Servicing of the Water Treatment Plant is carried out every 3 months. The water tanks are cleaned at regular intervals so as to prevent bacterial growth.

Moreover, proper hand disinfection is carried out before and after all technical procedures and sterile gloves are worn while connecting patients to machines to prevent infections. Fire drills are being carried after every 6 months and a ramp has been constructed to facilitate Emergency Exit. Moreover, all the members followed a half day training program on torrential rainfall and flooding.
6.4

Explain the monitoring and feedback process during the implementation of the Best Practice. *(Not more than 300 words)*
Monitoring the implementation of the Best Practice had been an enriching experience as it proved to be a continuous function that uses the systematic collection of data on specific targets and indicators that were set at the start of the study. The team leader had regular contact with the team members leading each strategy to make sure activities are staying on track and any barriers are being addressed. Our main objective was to measure the frequency of admissions (with different causes) among dialysis patients during implementation of Best Practice.

It had to be ensured that the monthly blood sampling was being carried out as per DOQI (Dialysis Outcome Quality Initiative- USA) guidelines in order to rule out false interpretation of blood results. Those patients whose blood clearance was below standard, that is, a Urea Reduction Ratio below 65% were referred to the Nephrologist for adjustment of Dialysis prescriptions.

All blood transfusions were being noted and fed into the computer so that transfusions could be monitored on a monthly basis. It was also ensured that all patients receive Erythrocyte Stimulating Agent (ESA) injections as per guidelines set by the Ministry of Health & QL as the patients’ Haemoglobin level has a positive correlation with their **Quality of Life.**

Feedbacks were received from team members during morning meetings and corrective measures were consistently being taken in order to stay on track and not to lose sight of the positive outcomes.
6.5 Name at least two risk factors that arose in implementing the Best Practice and explain those factors and/or risks briefly. (Not more than 200 words)

It is very easy to take for granted that all team members will accept that implementation of the best practice is ‘Good Thing’! It might not be the case when we talked about the new attendants that were posted at the Unit and the Ambulance drivers.

(i) The attendants were task orientated and paid less attention to important issues like cross infection and contamination. They resisted change through ignorance and our main objective in implementing Best Practice was to fight against infection. Close supervision and further training were consistently required to bring 100% compliance to established protocols of the Unit.

(ii) The Ambulance drivers gave a hard time to lying patients and our team members. They turned up to the Unit half an hour to one hour late after their log books had been signed by the Transport Officer. The ambulances provide services to those patients who could not walk due to certain diseased conditions. The drivers were never punctual and this caused frustration among patients and their relatives. This was a real threat to Best Practice and the matter was reported to the Head Quarters through the Regional Health Director and now a new Ambulance has been attached to the Unit.
EVALUATION OF THE BEST PRACTICE

3.1 Explain how was the evaluation of the impact of the Best Practice conducted? (Not more than 300 words)

Implementation of the Best Practice has got positive effects both on our patients and team members. It has been a major step taken to improve patients satisfaction, customer service and customer experience. We strived to deliver a service on the schedule of our patients, not just a schedule that happens to be convenient for our institution. We limited waiting time in between dialysis shifts. Scheduling of appropriate health care services is a complex issue that requires the balancing of clinical criteria and acuity; patient needs; and organizational resources, structure, and culture.

Every team member gradually knew how to handle customer complaints and concerns through use of good language and good eye contacts to show that we have a genuine interest to help the patients. Furthermore, a blame-free environment has led to improved transparency, improved systems, and, ultimately, to better results.

Introduction of a New Questionnaire

A new questionnaire (Please see Annex 5) has been devised at the Unit following certain changes in practice. This tool has a set of 12 questions and has been implemented so that patients can give their views and also come up with suggestions so that we can continue improving practice. Each month 30 questionnaires are distributed among patients and they are requested to drop them in the suggestion box next time they attended the Unit. The patients were encouraged to fill in the questionnaires in the presence of their relatives so as to
prevent bias answers and we asked them not to write their names for fear of blame and shame as they are vulnerable groups. Questionnaires were collected from the suggestion box and feedbacks given to team members. The suggestions and complaints gave rise to brainstorming sessions and group discussions so that we could come up with plausible solutions without delay.

**Assessment of Level of Empathy given to Patients**

Empathy is about emotion and caring. All new team members who joined the Unit required a special training session when it came to how to deal with dialysis patients. Dialysis patients are prone to depression due to physical, psychological and social stressors. Though there is hardly any tool to assess the level of empathy provided to patients, we carried out constant observations on certain aspects of life and these were as follows: Remarkable increase in appetite, patients having friends, patients were well groomed and well dressed, able to share and appreciate jokes, able to join work, increase in compliance to treatment, ability to perform *self-care*, positive outlook to life, requesting for change in shift to attend a wedding ceremony and sharing of sweets with all patients and team members on their birthdays. All these aspects of life showed that the patients were gaining control over their diseased condition. In a nut shell, we can say that we have been able to promote a healthy lifestyle among the dialysis patients.

**7.2 Describe the impact of the Best Practice on the level of services provided to key customers and on the environment, society.** *(Not more than 300 words)* *(Please provide data by comparing targets v/s actual performance, before-and-after indicators, and/or other types of statistics or measurements)*
The Table below shows some of our quantitative targets that had been met last year.

<table>
<thead>
<tr>
<th>ACTIVITIES</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Admissions with Infected catheters</td>
<td>28</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>Admissions with Fluid Overload</td>
<td>17</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>Admissions with Renal Anaemia</td>
<td>7</td>
<td>3</td>
<td>Nil</td>
</tr>
<tr>
<td>(patients on EPO injections)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Number of Admissions</td>
<td>52</td>
<td>28</td>
<td>8</td>
</tr>
<tr>
<td>2. Number of Blood Transfusions</td>
<td>804</td>
<td>689</td>
<td>319</td>
</tr>
<tr>
<td>3. Number of Patients with a Urea Reduction Ratio of over 65% (for patients without catheters)</td>
<td>160 out of 185 patients</td>
<td>178 out of 188 Patients</td>
<td>185 out of 195 Patients</td>
</tr>
<tr>
<td>4. Number of Patients with normal Protein level to Assess Nutrition Level</td>
<td>170 out of 202 patients</td>
<td>188 out of 205 Patients</td>
<td>195 out of 207 Patients</td>
</tr>
</tbody>
</table>

It has been found that the total number of admissions have decreased considerably by nearly 71% with the implementation of Best Practice. This implied that the
patients learned to take control of their health and were able to perform self-care.

The number of admissions with infected catheters has decreased from 15 to 4. More has done to bring down the figure but some patients were not able to keep the dressing clean, especially, when the catheters are found in the groin as urine incontinence, bowel incontinence and poor hygienic conditions favour bacterial growth and catheter exit site infection.

Admissions with fluid overload have also decreased and this reflects the level of compliance among patients. More emphasis was laid on salt intake rather than fluid intake as excess sodium intake (table salt) induces thirst. Patients were encouraged to buy a weighing scale so that they can check their weight at home. Fluid overload can also be caused by heart failure but on the whole admissions were reduced to only 4 patients during the whole year.

A decrease in the number of blood transfusions means that their haemoglobin level has been kept more stable with effective and efficient practice thus increasing patients’ satisfaction. Erythrocytes Stimulating Agents (ESA) injections are being done at regular intervals in order to boost up the Haemoglobin level of patients. Blood transfusions at the Unit decreased by more than 53% and this reflected the level of care given to patients.

The blood results show dialysis adequacy as the clearance level of most patients (95%) was satisfactory. The factors that contributed towards this achievement were as follows (i) Increase in Dialysis time

(ii) Use of high surface area dialysers

(iii) Online clearance.
Those patients whose clearance was below 65% were referred to the Nephrologist for modification of dialysis prescriptions.

95% of the patients showed good nutritional status whereas a low protein level is associated with morbidity and mortality among dialysis patients. Patients with low protein level were referred to dietician for further advice along with their relatives. “Best Practice” refers to practices that are based on the “best evidence” available from studies and research. Evidence based practice is the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients. The data also confirms that most of the patients have learned self-care and this has a positive correlation with their Quality of Life.

Impact of Best Practice on the Environment

Recycling of Plastic Containers and Used carton Boxes

We have already embarked on a green project through the recycling of used plastic containers as plastics are non-biodegradable items and cause pollution. Moreover we have diminished the use of papers in the delivery of service. Our important data are being stored in our computer system.
Impact of Best Practice on the society

The team members of the Unit are concerned with the rise in the number of patients undergoing dialysis treatment. We started with 10 machines and 63 patients on treatment in year 2003 and now we have 33 machines and over 200 patients in our Unit. Nurses at the Unit are not insensitive to this burning issue and this has prompted us to carry out awareness campaigns on health issues in our locality and secondary schools in order to sensitize students and members of the public.

We have organising Blood Donation since year 2011 with the view to help the Blood Transfusion Service to collect for the well-being of the whole population at large. It is to be noted that 21% of the blood collected round the island are being used for Dialysis patients.
8. REPLICATION TO OTHER ORGANISATION

8.1 How can the Best Practice be replicated to other organisations? (Not more than 200 words)

A Best Practice is an initiative that effectively integrates the efforts, expertise and experiences of all stakeholders in providing solutions to some of the most critical, social, economic, health and environmental problems faced by an organisation. Replication of Best Practice offers the means for mutual exchange and learning and constitutes a model for other organisations. It is therefore necessary that best practices, as models, have to be transferred to assist other institutions and units to improve their living environment and sustainability.

For an effective transfer, the interested organisations must be aware of the following:

(i) Concept of such Good Practice,
(ii) The methods used to operationalize the initiative,
(iii) The key actors or catalysts for action and change,
(iv) The opportunities that were seized upon to effect action and change,
(v) The ingredients leading to sustainability and success.

A strategic planning has to be worked out so that the replication process is implemented successfully with the following steps:

(i) The replicating organisation shall undergo site visits to the model organisation
(ii) During the visit a workshop on Best Practice has to be carried out by the model organisation. The workshop has to be attended by all Head of Departments of the replicating organisation.

(iii) The workshop should comprise of 3 parts:
(a) An overview of what is Best Practice
(b) Appreciation of the exemplary Practice: Seeing and Appreciating
(C) Establishing means of implementing the Best Practice in the replicating organisation.

(iv) Coaching and tutorial services should be given to the team members of the replicating organisation.

(v) A work plan has to be set up that will facilitate the implementation of the Best Practice so that it can be well sustained.

(vi) Actual implementation of the Good Practice.

(vii) Monitoring and Evaluation.

8.2 Based on your organisation’s experience, name up to three factors which you consider as indispensable to replicate the Best Practice. (Not more than 200 words)

(i) Leadership and Team Spirit
The Unit replicating the Best Practice should have a set of characteristics and properties unique to its own, that is, the culture of the Unit. In order to maintain and sustain this culture the Head of the Unit has to empower all the Team Members through Distribution of Leadership. In fact distributive leadership and Nurses as leaders are not new concepts in our field. It is now only that their importance is being recognised and acknowledged. Each nurse of the Unit should be assigned a specific task and this will allow full participation of the team members in the management of the Unit. Distributive Leadership enhances the
self-esteem of the team members thus making the service delivery more effective and more responsive to the demands and expectation of our patients.

(ii) Good Communication Channels

Communication plays a fundamental role in all facets of any business. It is therefore very important that both internal communication within the organisation as well as the communication skills of the employees are effective. In fact, communication forms the pillar of an organization and it can bring the following positive outcomes:

1. Builds and maintains relationships
2. Facilitates innovation
3. Builds an effective team
4. Managing employees
5. Contributes to growth of an organisation
6. Ensures transparency – This helps in building trust among team members

(iii) Strategic Planning for replication of Best Practice

Replication of Best Practice also requires a good strategic management process as it starts by establishing the actual position of the organisation and is about getting from Point A to Point B more effectively, efficiently, and enjoying the journey and learning from it. Part of the journey is the strategy and part of it is execution. Having a good strategy dictates ‘how’ you travel the road you have selected and effective execution makes sure you are checking in along the way.
REFLECTION

The first study carried out in year 2017 paved the way for the second one carried out last year. All this has been possible with the collaborative work of one and all. It has provided us the opportunity to grow in our profession and allowed us to view our practice from a new perspective taking into consideration the biopsychosocial factors that influence care and treatment. To conclude we can say that, in so doing, we did not stay in our comfort zone but we moved out to turn every challenge into a new learning experience and set new goals for the provision of better care to our patients and to the society at large.
ANNEX 1
Shortened Dialysis time does eventually harm the individual. It puts additional stress to an already weakened body, which can lead to shorter life expectancy. Studies have shown that an increase time by 30 minutes may improve life expectancy by 7%. The Table shows shortening of treatment time from 5 minutes to 30 minutes per session (3 sessions per week).

<table>
<thead>
<tr>
<th>Minus / Session</th>
<th>Week</th>
<th>Month</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 minutes</td>
<td>15 minutes</td>
<td>60 minutes (1 hour)</td>
<td>720 minutes 12 hours/0.5 Day</td>
</tr>
<tr>
<td>10 minutes</td>
<td>30 minutes</td>
<td>120 minutes (2 hours)</td>
<td>1440 minutes (24 hours/ 1 Day)</td>
</tr>
<tr>
<td>15 minutes</td>
<td>45 minutes</td>
<td>180 minutes (3 hours)</td>
<td>2160 minutes (36 hours/1.5 Days)</td>
</tr>
<tr>
<td>20 minutes</td>
<td>60 minutes</td>
<td>240 minutes (4 hours)</td>
<td>2880 minutes (48 hours/2 Days)</td>
</tr>
<tr>
<td>25 minutes</td>
<td>75 minutes</td>
<td>300 minutes (5.42 hours)</td>
<td>3600 minutes (60 hours/2.5 Days)</td>
</tr>
<tr>
<td>30 minutes</td>
<td>90 minutes</td>
<td>360 minutes</td>
<td>4320 minutes (72 hours/3 Days)</td>
</tr>
</tbody>
</table>
ANNEX 2
RICHE-MARE, LE HAVRE DE PAIX DES PATIENTS

Une usine, somme toute banale, sise sur une route latérale, dans la région de Riche-Mare. Au premier abord, rien ne laisse présager que des infirmiers y travaillent. Ces hommes et femmes mettent tout en œuvre pour que les patients dont ils ont la responsabilité puissent sortir de leurs sessions de dialyse avec le sourire.

Chaque jour, plus d’une centaine de dialysés y effectuent leurs sessions, longues de quatre heures. À l’instar de ce septuagénaire qui souffre d’insuffisance rénale depuis plus de 22 ans. Il ne se départit pas de son sourire. «Le secret de ma longévité, c’est d’avoir une vie saine. Je ne fais pas d’excès.» Il remercie aussi le personnel. Ce centre de dialyse a été plusieurs fois primé en tant que centre le plus amical et le plus propre. «Nous faisons en sorte que cela reste toujours propre. Les draps qui sont souillés sont acheminés vers la blanchisserie quatre fois par jour, après le passage de chaque patient», confie un responsable. Pour lui, ces dialysés ne sont pas juste des patients mais des membres de la famille. «Ils passent beaucoup de temps avec nous. Et nous devons leur rendre la vie moins pénible.» Pour lui, le plus important, c’est l’encadrement. «À plusieurs reprises, des patients m’ont demandé s’il ne restait pas un morceau de pain pour qu’ils puissent l’emporter chez eux. Les membres de leurs familles les ont délaissés et ils ne savent pas vers qui se tourner.» En tout cas, à Riche-Mare, l’indifférence n’a pas sa place.
ANNEX 3
COMMUNIQUE TO ALL PATIENTS

CYCLONE WARNING CLASS I IN FORCE IN MAURITIUS

DIALYSIS UNIT – OPEN   ALL 4 SHIFTS CARRIED OUT   TRANSPORT PROVIDED

ALL PATIENTS ARE REQUESTED TO TAKE THE FOLLOWING PRECAUTIONS;

1) LIMIT SALT AND FLUID INTAKE
2) NOT TO VENTURE OUTSIDE

CYCLONE WARNING CLASS II IN FORCE IN MAURITIUS

DIALYSIS UNIT – OPEN   ALL 4 SHIFTS CARRIED OUT   TRANSPORT PROVIDED

ALL PATIENTS ARE REQUESTED TO TAKE THE FOLLOWING PRECAUTIONS;

1) LIMIT SALT AND FLUID INTAKE
2) NOT TO VENTURE OUTSIDE

CYCLONE WARNING CLASS III IN FORCE IN MAURITIUS

DIALYSIS UNIT – OPEN FOR EMERGENCY CASES ONLY   NO TRANSPORT

ALL PATIENTS ARE REQUESTED TO TAKE THE FOLLOWING PRECAUTIONS;

1) LIMIT SALT AND FLUID INTAKE
2) NOT TO VENTURE OUTSIDE
3) PATIENTS SHOULD CALL AT THE UNIT IN CASE THEY DO NOT FEEL WELL
4) PATIENTS SHOULD ATTEND UNIT FOR TREATMENT BY OWN MEANS AND TO BE ACCOMPANIED BY A RELATIVE

TORRENTIAL RAIN – PRECAUTIONS SAME AS CYCLONE WARNING CLASS II

DIALYSIS UNIT – OPEN   ALL 4 SHIFTS CARRIED OUT   TRANSPORT PROVIDED

THE SERVICE WILL BE PROVIDED AS FAR AS THE ROAD IS SAFE
Checklist: Haemodialysis Catheter Exit Site Care

☐ Wear mask and remove dressing

☐ Perform hand hygiene

☐ Put on sterile gloves

☐ Apply skin antiseptic

☐ Allow skin antiseptic to dry

☐ Do not contact exit site (after antisepsis)

☐ Apply antimicrobial ointment*

☐ Apply dressing aseptically

☐ Remove gloves

☐ Perform hand hygiene
Checklist: Hemodialysis Catheter Connection

☐ Wear mask and perform hand hygiene

☐ Wear Sterile Gown and put on sterile gloves

☐ Disinfect catheter with Chlorhexidine Solution

☐ Scrub Catheter hub with antiseptic

☐ Remove caps and connect 10 mls syringe to ports and remove heparin lock

☐ Check patency of catheter – both ports

☐ Flush catheter with heparinized saline

☐ Connect catheter to blood lines aseptically

☐ Remove Gloves and Perform hand hygiene
Checklist: Haemodialysis Catheter Disconnection

- Wear mask
- Perform hand hygiene
- Put on sterile gloves
- Clamp the catheter
- Disconnect catheter from blood lines aseptically
- Scrub catheter hub with antiseptic
- Allow hub antiseptic to dry
- Attach new caps aseptically
- Apply dressing
- Remove gloves and perform hand hygiene
ANNEX 5
### FLACQ HAEMODIALYSIS UNIT

**PATIENT’S FEEDBACK FORM** (Please tick as appropriate)

<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Are you well greeted at the Unit?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Is the waiting area always clean?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Is the clinical area always clean and tidy? (Flooring, Dialysis chairs, beds, bed sheets, pillow cases)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Are the toilets always clean?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Were you comfortable during the treatment?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Are you satisfied with the treatment?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Are the nurses compassionate and caring?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Do you receive your snack meal on time?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Do you wait too long before connection?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Do you wait too long to be conveyed back home?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Are the vans or the ambulance clean and tidy?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Do you have any complaints or suggestion?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ANNEX 6
- Verbally inform staff when writing new orders
- Regularly explain rationale of new orders with staff
- Actively inform the staff early on when a developing problem is first detected in a patient
- Actively inform the staff when a hospitalized patient is being discharged with plans to resume treatments
- Actively inform the staff when a dialysis facility patient has been hospitalized

- Sit down when interviewing patients in the dialysis facility
- Pull privacy curtains or screens, if available, when interviewing and examining patients in the dialysis facility
- Visit patients at least twice weekly in the dialysis facility (Mondays and Tuesdays)

- Conduct and document foot examinations in all diabetic patients during facility visit
- Conduct and document cardiovascular examinations in all dialysis patients during facility visit
- Update patient medication list on a timely basis
- Address and update patient goals, values, and advanced care plans
- Provide a discharge summary in time for the patient’s first post-hospitalization dialysis session
- Actively and consistently attend and contribute to patient care conferences
Physician Documentation Practices

- Consistently sign care plans on a timely basis
- Provide a timely history and physical (H&P) in the chart for all patients new to the dialysis facility
- Provide H&Ps on a timely basis for all existing dialysis patients
- Document advanced care plans in patient charts

Staff Working

- Actively promote teamwork among staff members
- Actively discourage and correct alienation between staff members
- Promote mutual respect for work product among staff members
- Actively acknowledge staff members good work
- Build mutual trust among staff members
- Promote climate of fairness among staff members
- Ensure all staff members feel like an integral part of the team
- Actively discourage and correct blaming between staff members
- Encourage and support admissions of fault in lieu of climate of denial and/or shame
Facility Layout and Positioning

- Ensure that nurse workstations face towards—not away—from patients
- Place scale in location where it is easy for staff to view and monitor patient weigh-ins
- Detach adhesives from the cannula to avoid injury
- Maintain sharps containers within an arm’s length of patient chair, and ensure containers stay <50% full
- Ensure that privacy curtains or screens are readily available if needed
- Provide comfortable break room for staff members
- Provide a private room to allow meetings with patients when they are not on their dialysis run

Facility Appearance

- Maximize amount of natural light in treatment room
- Display art, pictures, or other decorations and aesthetics on walls of treatment room and reception area
- Emergency trolley easily accessible
- Maintain floors, tables, and other furnishings clean and free of noticeable litter
- Post signs throughout facility reminding staff to wash their hands
- Provide no-touch disinfectant dispensers throughout the main treatment room
- Post notice of patients’ rights in an area that is easily visible to patients
- Post “Patient Star Board “or other patient recognition display in an area that is easily visible to patients.
**Facility Layout and Positioning**

- Ensure that nurse workstations face towards-not away-from patients
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- Ensure that privacy curtains or screens are readily available if needed
- Provide comfortable break room for staff members
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**Facility Characteristics and Amenities**

- Maximize amount of natural light in treatment room
- Display art, pictures, or other decorations and aesthetics on walls of treatment room and reception area
- Emergency trolley easily accessible
- Maintain floors, tables, and other furnishings clean and free of noticeable litter
- Post signs throughout facility reminding staff to wash their hands
- Provide no-touch disinfectant dispensers throughout the main treatment room
- Post notice of patients’ rights in an area that is easily visible to patients
- Post “Patient Star Board” or other patient recognition display in an area that is easily visible to patients.
Facility Patient Amenities / Services

- Provide extensive collection of quality patient informational brochures
- Provide adequate televisions for all patients
- Provide collection of quality educational videos for patients to view during dialysis runs
- Provide formal facility tours for all new patients—preferably before beginning dialysis when possible
- Offer patients formal intradialytic exercise programs

Facility-Based Health Maintenance

Health Maintenance Practices

- Offer patients formal programs in smoking cessation
- Offer patients formal program in obesity management
- Offer patients formal programs in diabetes management
- Employ formal process of monitoring and tracking immunizations
- Employ formal process of monitoring age-appropriate cancer screening status
- Formally screen for and document depression as part of routine care
- Employ formal of monitoring and tracking lipid panels in all patients
- Employ formal process of monitoring and tracking hemoglobin A1C levels in diabetic patients
- Encourage nurses to conduct routine foot examinations in diabetics
- Encourage nurses to routinely evaluate for anginal symptoms (e.g. chest pain) in all patients
- Discuss health maintenance issues as part of multidisciplinary care conferences
<table>
<thead>
<tr>
<th>Cannulation Practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Use tourniquet with every cannulation attempt</td>
</tr>
<tr>
<td>- Assess bruit and thrill before every cannulation attempt</td>
</tr>
<tr>
<td>- Wear mask with each cannulation attempt</td>
</tr>
<tr>
<td>- Apply Chlorhexidine solution with circular or stripe technique (i.e. non “scrubbing” technique) before every cannulation attempt</td>
</tr>
<tr>
<td>- Allow Chlorhexidine solution to dry for minimum of 1 minute before cannulation attempt</td>
</tr>
<tr>
<td>- Wash hands immediately before every cannulation attempt</td>
</tr>
<tr>
<td>- Put on new gloves before making any contact with cannulation site</td>
</tr>
<tr>
<td>- Following application of Chlorhexidine solution to fistula, no other contact at site prior to insertion of needles</td>
</tr>
<tr>
<td>- If cannulation site is inadvertently contaminated through contact, aseptic procedure must be repeated</td>
</tr>
<tr>
<td>- Wear gown for all catheter cannulation attempts</td>
</tr>
<tr>
<td>- Clean catheter ports with chlorhexidine solution before all catheter cannulations</td>
</tr>
<tr>
<td>- Monitor date of catheter insertion</td>
</tr>
<tr>
<td>- Discourage patients from handling catheter dressing</td>
</tr>
<tr>
<td>- Use disposable caps and discard used caps</td>
</tr>
<tr>
<td>- Teach patients about signs and symptoms of Infected catheter</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Miscellaneous Technician Practices and Policies</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Use tourniquet with every cannulation attempt</td>
</tr>
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<tr>
<td>- Use disposable caps and discard used caps</td>
</tr>
<tr>
<td>- Teach patients about signs and symptoms of Infected catheter</td>
</tr>
</tbody>
</table>
Wipe down chairs with alcohol after each shift
Drape chair with clean sheet between before all patient uses
Hire new dialysis technicians when needed
Employ formal policy to perform random and blinded reviews of the technician performance
Encourage new dialysis technicians to use well developed veins to practice their cannulation techniques
Encourage dialysis technician to attend seminars and workshops

Ensure to hire nurses who have 5 years minimum experience
Hire new nurses to “test them out” on a trial basis, and later convert them to full time if warranted
Employ formal policy to perform random and blinded reviews of nursing staff performance
Provide nurses with formal training in leadership skills
Require that new nurses undergo a training of 6 weeks before being posted on roster
Encourage all nurses to round right along with physicians
Prepare and administer all injectables prior to end of dialysis run-preferably (ESA injections and Iron Sucrose)
Conduct seminars for patients on a regular basis
Address immunization status of all dialysis patients
Address age-appropriate cancer screening as part of treatment in stable dialysis patients
Address depression screening as part of treatment in stable dialysis patients
Address cardiac care (e.g. anginal symptoms, heart failure symptoms, need for ECHO) as part of treatment
Address formal psychosocial assessments as part of treatment in stable dialysis patients
Address goals, values, and advanced directives as part of treatment in all dialysis patients
Perform medication reconciliation as part of treatment in all dialysis patients
Address transportation needs and other barriers to compliance as part of treatment in all dialysis patients
Listen attentively to patients’ complaints and suggestions
Resolve Nurse-Patient conflicts without blame game
Develop empathy for all patients

Offer after-hour capacity to treat patients who need longer sessions or unscheduled ultrafiltration
Use dialysis machines that include “online clearance” measurements
Use dialysis machines that allow continuous blood volume monitoring
Maintain an explicit policy that sets a maximum ultrafiltration rate
Dialysis staff enhancement Practices

- Staff or appoint a dedicated anemia manager
- Staff a full-time physician assistant or nurse practitioner
- Prepare an educational “topic of the month” for each month
- Allow days off so staff can attend off-site educational conferences, programs, and meetings
- Encourage all staff members to participate and contribute in clinical policy development for the facility
- Provide formal mechanism to elicit staff input regarding educational topics of interest
- Offer equal opportunities for all nurses—days off, overtime, Casual Leaves and Vacation Leaves
- Create opportunities for continuous professional development

Dialysis Scheduling Practices

- Schedule patients as per shift system
- Develop and implement formal systems to rapidly and reliably correct short-staffing situations (Bank sessions)
- Develop and implement formal systems to aggressively and consistently track-down reasons for patient “no shows”
- Reduce waiting time
Enforce policy that prohibits from eating while receiving dialysis.

Enforce policy that patients cannot be taken off the dialysis machine until the staff checks that all prescribed injectable medications were appropriately delivered.

Maintain low threshold to “fire” patients who are consistently disruptive, combative, or threatening to other patients and staff.

Develop and implement system to actively monitor patients’ progress when hospitalized, so that dialysis staff is optimally up-to-date when patients are discharged back to the facility.

Standardize the day on which routine labs are ordered.

Maintain a policy to actively evaluate need for erythropoietin dose increase in patients just returning from the hospital.

Allow physicians to write standing orders.

Monitor hematocrit at least twice monthly in stable dialysis patients.
Information system Practices

Availability of rapid and effective technical support
Able to efficiently report all the information necessary to track and monitor any given patient
Able to provide adequate statistical summaries to study various groups of patients
Staff is well-trained on the functions that the computer systems have to offer

Dietician Practices

Perceived characteristics of “best practice” dietician
Optimally knowledgeable about available resources for patients
Outstanding educator and communicator
Able to perform effective psychosocial assessments
Willing to spend extra time with any patient who needs it
Able to tailor dietary counseling to individual patients
Understands how to address cultural dietary issues when providing dietary counseling to patients
Avoids being too judgmental when patients fail to follow his/her advice
Has panel that does not exceed 50 patients
Perceived characteristics of “best practice” social worker
Optimally knowledgeable about available resources for patients
Outstanding communicator
Able to perform effective psychosocial assessments
Willing to spend extra time with any patient who needs it
Actively involved in arranging transportation for patients
Strong patient advocate
Has panel that does not exceed 100 patients

Perceived characteristics of “best practice” dialysis manager (Medical Director/Nurse Manager)
Outstanding leader
Actively involved in daily operations
Consistently fair when deliberating staff conflicts
Sufficiently empowered to enforce staff policies
Aggressively solves problems
Actively listens to staff concerns and comments
Allows easy and open access to staff members to discuss issues
Puts patient needs before financial needs