DESIGNING MONITORING MECHANISM

BACKGROUND:

Health Economics Unit (HEU) of MOHFW has set up a "Quality Improvement Secretariat" to introduce and monitor "Quality of care Improvement" initiative. The main objective of this initiative is to improve health care quality from present status to a targeted level applying 5S-CQI-TQMapproach throughout all public and private hospitals of all tiers.

QI Strategic plan

A Strategic Plan on Quality Improvement has been developed for implementing quality improvement activities. It sets the basis for a focused and coordinated framework for guiding QI activities both for Govt. and Non-Govt. health facilities. It will equally significant to the decision makers and to the health providers as it is designed to guide their actions accordingly. The plan has 8 strategic objectives (5 core and 3 supportive) with 39 intermediary objectives.

Now that the monitoring quality of health care activities at health facilities are crucial to improve quality. This document therefore tries to attempt to develop a generic monitoring system that could be applicable commonly for a health facility irrespective of its size, nature, location or specialty.

As we proceed to design monitoring system it is important to identify patients` basic first line expectations towards a hospital. Broadly, a patient and their attendants expect few important things as primary. These are very much pivotal to create satisfaction to them. Such as:

1. While they enter into a hospital building they expect welcoming behavior from hospital employees, right from security guard to crowd controller to paramedics to nurses to physicians to hospital administrators etc,
2. They like to see Clean environment, no bad smell, no cluttered things, everything tidy etc
3. They will be cured without adverse effect,
4. They expect the cost of the services will not be a burden for them

These are practically the basics but there are other things ,for example, privacy, confidentiality, infection control, knowing about his/her health condition, right to choose service (Informed consent) etc that contribute largely to produce patient satisfaction.

Further to these there are some ancillary things too to contribute final quality of **Clinical Cares** like laboratory services, supply services, laundry services, diet services, referral services etc. that directly or indirectly influence patient satisfaction.

This analysis logically lead us to conclude that we have to consider some basic things as **primary** and rest others as **secondary** that comes afterwards.In other words as Primary**'quality issues' and** secondary **'Quality issues'.**

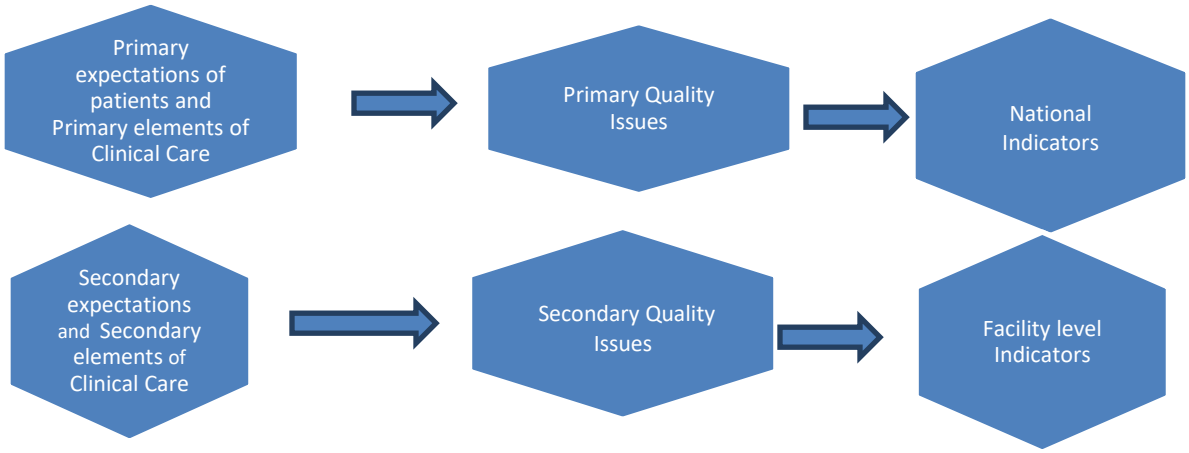
Now to design a nationwide monitoring system we will have to MONITORthese quality issues (both primary and secondary) and to design a mechanism to operationalize it.

In regards to quality issues we will designate Primary quality issues as national and thus to identify **national quality indicators** on these. Rest of the quality issues will be considered as secondary and the indicators on these are to be used at facility level, i.e **Facility level indicators.**

So a facility will have obligation to take QI program to address primary quality issues and will monitor related indicators using TOOLS given by QI Secretariat. As far as secondary quality issues are concerned every facility will have flexibility to address and thereby will be monitored themselves using standard monitoring tools given by QI Secretariat.However, monitoring will be done both internally and externally by INTERNAL monitoring team and by EXTERNAL monitoring teams as well. We will explain this elaborately later in 'Monitoring mechanism part'.

Therefore, at a glance the monitoring system will have:

1. **National indicators:** National indicators are common & general indicators. All health facilities (primary, secondary and tertiary)must stick with these, be it public or private, acrossthe country.
2. **Facility level indicators:** These indicators are mainly facility specific other than national indicators. Facilities will have freedom to choose their indicators as fit for their QI initiative out of a list of indicators provided by QI Secretariat.



NATIONAL INDICATORS

Some primary/major quality issues relating **patient satisfaction** could be like:
1. Interpersonal relationship (Courteous behavior) i.e dealing with dignity, kindness, respect, compassion **2. Cleanliness** i.e Clean environment, nothing cluttered, all tidy, no bad smell, clean bed cover, pillow , no hospital wastes etc **3. Waiting time:** Reasonable time to see doctor, getting done lab test, getting medicine/ treatment started etc **4. Privacy :** Curtain use, portioned area , maintaining secrecy etc

Some Secondary quality issues relating **patient satisfaction** could be like:
1. Knowing health condition: 2. Sharing treatment plan 3. Freedom to choose service 4. Low cost 5. Less out of pocket expenses 6. Amenities (Sitting arrangement while waiting) 7. Fan 8. Diet 9. Water supply 10. Laundry facility for patients 11. Wash drying facility 12. Clean functional toilets 13. Referral 14. Attending patients as care taker

Clinical Care

Some Primary/major quality issues relating **Clinical Care** could be like:
1. **Effectiveness:** Patient final expectation is to be cured. 2. **Accuracy of lab & other diagnostic tests:** Accurate and timely lab test result is important in making correct diagnosis and treatment. It is therefore an important hospital service. 3. **Patient safety:** Adverse events like Medical/ Surgical error, unsafe blood transfusion, hospital acquired infections, drug reaction, drug addiction, disabilities, getting new disease etc

4. **Supply of emergency medicines:** Uninterrupted supply of emergency medicines can save significant number of lives.

Some Secondary quality issues relating **Clinical Care** could be like:
1. Human resource with skills 2. Supply of drugs, lab reagents, diagnostic aids, consumables etc 3. Laundry services **4.** Patient record keeping and retrieval

Once we agree with PRIMARY and SECONDARY quality issues in regards to PATIENT SATISFACTION we
are able to identify indicators easily as followings:

Sl.No.	Primary quality issues	National indicators/KPI
1.	**Interpersonal relationship (Courteous behavior)**	% of patients were greeted, received cordially, dealt with kindness and compassion
2.	**Cleanliness**	% of hospitals have clean environment (Clean premises, Floor, wall, ceiling, no waste other than bins, usable toilet) with Sort, Set and Shine practice
3.	**Waiting time**	% of patients had to wait reasonably (OPD= 1 hr, IPD admission plus treatment initiative= 1 hr, Emergency= 20 minutes)
4.	**Privacy**	% hospitals have privacy arrangements % of patients examined physically maintaining privacy

Sl.No.	Secondary quality issues	Facility level indicators
1.	Briefing health condition and Sharing treatment plan	% of patients were briefed on condition and shared treatment plan
2.	Freedom to choose service	% of patients given freedom to choose service (Consent form etc)
3.	Low cost (Less out of pocket expenses)	% of patients perceived the service as low cost/ felt out of pocket expenses less in amount
4.	Sitting arrangement while waiting	% of patients could sit while waiting for service
5.	Fan	% of hospitals have 'Fans' in waiting area % of patients enjoyed 'Fans' while waiting
6.	Diet	% of IPD patients get good diet

7.	Water supply	% of hospitals have water sources at sufficient level % of hospitals have safe drinking water source % of patient could use sufficient water for drinking and other purposes(Washing, showering)
8.	Laundry facility for patients	% of hospitals has washing and drying facilities of their belongings % of patients could use washing and drying facilities
9.	Clean functional toilets	% of hospitals has clean functional toilets for patients (running water, soap, Mug etc) % of hospitals has clean functional toilets for providers (running water, soap, Mug etc) % of patients could use toilets in need
10.	Referral	% of patients were referred with a referral slip and coordinated of phone % of referral patients were received honoring referral slips from outside facilities
11.	Attending patients as care taker	% of hospitals have 'rules' for staying with IPD patients as caretaker % patients satisfied with the 'rules' of keeping attendants

Likewise for **clinical care,**indicators could be :

Sl.No.	Primary quality issues	National indicators/KPI
1	**Effectiveness**	% of patients cured (IPD) % of patients cured (OPD)
2	**Accuracy of lab & other diagnostic tests**	% tests found correct in counter test % test found concordant with reference lab/diagnostic test
3	**Patient safety**	% patient had adverse effect/ medical or surgical error
4	**Supply of emergency medicines**	Number of times the hospital has gone run out of emergency medicine of any type

Sl.No.	Secondary quality issues	Facility based indicators
1.	Human resource with skills	% of HR with skills available for department/ subject/ specialty % of hospitals have HR with skills
2.	Supply of drugs, lab reagents, diagnostic aids, consumables etc	-Number of times the hospital has gone run out of major drugs of any type [* A list of major drugs to be prepared] -Number of times the hospital has gone run out of major lab reagents of any type [* A list of major lab reagent to be prepared] -Number of times the hospital has gone run out of

		major diagnostic aids of any type [* A list of major diagnostic aids to be prepared] -Number of times the hospital has gone run out of major consumables aids of any type [* A list of major consumables to be prepared]
3.	Laundry services	% of wash found dirty out of randomly selected cloths in the stock
4.	Patient record keeping and retrieval	% of patients records found complete out of randomly selected records % of patient records could be retrieved

MECHANISM OF MONITORING

Being aware that we have national and facility level indicators we now need to determine how best we can monitor them.

As we know quality improvement process always needs to be associated with constant and close monitoring at all levels and at frequent intervals. It is better to have monitoring both **internally and externally.**

Internal:

Internal monitoring will mean monitoring to be done by the hospital Quality Improvement Committee (QIC) members themselves. They will use monitoring tools developed by QI Secretariat, HEU, MOHFW. They will summarize the data and will report to higher level and also make presentation at progress review conference.

External: Periodic monitoring

A third eye view is important as long as 'Quality' is concerned. External monitoring would be done by teams of three kinds like:

a. District QI Monitoring Team
b. Divisional QI Monitoring Team
c. National QI Monitoring Team

District QI Monitoring Team: District QI Committee members will comprise this team with a scope of Co-option.

Divisional QI Monitoring Team:District QI Committee members will comprise this team with a scope of Co-option.

National QI Monitoring Team: A 15-20 member pool of health experts, public plus private

	Categories of Facilities to oversee	
Committees	**Public**	**Private**
National QI Steering committee (N-QISC) National Quality Improvement Committee(NQIC) QI Secretariat(QIS)	All categories of hospitals	All categories of hospitals
National QI Technical committee(N-	-Specialized hospitals	- Specialized Hospitals

QITC) National Task force Committees(N-TFC)	-Medical College hospitals -District hospitals -Upazila hospitals	- Medical college hospitals -Private hospitals/Clinics
	-MCWCs -Upazila Health Complex (MCH-FP Services) -UHFWCs	FP services from private hospitals/clinics
Divisional Quality Improvement committee (Div. QIC)	-Specialized hospitals -Medical College Hospitals -District Hospitals -MCWC -Upazilla Health Complex -UHFWC	-Specialized hospitals -Medical College Hospitals -Private hospitals/Clinics
District Quality Improvement Committee (D-QIC)	-Specialized hospitals -Medical College Hospitals -District Hospitals -MCWC -Upazilla Health Complex -UHFWC	-Specialized hospitals -Medical College Hospitals -Private hospitals/Clinics
Upazilla Quality Improvement Committee (U-QIC)	-Upazilla Health Complex -UHFWC	-Private hospitals/Clinics

Monitoring Methods

This tells about the ways of monitoring. A combination of methods needs to be used to capture interventions/ indicators of various natures or characters.

- Assessment by Observation/Inspection
- Interviewing providers
- Records review
- Exit interview
- Focus group discussion (FGD)
- Random sampling of Input and output
- Supportive supervision
- Third-party assessments(Survey)
- Progress review conference

Assessment by Observation: Quality of INPUTs and PROCESS would be assessed by developing CHECKLIST on these. The MONITOR will observe inputs (HR, Equipment, Logistics, Infrastructure, Technology) and process (Plan-do-check-act) to mark in checklist and finally to summarize and drawing inference.

Interviewing providers: This method will give validity of actions recorded and reported basically. A set of questions on the actions supposed to do for a service can be prepared and then asked during monitoring. The responses then be summarized and inference be drawn.

Records review: Some of the hospital activity or portion of activity cannot be observed or cannot be assessed by interview method. We then have to look at records. Examples might be like how many meetings are held, report given, problem solving exercise done, treatment records, registration, discharge, medical audit/death audit etc. Monitoring team can select few records randomly and can determine quality of process of an activity.

Exit interview: This type of interview can capture the views of service users out of what they experienced from hospital. It is done after releasing IPD patients or OPD patients going out of hospital. Patients and their associates can be interviewed. In Bangladesh context interviewing within hospital may suffer biasness. When done by External Team, with sufficient assurance can capture facts.

Focus group discussion: Arranging 8-10 persons discussion meeting, ideally all male or all female patients, have got experience of receiving service from the hospital. Questions will be thrown to participants and they will express their opinion.

Random sampling: Some of the hospital activities like quality of records (Data), quality of laboratory tests, quality of laundry services, quality of treatment outcome, and quality of supplies cannot be assessed by other methods. Few samples out of huge numbers can give a reliable impression on quality.

Supportive supervision: Supervision with positive outlook towards providers. Mentoring and correcting mistakes, giving on-site training, encouraging to do better in future. Supportive supervision may include other methods fully or partly, for example: Observation, Interviewing providers, record review, FGD, Sampling etc. A supervision checklist would be used for this.

Third party assessment (Surveys):A third party survey (National or regional) is useful to assess patient satisfaction, Advantages of this method are that it identifies what is valued by patients and the general public, and standardized surveys can be tailored to measure specific domains of experience and satisfaction.

Progress review conference: It mainly monitors planned Quality Improvement activities of hospitals. For example hospitals in a certain district implementing QI activities may join a conference on a certain date chaired by the Chairman of District QI Committee.

Now till this point we know quality issues (Primary and secondary), thereby Quality indicators (National and facility level), methods to measure the indicators and the way of monitoring (Internal & External). Subsequent to these it comes the TOOLS to measure these. Before

stepping into developing tools we should keep in mind that the hospitals will take QI interventions to address quality issues. Thus along with national and facility level indicators MOHFW and QI Secretariat and facilities will have some **management indicators** to monitor programmatic progress.

We should also keep in mind that we will need Target Standards in relation to indicators so that facilities knowwhere they are standing and MOHFW will know which facility is standing where.

The tools are inserted in annex.

Now let's see the whole thing in one matrix.

	Quality Issues	National Indicators	National Target Standards	Method(s) to measure *(Data source)*	Involvement of monitoring Team
Patient satisfaction	**Interpersonal relationship (Courteous behavior)**	% of patients were greeted, received cordially, dealt with kindness and compassion	80% of patients received courteous behavior from providers	- Exit interview -FGD -Assessment by Observation (Mystery patient)	-Internal -External
	Cleanliness	% of hospitals have clean environment (Clean premises, Floor, wall, ceiling, no waste other than in bins, usable toilet) with Sort, Set and Shine practice	95% of hospitals are clean and practicingSort, Set and Shine	-Assessment by Observation -FGD -Exit interview	-Internal -External
	Waiting time	% of patients had to wait reasonably	Waiting time for: -OPD= 1 hr, -IPD admission plus treatment initiative= 1 hr, -Emergency= 20 minutes	- Exit interview -FGD -Assessment by Observation (Mystery patient)	-Internal -External
	Privacy	% hospitals have privacy arrangements % of patients examined physically maintaining privacy	90% hospitals have privacy arrangements 90% of patients examined physically maintaining privacy	- Exit interview -FGD -Assessment by Observation (Mystery patient)	-Internal -External
Clinical Care	**Effectiveness**	% of patients cured (IPD) % of patients cured (OPD)	90% of patients get cured (Both IPD & OPD)	-Record review -Random sampling of former patients	-Internal -External
	Accuracy of lab & other diagnostic tests	% tests found correct in counter test % test found concordant with reference lab/diagnostic test	98% tests found correct in counter test 99% test found concordant with reference lab/diagnostic test	-Random sampling	-Internal -External
	Patient safety	% patient had adverse effect/ medical or surgical error	Less than 1% patient had adverse effect/ medical or surgical error	-Record review -Interviewing providers -Exit interview -FGD	-Internal -External
	Supply of emergency medicines	Number of times the hospital has gone run out of emergency medicine of any type	**O** times (Never) the hospital has gone run out of emergency medicine of any type	-Record review -Interviewing providers -Exit interview -FGD -Random sampling	-Internal -External

Accordingly we can have a matrix for **facility level indicators**

	Quality Issues	Facility level Indicators	Facility level Target Standards	Method(s) to measure *(Data source)*	Involvement of monitoring Team
Patient Satisfaction	Briefing health condition and Sharing treatment plan	% of patients were briefed on health condition and shared treatment plan	90 % of patients were briefed on health condition and shared treatment plan	-Assessment by Observation -Interviewing providers -Exit interview -Focus group discussion (FGD)	-Internal (Primary responsibility) - External (Optional)
	Freedom to choose service	% of patients given freedom to choose service (Consent form etc)	98% of patients given freedom to choose service (Consent form etc)	-Assessment by Observation -Interviewing providers -Exit interview -Focus group discussion (FGD)	-Internal (Primary responsibility) - External (Optional)
	Low cost (Less out of pocket expenses)	% of patients perceived the service as low cost/ felt out of pocket expenses less in amount	50% of patients perceived the service as low cost/ felt out of pocket expenses less in amount	-Exit interview -Focus group discussion (FGD)	-Internal (Primary responsibility) - External (Optional)
	Sitting arrangement while waiting	% of patients could sit while waiting for service	70% of patients could sit while waiting for service	-Exit interview -Focus group discussion (FGD)	-Internal (Primary responsibility) - External (Optional)
	Fan	% of hospitals have 'Fans' in waiting area % of patients enjoyed 'Fans' while waiting	90% of hospitals have 'Fans' in waiting area 70% of patients enjoyed 'Fans' while waiting	-Assessment by Observation -Exit interview -Focus group discussion (FGD)	-Internal (Primary responsibility) - External (Optional)
	Diet	% of IPD patients get good diet	98% of IPD patients get good diet	-Assessment by Observation -Exit interview -Focus group discussion (FGD)	-Internal (Primary responsibility) - External (Optional)
	Water supply	% of hospitals have water sources at sufficient level % of hospitals have safe drinking water source % of patient could use sufficient water for drinking and other purposes(Washing, showering)	85% of hospitals have water sources at sufficient level 60% of hospitals have safe drinking water source 75% of patient could use sufficient water for drinking and other purposes(Washing, showering)	-Assessment by Observation -Exit interview -Focus group discussion (FGD)	-Internal (Primary responsibility) - External (Optional)

	Laundry facility for patients	% of hospitals has washing and drying facilities of their belongings % of patients could use washing and drying facilities	40% of hospitals has washing and drying facilities of their belongings 40% of patients could use washing and drying facilities	-Assessment by Observation -Exit interview -Focus group discussion (FGD) -Random sampling	-Internal (Primary responsibility) - External (Optional)
	Clean functional toilets	% of hospitals has clean functional toilets for patients (running water, soap, Mug etc) % of patients could use toilets in need	50% of hospitals has clean functional toilets for patients (running water, soap, Mug etc) 70% of patients could use toilets in need	-Assessment by Observation -Exit interview -Focus group discussion (FGD)	-Internal (Primary responsibility) - External (Optional)
	Referral	% of patients were referred with a referral slip and coordinated by phone % of referral patients were received honoring referral slips from outside facilities	80% of patients were referred with a referral slip and coordinated by phone 80% of referral patients were received honoring referral slips from outside facilities	-Record review -Exit interview -Focus group discussion (FGD) -Assessment by Observation (Mystery patient)	-Internal (Primary responsibility) - External (Optional)
	Attending patients as care taker	% of hospitals have 'rules' for staying with IPD patients as caretaker % patients satisfied with the 'rules' of keeping attendants	90% of hospitals have 'rules' for staying with IPD patients as caretaker 90% patients satisfied with the 'rules' of keeping attendants	-Record review -Exit interview -Focus group discussion (FGD)	-Internal (Primary responsibility) - External (Optional)
Clinical Care	Human resource with skills	% of HR with skills available for department/ subject/ specialty % of hospitals have HR with skills	70% of HR with skills available for department/ subject/ specialty for a particular service 70% of hospitals have HR with skills	-Record review -Exit interview -Focus group discussion (FGD)	-Internal (Primary responsibility) - External (Optional)
	Supply of drugs, lab reagents, diagnostic aids, consumables etc	-Number of times the hospital has gone run out of major drugs of any type [* A list of major drugs to be prepared] -Number of times the hospital has gone run out of major lab reagents of any type [* A list of major lab reagent to be prepared] -Number of times the hospital has gone run out of major diagnostic aids (Equipment, apparatus, devices) of any type [* A list of major diagnostic aids to be prepared] -Number of times the hospital has gone run out of major consumables aids of any type [* A list of major consumables to be prepared]	**0(Zero)**Number of times the hospital has gone run out of major drugs of any type **0(Zero)**Number of times the hospital has gone run out of major lab reagents of any type **0(Zero)**Number of times the hospital has gone run out of major diagnostic aids of any type **0(Zero)**Number of times the hospital has gone run out of major consumables aids of any type	-Record review -Exit interview -Focus group discussion (FGD)	-Internal (Primary responsibility) - External (Optional)

	Laundry services	% of wash found dirty out of randomly selected cloths in the stock	Less than 5% of wash found dirty out of randomly selected cloths in the stock	-Random selection -Exit interview -Focus group discussion (FGD)	-Internal (Primary responsibility) - External (Optional)
	Patient record keeping and retrieval	% of patients records found complete out of randomly selected records % of patient records could be retrieved	90% of patients records found complete out of randomly selected records 95% of patient records could be retrieved	-Random selection	-Internal (Primary responsibility) - External (Optional)
	Infection prevention	% of Sterilization done for surgical cloths, instruments	100% Sterilization done		

Management indicators

In course of monitoring quality of services by hospitals nationwide, QI Secretariat will have to use some management indicators.

These would be like:

A. Reporting
B. Meeting
C. Monitoring visit
D. Holding progress review meeting
E. Holding progress review conference
F. Feedback response
G. QI Champion selection
H. QI festival

Let's see these in a matrix:

Sl No	Management Issues	Process	Management indicators	How to measure	Responsibility of measuring and reporting	Frequency
1	Reporting	Following chain of command with a copy to QI Secretariat electronically*	% of facilities reported	Record review	-Administrative levels -QI Secretariat	-Quarterly -Annually
2	Meetings	-Facility level meeting	% of facilities hold QI meeting	-Report -Meeting	-Administrative levels -QI Secretariat	-Quarterly -Annually

		-Administrative level meeting	% of administrative level meeting held	minutes		
3	Monitoring visit	-External monitoring visit	Each facility had been visited by external monitoring team at least once	-Monitoring report	-Administrative levels/ Units -QI Secretariat	-Quarterly -Annually
4	Holding progress review meeting	-Conducting progress review meeting at facility level and administrative levels/Units	% of hospitals hold progress review meeting % of administrative levels/Units conducted progress review meeting	Electronic Report	-Administrative levels/ Units -QI Secretariat	-Quarterly -Annually
5	Annual progress review conference	-Conducting progress review conference	Annual progress review conference held	Achievement assessed against national targets	QI Secretariat	Annually
6	Feedback response	-Giving feedback in response to quarterly and annual report	% of facilities received feedback response	-Record review -Report	-Administrative levels/ Units -QI Secretariat	-Quarterly -Annually
7	QI Champion selection	-Selecting QI Champion in district and above	% of districts selected QI champion % of divisions selected QI champion -National champion selected by QI Secretariat	-Report -News letter	-Administrative levels/ Units -QI Secretariat	-Annually
8	QI festival	- QI festival arranged in district and above	% of districts arranged QI festival % of divisions arranged QI festival -National arranged QI festival by QI Secretariat	-Report -News letter	-Administrative levels/ Units -QI Secretariat	-Annually

- Please see Chapter four (Committees)