האגף לרפואה כללית

דוח בקורת
בית החולים אל-מקאסד
בירושלים מתאריך
ה-11 בנובמבר 2013

הדות נכתב על ידי האגף לרפואה כללית, מחלקת בקורת.
El Makssed Hospital
East Jerusalem

Re: Multidisciplinary Licensing Audit of Hospital Wednesday December 11th 2013

Dear Dr. Bassam Abu- Libedeh, M.D.

Enclosed please find a comprehensive multidisciplinary report of the El Makssed Hospital, carried out by the Ministry of Health on December 11th, 2013.

The report consists of 3 parts:

a. Grades Table (scoring)
b. Executive Summary
c. Detailed Instructions for Required Corrections according to a specified Time Frame.

The hospital management is requested to respond within one month to the recommendations summarized at the end of the report. Your response should include an estimated timetable for implementing the required corrections. Failure to respond will be viewed as agreement with the findings and the report will be published on our website as is. Following this, a recommendation for license renewal will be forwarded to the Director of Medical Facilities & Appliances Licensing Division, MOH.

Yours Sincerely,

Dr. V. Ezra, M.D.                                Mrs. R. Freund, RN, MPH
Director-Division of General Medicine            Head Department of Hospital audit
Medical Administration                           Division of General Medicine
On the 11th of December 2013, a team of both the Division of General Medicine MOH and Jerusalem District Health Office team carried out an audit prior to renewal of the hospital license. On the day of the audit, 201 patients were hospitalized.

**Background**

Al- Makassed hospital was founded in 1968 as a non-profit charitable institution to provide tertiary hospital services to populations of east Jerusalem, the west bank and Gaza strip. It is currently licensed for 250 beds. The hospital serves as a clinical teaching site for most of the Palestinian health professions.

**General data collected by the Licensing Division MOH**

<table>
<thead>
<tr>
<th>OWNERSHIP</th>
<th>Public</th>
</tr>
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<tbody>
<tr>
<td>Address</td>
<td>Mount of Olives, Jerusalem</td>
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<td></td>
<td>Jerusalem</td>
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<table>
<thead>
<tr>
<th>Medical director</th>
<th>Dr. Bassam Abu- Libedeh, M.D.</th>
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<tbody>
<tr>
<td>Medical director specialty</td>
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<tr>
<td>Medical director specialty</td>
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<td>15965</td>
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<tr>
<td>Hospital Administrator &amp; Nursing Director</td>
<td>Mr. Turkiman Suliman</td>
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<table>
<thead>
<tr>
<th><strong>EXTENT OF ACTIVITY</strong></th>
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<tbody>
<tr>
<td>Total Hospitalization Days</td>
<td>66,678</td>
</tr>
<tr>
<td>Mean Occupancy</td>
<td>83.8%</td>
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<tr>
<td>Total admissions</td>
<td>12,938</td>
</tr>
<tr>
<td>Surgical Procedures</td>
<td>5,368</td>
</tr>
<tr>
<td>Visits to Emergency Room</td>
<td>22,449</td>
</tr>
<tr>
<td>Clinics Visits</td>
<td>41,582</td>
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</table>
### No. of Births

- Vaginal deliveries: 1,739 (74%)
- C.S.: 596 (26%) of which Jerusalemites: 1,208; non-Jerusalemites: 1,127.

<table>
<thead>
<tr>
<th>Mortalities:</th>
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<tbody>
<tr>
<td></td>
<td>161: adults-82 children-79</td>
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### MANPOWER (All Sectors)

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<tr>
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<td>83</td>
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<tr>
<td>Specialists</td>
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<td>48</td>
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<tr>
<td>Nurses</td>
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<tr>
<td>Medical Professions</td>
<td>78</td>
<td>78</td>
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<tr>
<td>Logistics and Accommodation</td>
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<td>38</td>
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<tr>
<td>Total</td>
<td>560</td>
<td>555</td>
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### Bed Distribution

<table>
<thead>
<tr>
<th>Bed Type</th>
<th>No Of Beds</th>
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<tbody>
<tr>
<td>Beds total</td>
<td>250</td>
</tr>
<tr>
<td>Operating theater</td>
<td>5</td>
</tr>
<tr>
<td>Recovery stations</td>
<td>6</td>
</tr>
<tr>
<td>Emergency room stations</td>
<td>18</td>
</tr>
<tr>
<td>Delivery stations</td>
<td>4</td>
</tr>
<tr>
<td>Clinics</td>
<td>22</td>
</tr>
<tr>
<td>Institutes</td>
<td>8</td>
</tr>
<tr>
<td>Laboratories</td>
<td>2</td>
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<tr>
<td>Medical devices</td>
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</tr>
<tr>
<td>Medical professions</td>
<td>General Surgery, Urology, Plastic Surgery, Burns, Oral and Maxillofacial Surgery</td>
</tr>
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<td>-------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
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Ratings Table (grades)

<table>
<thead>
<tr>
<th>Fields of Inspection</th>
<th>1 Failed</th>
<th>2 Poor</th>
<th>3 Requires improvement</th>
<th>4 Good</th>
<th>5 Very good</th>
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<tr>
<td></td>
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<td>50-64</td>
<td>65-79</td>
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<td>95-100</td>
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<tr>
<td>1 Hospital Administration</td>
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<tr>
<td>2 Medical Administration</td>
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<tr>
<td>3 Nursing Administration</td>
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<tr>
<td>4 Dental Clinic</td>
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<tr>
<td>5 Operating Theatre Safety</td>
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<tr>
<td>6 Recovery Room Safety</td>
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<tr>
<td>7 Anesthesiology</td>
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<td>97</td>
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<tr>
<td>8 Engineering Systems</td>
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<td>81.5</td>
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<tr>
<td>9 Clinical Laboratories</td>
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<td>77</td>
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<td>10 Social Work</td>
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<td></td>
<td>59.5</td>
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<tr>
<td>11 Diet &amp; Nutrition</td>
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<td></td>
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<tr>
<td>12 Pharmaceutical Services</td>
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<tr>
<td>13 Sanitation and Environmental Health</td>
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<td>78</td>
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<tr>
<td>14 Laundry Handling</td>
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<tr>
<td>15 Waste Collection and Disposal</td>
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<tr>
<td>16 Endoscopes management (gastro)</td>
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<tr>
<td>17 Physiotherapy</td>
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<td>18 Geriatrics</td>
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<td>71</td>
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<tr>
<td>19 Licensing and Allocation of Beds</td>
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</table>
Executive Summary

1. **Hospital Administration:**

Areas audited: Committee Activities, Incident Reports, Patients' Rights, Informed Consent, Staff Immunization, Availability of MOH Written Standards and Malpractice Insurance.

**Fire safety:** Fire department certificate is valid on condition, until 24.12.2013.

**Admissions' insurance coverage:** In 2013 (12,938) patients were covered financially as the following: Palestinian authority-51%, National Insurance-10%, UNRWA-1%, Road traffic accidents insurance - 0.17%, Kupot Holim-17%, Others and private insurances -20.83%

**Cultural specificity:** Patient information is available mainly in Arabic, with English is an option when needed, as appropriate to the hospital's population characteristics.

**Quality assurance:** The hospital management is investing great efforts in preparations before the JCI final accreditation survey. Functioning hospital committees include: infection control, quality assurance and risk management. Hospital services comply with the demands for protecting patients' rights. Informed consent documents are filled and signed as required, although a copy is not submitted to the patient. According to the director's statement, staff immunization is a prerequisite for each employee prior to hiring. However, unlike new employees who have 100% vaccination rate, vaccination of veteran employees is incomplete. Absence of a criminal record is not verified prior to hiring new employees. The process of recruitment of male employees over eighteen does not include inquiry regarding a record of sexual assault. Although some of the MOH directives are translated into Arabic, most of the MOH directives and guidelines are not implemented; essentially local form protocols are used. All directives in Hebrew can be retrieved from the MOH website [http://www.moh.health.gov.il](http://www.moh.health.gov.il).

As a teaching hospital, participation of medical students in patients' examinations is not performed according to regulations, as stated in the MOH directive 44/1996. There is no official regime concerning continuity of care for
discharged patients and no recommendations for continuation of treatment at rehabilitation centers. Neonatal auditory screening tests are carried out at a rate of 100%.

**Special Incidents**: are reported to the MOH as required.

**Malpractice insurance**: Malpractice insurance is valid until 28th February 2014 through "Palestine Insurance Co." (PLC).

2. **Medical Administration**

**Areas audited**: Physicians employed, Medical records.

The audit was performed in the Neonatal Department, Pediatric Cardiac Surgery, Obstetrics and Gynecology. The audit included the hospital wards, out-patient clinics, waiting areas, hospital grounds and medical records.

**Medical personnel**: 

Physicians: total 147; 56 specialists (38 of them are licensed to practice medicine in Israel), 82 residents; the majority are graduates of AL- Quds University; none of whom are licensed to practice medicine in Israel. There are 3 physicians in the Emergency and Outpatient clinics; only one of them is licensed to practice medicine in Israel. In addition there are 22 interns; the majority is AL- Quds university graduates.

**Medical files and documentation**: 

The medical files are well organized but not computerized; behaviours and some of the patient's identification details are missing. ICD 9 coding is not used.

Medical notes are handwritten in English. Only some of the Medical documentation is stamped by an official physician stamp (physician name and license number). The use of medical abbreviations is noticed.

Orders of dispensing medication are partially written using capital letters.

Resident's night duty is not managed according to the MOH directives.

3. **Nursing Administration**

**Areas audited**: nursing manpower, nursing records and documentation, medication administration, patients' environment, mobile resuscitation
trolley, incident reports, standards and procedures, professional development and in-service training, patient discharge process.

The nursing activities audit was carried out in the Pediatric, Surgical and Maternity wards. Data was collected through observation, staff interviews and nursing records review. A drill down audit was performed in the NICU following an alarming outbreak of CRE on December 8, 2013. All recommendations of the Israeli National Center for Infection Control were implemented to halt the spread, including complete isolation of the nursing staff and the equipment of these CRE carriers from the rest of the NICU on all shifts.

The hospital employs 233 registered nurses, 68 practical nurses, 21 midwives and 16 nurse aids. Twenty five nurses have permits (permanent or temporary) to practice nursing in Israel.

Protocols and regulations were found in a local format. According to the nursing administration, these protocols are based on both the JCI and MOH protocols. Only a few MOH nursing protocols were found, no folder with a collection of MOH nursing protocols was found.

A review of patients' records showed: some pages in the files were missing patient's identification details; use of stickers including the patients' identifying information was missing; some stickers of an IV drug on peripheral lines were missing a nurse signature; a nursing discharge summary still is not implemented, although this was noted in prior audits.

Risk assessment documentation for developing pressure sores was found signed by a registered nurse on admission; no general skin assessment was found.

The hospital is still using an old version of resuscitation trolleys which are difficult to maneuver; an oxygen cylinder was not attached and drawers couldn't be opened easily. According to the information obtained from the Nursing Director, a resuscitation committee has been active since August 2013; most of the emergency team passed ACLS and PALS.

Some of the hospital departments are in the process of renovations; some patient rooms still lack sinks; in most toilets, hand rails and assistance bells were missing. No "No touch" hand taps are in use. Antiseptic soap is not
refilled according to the recommendation. It should be noted that most of the previous audit recommendations were carried out.

4. **Dental Clinic**

One dental unit is used in the outpatient clinics. A mobile unit is used in the operating rooms for general anesthesia cases. 

**Dental staff includes** an Oral and Maxillofacial Surgeon, general dentist and a dental nurse. Currently, there are no interns or students observing treatments.

**Dental activities:** Conservative, prosthetic, minor oral surgery, periodontic, pedodontic, and endodontic treatment is performed in the clinic according to required standards. Oral and maxillofacial surgery patients, pedodontic patients and special needs dental patients are treated under GA.

The Dental Department is clean and well organized. The head of the dental services is invited to contact the Oral Health Department in the district health office for any additional information or guidelines.

5. **Patient Safety in the Operating Theatre**

**Areas audited:** Manpower, Infrastructure, Patient Identification Process, and Nursing Documentation, Standards and Protocols, Medications and Narcotics, Cleaning, Disinfection and Sterilization of Instruments; Incidents Reporting.

There are 6 operating theatres fully equipped for general anesthesia. 

**Manpower:** Out of the 18 RN's, only two completed a post graduate course in operating theater nursing. In addition 11 LPNs are employed, one of whom completed a special course in operating theater for practical nurses. Also employed are 3 technicians for heart-lung machine and 5 anesthesia technicians.

**Patient identification process:** Identification is performed at the entrance to the OR by the head nurse prior to surgery, according to a checklist. Patient's
Identification and verification of data is repeated at theatre while the patient is still awake and can give feedback. The process is carried out according to local protocol. "TIME OUT" verification of data prior to anesthesia has also been instituted.

**Documentation:** The patient chart has all necessary parameters for surgery and anesthesia. There is no documentation elaborating the number of the diathermy unit used during surgery. Also missing are details concerning the range of the diathermy power used during surgery. No documentation of diathermy checkups after 100 time's use was found.

**Standards and Protocols:** Local standards and protocols relevant to OR procedures are organized in a file, no MOH directives were presented.

**Resuscitation trolley:** The trolleys that were checked contained all items compulsory for resuscitation including defibrillator and medications. Documentation of regular trolley checkups was presented.

**Cleaning, disinfection and sterilization of the instruments in the OR:** Cleaning of instruments is done manually in the area adjacent to the OR prior to their transfer to the central sterile supply department. There is no washing machine or ultra-sonic machine for instruments cleaning and disinfection.

**Medications and Narcotics Management:** Medications are handled according to regulations. No Narcotics are in use by nurses in the OR.

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6. **Recovery Room safety**

**Areas audited:** Manpower, Infrastructure, Resuscitation trolley. Nursing documentation and the registry of medications and narcotics.

There are 4 well equipped patients’ posts.

The Recovery Room is an integral part of the Operating Theatre, so that nurses employed in the OR are also assigned to the recovery room. Only two nurses on staff had completed a post graduate Intensive Care course. Following heart surgery, patients are transferred to the open heart recovery room, while other complex patients are transferred to the Intensive Care Unit.

**The Resuscitation trolley:** Resuscitation trolley contains all items and drugs needed for the resuscitation procedure, including the defibrillator which
undergoes daily inspection. All medications on the trolley are updated according to expiration dates. Evidence of regular checkups was presented. **Medication:** Drugs are administered according to regulation. Medications are alphabetically arranged and stored in a closed cupboard. There is a locked narcotic cupboard and an up-dated narcotic registry. Daily counts of narcotics are performed as required. **Documentation:** Documentation and patient follow up charts included all essential data. Physicians orders to be carried out by the nurses are documented in patient files, are written daily according to recognized standards, clearly, in capital letters, with an intelligible signature attached. In some charts the patient’s pain and consciousness levels were missing.

7. **Anesthesiology**

Areas audit: Operating theatre and Recovery room; Human Resources, Qualifications and Suitability to work load; Infrastructure and Quality of Ventilators; Documentation: Perioperative Charts, Surgery Report, Informed Consent.

The Anaesthetic Department is very well organized and works according to the highest professional standards. There are 4 anesthesiologists who are specialized and 12 interns. All anesthesiologists employed have completed the ACLS courses. About 7000 operations are performed yearly, of which about 10% are emergencies. There are 5 operating rooms in the main area with 4 recovery room beds. There is 1 room for gynaecological procedures with 1 recovery room bed. Anaesthetics are given in the Radiology Department for CT’s and MRI’s and also for Cardiac Catheterization in the Catheter Laboratory. In all these cases the patients are transferred to the ICUs of the respective departments. There is no ventilator in either of these areas; it is mandatory to have a mobile ventilator, which can be transferred as necessary. All patients from cardiac surgery and neurosurgery are taken directly to the ICUs of the respective departments. Nonetheless, the number of beds is not adequate. The Ministry of Health directive states that there should be 1.5 recovery room beds for every operating room.
There is no Pain Clinic. One of the members of staff expressed an interest in pain care and appreciate further training. There is a Pre-operative Clinic. There is adequate postoperative pain care. The infrastructure is very old and the physical conditions for the staff are inadequate; there is no room for the staff to rest in.

The machines are checked every morning but there is no record of this. Some additions to the pre-operative chart are required. Consent forms are in place. Record keeping during surgery is satisfactory, as is the record keeping of the surgeons, though they don’t always sign and stamp their charts as required. The record keeping in the operation register is satisfactory. The patients are discharged from the Recovery Room by an anaesthesiologist.

There is no adequate chart for record keeping while transferring the patient to the Recovery Room. The Recovery Room is equipped with the necessary equipment, except a ventilator, which is mandatory. The resuscitation cart is satisfactory. Also, an antiseptic bottle is required at each bed. All directives of the Ministry of Health are in place.

8. **Engineering Systems**

**Areas audit:** OR Infrastructure, Medical Gases, Electricity system, Air conditioning and Central Sterile Supply (CSS).

Generally, the hospital's systems are in moderate condition.

**The Operating Theaters**

**Environment**

Observation was kept to the complex of 5 active operating theaters. No clear separation exists between a clean area and a non-clean area. No separate entrance for the removal of contaminated materials from the OR site was observed. There are no controlled automatic doors for the prevention of entry to unauthorized persons. There were no taps that can be operated without palm of the hand contact in the surgical washing basin. There was no air suction system above the hand washing area. There are anterooms for patients waiting prior to surgery and for waiting families. There was no designated area for talking with the families. Fire-fighting equipment was
incomplete; automatic sprinklers and a smoke detention system were observed. No illuminated emergency exit signs were found.

**Medical gases**
There are automatic backup systems for the supply of oxygen and nitrous. There is a warning system for decrease in medical gas availability. Two systems exist for the removal of anesthetic gases in every operating theater, as required. The medical compressed air supply system lacks an appliance for continuous monitoring of the dew point in the air, after filtration and after regulation of the pressure (not in accordance with Procedure G-01 of the Ministry of Health). There is no appliance for monitoring continuous concentration of carbon dioxide in the OR air (not in accordance with the Ministry of Health Procedure G-01). The piping is not marked and the type of gas is unidentified.

**Electricity**
The system is according to the Electricity Law: Electricity Regulations (Electric Installations at Medical Sites up to 1000 volts), 1994. A system of alert monitors is in place for the electricity overrun system. The operating theaters are fed from the specially designated electricity panels that include buffer transformers and a clear division exists of the various feeding fields. The sockets are NOT in the usually accepted colors and there are NO markings of numbers of the feed circuits.

**Air Conditioning**
In general, the system is in good condition although some problems were observed. As required, there is a separate unit for each room with no divided air conditioners. Each room has a separate climate care unit (ITO). There is a temperature display screen in the operating theaters but they NO mechanism for regulating the heat measurements. In addition, there is NO mechanism for regulating the humidity in the air conditioning system in each operating theater, in accordance with Procedure AC-01 of the Ministry of Health. Only in operating Theater 2 was a positive pressure status maintained, as is required.
A positive pressure situation MUST be installed in the other operating theaters (1,3,4,5).

**Recovery Room**
The medical gases systems operate normally. A transparent cover must be installed with a sign on the cut-off taps in the recovery hall. The amount of recovery stations is greater by 1 than the number of operating theaters; 2 recovery posts are lacking. The air conditioning system is working normally, but there is no mechanism for regulating the temperature in the room.

**Washing/sterilization room, located within the operating theaters area**
There is a washroom for immediate instrument cleaning. An air suction system above the washing area MUST be installed. A fast autoclave is lacking. An automatic machine for washing surgical instruments, reaching a temperature of 93 degrees centigrade was NOT observed.

**Central Sterile Supply (located outside the operating theater complex)**
Only partial division was observed between a clean and a dirty area. A special surface for the unloading of dirty equipment complies with the requirements. The sink for the initial washing and sorting of the equipment is in normal working order. An installation for the exhalation of filtered compressed air for the drying hollow cavity appliances is lacking. The number of arrangement positions in the clean area is compatible with requirements. The standard of illumination in the clean area is good. Management of the disinfection activity is normal. A monitoring of disinfection LOG BOOK is kept, but the annual validation procedure is not being carried out in accordance with Israel Standard 4335. It is being carried out by staff of the bio-medical engineering department of the hospital, which is not in accordance with the Standard. The reports that have been furnished are not compatible with the requirements of outsourcing.

**Central Oxygen Supply System**
There is a local oxygen generator in the hospital; the quality of the oxygen is NOT being measured by a controlled system, as required by the Ministry of Health. The piping is NOT colored and marked in the machinery room through the exit track to the hospital. The quality of the oxygen must be checked by an outside source in order to ascertain its quality (02 99.5% E.P. Compression). Only partial means of fire protection were observed. The area of the back-up central exchange is only partially lit. The oxygen generating station and the containers are not secured against earthquakes. There are no signs on the entrance door to the site containing medical gases.

**Medical Nitrous Supply System**

The medical nitrous system for the medical center is provided by main 4*4 cylinders; there are no cryogenic containers. The right branch manifold with four cylinders is not in proper working order. There is insufficient protection against mechanical damage to the illumination system. The taps installed in the pipe are only partially suitable for nitrous. The pipes are neither colored nor marked. The elastic piping connecting between the cylinders and the manifold are NOT in good order. Copper piping must be installed. There is no integral warning system that operates if there is a mishap in the stations that are manned 24 hours daily. The cylinders exchange is not protected against earthquakes.

**In the Medical Compressed Air Supply System**

There is a medical compressed air system with 2 compressors, one that is in operation and the second as a back-up. Evidence of hydrostatic check of the pressure container by a qualified examiner engineer was not presented. There is no continuous monitoring device for monitoring the dew point in the air after filtration and after regulation of the pressure, as required by the Ministry of Health Procedure G-01. There is no device for continuous monitoring of the carbon dioxide concentration in the air, after filtration and after regulation of the pressure, as required by the Ministry of Health Procedure G-01. There is no refrigeration dryer and a chemical absorption dryer installed parallel to the air system, as required by the Ministry of Health Procedure G-01. Air filters are lacking at the free air suction points inside the
machinery room. An emergency connection to the medical compressed air system is lacking.

**Medical Vacuum Supply System**
There is a medical vacuum system with two pumps, each of which supplies the required peak output to the hospital. The vacuum system and the medical compressed air system are in the same machinery room, which is nonstandard. There are no biological filters and no liquid separator in the medical vacuum production installations. The medical vacuum pipe is unsuitable; it is not colored as required or properly marked. Its components must be marked by means of identification, including warning and complete identification of functions, their restrictions and the designated level of risk of each. An identification sign, instruction and warning is lacking; this must be installed in front of the machinery room near the entry.

**High Voltage Room**
The last servicing carried out on the high voltage system was on October 27, 2012 (it was in normal condition, examination frequency - once every five years). Visually, the condition of the transformers appeared normal. All the required means of protection were found in the room, including: means of preventing electrocution, carpets for prevention of static electricity, gloves, protective spectacles, earth connecting pole, appropriate signboards. The room is secured and locked in order to prevent unauthorized entry and access to it is controlled. A detailed and framed electricity plan hanging on the wall of the high voltage room is absent. Emergency lighting arrangement in the high voltage room is NOT in proper working order.

**Main Electricity Room**
The electricity panels are only partially in normal working order. The installation of stoppers, signs and marking must be completed. There is an automatic fire-fighting and smoke detection system in the electricity panels. The room is secured and locked. A detailed and framed electricity plan hanging on the wall of the main electricity room is absent. Emergency lighting
in the room must be completed. The room is not secured and locked to prevent unauthorized entry.

**Generators**
The generators are in normal working order. The day of the audit was wet and stormy (the day before the snowstorm). There was an electricity power cut and the generators went into normal operation and supplied the hospital's demand for electricity; departments of the hospital continued functioning normally, yet NO required means of protection were found in the generator room. No means of preventing electrocution, (carpets for prevention of static electricity, gloves, protective spectacles, earphones, earth connecting pole, appropriate signboards) were observed. Dust was observed to have accumulated on the floor of the generators room. There was no emergency connection - from the local generator to the city electricity system. A detailed and framed plan of the whole system which should be hanging on the wall of the room was absent. The room is not secured and locked in order to prevent unauthorized entry and access to it is not controlled. The entrance passage to the room of the Chief Engineer and maintenance staff is within the generators room.

**Air conditioning Purifying Air Units PAUS**
These are installed on the roof. A new Purifying Air Unit was observed in No. 2 Operating Theater and it was in proper working order. The others are old and are not compatible with the Ministry of Health Procedure AC-01. There is no temperature gauge installed at the PAUS cold water entry point in all the PAUS observed on the roof of the operating theaters. **Access to the area is not safe and not standard.**

**Air conditioning/ Pump Compressors**
The air conditioning compressor is backed up by a generator and operates as required. The compressor supplying the water to the operating theaters area is backed up by an additional compressor. The visual condition of the compressor seems normal. A water backflow prevention accessory in the
expansion containers in the air conditioning room is lacking. There is no emergency lighting in the room.

**Steam Boilers**
The dual purpose boilers are fuelled by gas or diesel oil. The general impression of the area of the boiler installations is unsatisfactory. Clothing is being hung out to dry on the steam boilers, a health and safety warning and direction signboard is absent. The entrance to the office of the Chief Engineer and the maintenance staff is inside the steam boilers room, which constitutes a safety hazard.

9. **Laboratory services**

**Clinical laboratories (CL) infrastructures and safety:** During the MOH audit performed at the beginning of 2011, a reorganization plan in terms of a new building and renovation of the CL premises was shown to Dr. Yishai. The plan was consistent with modern standards for clinical laboratories. The plan included all the units of the CL and a new unit dedicated to microbiology-molecular biology analysis. It ensured enough space in order to alleviate the cramped conditions at that time. The plan was to be carried out during 2011 but postponed, to be carried out during 2012.

Up to the present, no changes have been performed. A new plan is to be carried out within two weeks from this audit, so that the building of the new CL unit should be completed in approximately five months.

**Quality assurance:**
The last audit report strongly recommended implementation of a software program for the CL that would allow connecting equipment to the software in order to transmit data from the machines to the central program, an act that will reduce the probability of human error. The program would also allow for improved traceability and delta check (history) of patients results. Presently no specialized clinical laboratory software that can integrate and trace laboratory data has been implemented. The only existing software is an "in house" development
by Mr. Sabri Ali Barghati that allows for some aspects of data management and recording of test results (not validated).

**Blood gases:**
Tests for determining blood gas levels at the 6 different units are performed by nurses (open heart surgery, pediatric open heart, pediatric ICU, general ICU, neonatal ICU and the CL itself). So far the CL is not involved in monitoring quality control of the blood gases test performed outside the laboratories. Daily quality (QC) and external control (EC) should be controlled and followed by the CL like for all the other CL tests. No external QC is implemented for machines' safety. Yet the CL is retrieving quality control data from all the units that test for blood gases. Mr. Sabri Ali is in charge of writing an internal software program in order to manage monitoring of the quality control data.

**Accreditation:**
The Hospital started to prepare for the JCI accreditation. Yet the CL Quality Assurance program has not been certified or accredited. The MOH Director General has stipulated that by 2015 all the clinical laboratories must be certified according to the ISO 9001:2008 standard as a minimum, or accredited according to the ISO 15189.

**Proficiency testing:**
In general the CL participates in EQC or proficiency testing for most of the CL tests, but not all. It is anticipated that for 2014 it will add the EQC for blood gases and G6PD testing.

**Stool samples:**
Presently at the CL not all the stool samples are processed at the microbiology unit and under the bio-safety hood, some are processed at the biochemistry and hematology units on the laboratory benches.

**Night shift:** As mentioned in past audits, only one person is in charge of the night shift at the CL. According to safety regulations, it is mandatory that nobody is left alone in the premises without supervision, in case of an emergency.

**Pathology:**
The Pathology laboratory has been moved to an upper floor. At the laboratory premises a strong smell of formalin can be detected even with an open window. The Pathology laboratory does not participate in any external QC testing. Dr. Sharabati requests a second opinion from colleagues in uncertain cases in order to provide final results.

**Genetics**:  
A laboratory performing human genetics testing has been established in the hospital without reporting to the MOH or Department of Laboratories.

**10. Social Work Services**

Areas audit: Structure availability and range of the service, the working environment, patients’ rights law, procedures, birth of a child with developmental disability, treatment of victims of family violence, appointment of guardian, urgent medical treatment, records, professional development, discharge and continued treatment, MOH rules and regulations, special projects.

The control checks in social services were conducted with the assistance of Ahmed Gedalla, Social Worker, who is the Social Service Director; by examination of records, interviews with staff and patients and a visit to the orthopedic, children's and surgical wards.

Two social workers (unlicensed) are employed in the hospital. One of them is the Director. Two psychologists are employed in the hospital and work under the Social Service Director.

The two Social Workers provide service to all the wards, with no clear division between them. Most of their time is devoted to examining the entitlement to finance of medical treatment, on behalf of persons lacking in status and medical insurance. In each ward there are written instructions to the Social Worker as to the manner of intervention in various circumstances.

Members of the staff are not familiar with the procedures of the Ministry of Health. According to them these procedures are not language accessible. No due process is carried out as regards appointment of a guardian in respect to East Jerusalem residents. The Director of the Surgical Ward obtains, at his
own discretion, the consent of one of the relatives for carrying out medical procedures, without applying to the Court and not safeguarding the rights of the patient.

Continuity of care is maintained with the welfare services in East Jerusalem, but there does not appear to be solutions for those who come from Gaza and the Palestinian Authority. There is a local protocol in the wards for calling a social worker and a special referral form which is completed by members of staff for the social service.

The records presented by the Social Worker were very good. No records were found in the individual patient sheet.

There is an annual work program. There has been substantial improvement in the realm of family violence since the previous audit. An inter-professional committee was appointed which met 6 months ago. A day seminar was organized for the staff in this field. The new social worker attended an advance training course on this subject.

Local Initiatives: a program for diagnosing children with autism and organization of a conference of medical social workers.

The ratio of shifts to the number of hospital beds is lower than the national average.

11. **Diet & Nutrition**

**Areas audit: personnel, food menu for the patients, records & documentation, special food, specially designated clinical diet services, menus and ward procedures, instructions for enteral feeding treatment.**

The nutrition and diet department is well run, meets a good professional standard, providing professional treatment to hospitalized patients. The dietetic standards are partially compatible with the requirements of Directive No. 13/93 (one dietician for every 100 beds). Half a position is lacking in order to comply with the requirements of the directive. The hospital is engaged in the process of accreditation (JCI).

A weekly pre-planned menu is maintained which includes most of the requisite food elements.
Work is carried out in accordance with procedures for nutritional treatment under the NCP Method and according to the accreditation process. There is a lack of familiarity with and non-application of the working procedures of the Nutritional Department of the Ministry of Health because of a language barrier. Whole-wheat bread is served for diabetic patients. There are several types of menus: general, light, sugar-free, liquidized and special. Every standard and special diet is supervised by the dietician in the kitchen. Only partial documentation of anthropometric measurements exists.

The instructions for treatment by enteral feeding are recorded as necessary. Because of the lack of a financial budget, there is an insufficient stock of special food for enteral feeding and therefore use has been made of ground and shredded food which, from all standpoints, constitutes a danger to the hospitalized patients. The hospital maintains a policy of 10 steps to encourage breast feeding, conducting lectures for mothers to begin breast feeding already during the first hour following the birth.

12. **Pharmaceutical Services**

**Areas audit: Infrastructure. Medication Distribution, Dangerous Drugs Management, Documentation**

The pharmacy is clean and well organized, well managed by an Israeli licensed pharmacist. Drug expiry date, procedure used to follow up the medication expiry date and the follow up after the refrigerator temperature were checked. Results were satisfying.

The pharmacy prepares preparations from capsules and syrups already found in the pharmacy; no raw materials were found. The scales were recently calibrated; all necessary tools were found in place. Suitable labeling is used; label sample was given during the inspection.

The dangerous drugs were counted and complied with the registrations. The registrations for dangerous drug transformation were checked and found to be according to the requirements. All recommendations from the last inspection were taken into consideration and all the reported deficiencies were fixed.
13. **Environmental Health**

Areas audit: Drinking water network, food hygiene, sanitary condition in the wards and the auxiliary departments, sorting and disposal of various types of refuse and laundry arrangements

Generally, good sanitary conditions were found. Some of the faults found in the previous audit have been rectified, nevertheless, some faults were still found in different areas.

**Cold water**

Cold water pipes found on the roof were completely wrapped with broken isolated materials to prevent the cold water temperature from increasing. The hospital is performing a routine sampling of the drinking water according to the schedule arranged by the Ministry of Health and on an ongoing basis. The back flow prevention valves are checked by an authorized installer once a year and the checking results were sent to the Ministry of Health, as required.

**Kitchen**

Preparation of food in general is done according to common standards. Salads are not kept according to regulation while being transferred to the wards. Some of the Heating trolleys for serving hot food to the patients were not in a good condition. Kitchen oils from the fat separator were sent to "Pa'eel", a licensed treatment plant, as required.

**Waste**

Lab chemical waste was collected by "Tabib" company and was disposed to a licensed treatment plant. There is NO designated area for cleaning and disinfecting containers designated for collecting regular waste. The storage rooms for keeping and collecting regular waste lack artificial ventilation, negative air pressure, drainage and hand washing sinks. Rooms in the different departments used for storing waste transportation containers lack proper drainage. The waste disposable center is located in a place accessible to the public. There is no separate elevator for evacuation and transportation of regular waste. The regular waste trash container is not kept in a room with a sealed floor covering and washable walls.
Pest extermination
Pest extermination was performed by an exterminator who is registered by the Ministry of the Environment.

Prevention of Legionnaire's Bacterial Growth
The temperature of the returning circulated hot water reached 57 degrees centigrade as required.

The directives for the prevention of Legionnaire's bacterial growth are observed in accordance with the directives of the Ministry of health. Particular care was taken to drain the hot water boilers at least once every two days as well as treating them annually. A maintenance diary is kept for recording the time the hot water is being drained and the name of the person who has done it, as required.

14. Laundry Processes
Areas audit: Implementation of guidelines instructed in the Medical Administration Circular no. 29/08 dated 26/6/98.

The hospital divides dirty laundry into two sub-categories: "dirty" and "infected", the latter being in cases where it is stained with blood or secretions. This division is in conflict with Ministry regulations, which define all dirty laundry in hospitals and treatment facilities as infected.

On some wards the dirty laundry is collected in strong sacks lined with nylon bags which are filled up to no more than 75% of their capacity. On wards where these bags are stored in laundry rooms, the rooms are also used to store other items. On other wards, these bags are left on corridors.

The dirty laundry bags are then transferred to the internal laundry on trolleys that are physically differentiated from those used for distributing clean linen, but that are not fitted with a cover made from strong porous material. The trolleys are cleaned and disinfected, but not exactly according to the process defined in the Ministry regulations.

Laundry from the operating theatres that is transferred directly to the internal laundry by a chute is not placed in laundry bags.

Laundry sorting is undertaken by staff wearing the correct protective clothing, but not in a separate room/area in the laundry.
15. **Waste Collection and Disposal**

Areas audit: Implementation of guidelines instructed in the Medical Administration Circular no. 34/98 dated 17/5/98 guidelines.

Pedal bins are used for collecting regular waste in treatment rooms. Sharp infectious waste is collected in special sharps boxes. Infectious waste from the microbiology laboratory is collected in biohazard waste bags, according to procedures.

Although expired medicines in the pharmacy are kept in a locked cupboard, as required, they are then incorrectly placed in an infectious waste bag and disposed of as infectious waste.

The number of large bins in the infectious waste store was insufficient, as they overflowed with waste, while sharps boxes were placed on the floor. There is no sign on the dangerous waste store.

The hospital receives from the waste disposal company confirmation that the infectious and dangerous waste that is collected is dealt with according to all regulations.

16. **Endoscopes management (gastro)**

Areas audit: Implementation of guidelines instructed in the Medical Administration Circular no. 13/98 "Cleaning and disinfecting of scopes guidelines".

The initial cleaning which takes place as soon as the gastroscopic procedure has ended to immediately reduce the bacterial bio-burden, is carried out without a final rinse of the scope's channels with water. The scope is then transferred to 2 separate rooms for carrying out second and third stage cleaning and disinfection.

The second stage hand cleaning room does not have air changes. Hand cleaning is carried out in accordance with the written standard, i.e. the channels are cleaned by a special brush 3 times, which is dipped each time into disinfectant and then discarded. A leak test is carried out.

Third stage cleaning is carried out by a washer-disinfector machine using filtered water. Despite the machine not having a drying cycle, hand air drying
is not carried out. At the end of the process the scope is stored in a suitable and specially aerated cupboard, which stores the scopes vertically. Cleaning staff do not always wear surgical masks while cleaning. Scopes used for the first time in a day are not disinfected again before use. Scope attachments used for biopsies (snares, cutters) are all disposable. There is no reprocessing in CSSD.

17. **Physical Therapy Service**

**Areas audit:** Manpower, Service Characteristics, Medical records, Treatment Area and Equipment, Continuing Education

**Staff:**
The staff consists of 3 Physiotherapists with a bachelor's degree (BPt.) and one physiotherapy assistant (reduced from 4 PTs and one aid). Head Physiotherapist: Is Mr Khaled Haddash. All physiotherapists and the assistant work full time. The staff to beds ratio is not appropriate.

**Service Characteristics:**
Regular service is provided to all surgical and medical wards, except to premature infants (on call), according to physician written orders. Physiotherapists have an integral role in medical rounds on both orthopedic and surgical wards.

**Operating Procedure:**
The staff meets every morning to discuss patients and special problems. Every three months the physiotherapists rotate wards, so that each physiotherapist has an opportunity to be acquainted with all types of professional procedures. Since contact with patients is limited to the short hospitalization period, great effort is made to educate both patients and family regarding self treatment. The head physiotherapist can provide the additional services of creating custom made splints for burn patients and measuring for Jobst pressure garments, as he is a graduate of the appropriate courses.

**Medical records:** The head physiotherapist improved the medical record; it contains all of the required fields (the date, type of treatment and name and signature of the therapist, results of physical examination, treatment goals and plan and daily functional progress).
Continuing Education:
There are almost no opportunities to participate in postgraduate professional enrichment courses or to specialize. The staff makes an effort to share knowledge with one another and to learn from material available on the internet.

Treatment Area and Equipment:
A new treatment area has been allocated to the physiotherapy service which has been equipped with various types of treatment equipment. According to the head physiotherapist, the equipment is checked regularly by the hospital engineer. There are plans to expand the out-patient services, which at the moment are limited to about 60 patients per month. It must be noted that the clinic is separate to the hospital building and is only accessible to ambulatory patients. The meeting room in the orthopedic ward sometimes serves as a treatment room for patients of the ward.

18. Geriatric Medicine

Areas audit: Implementation of MOH directives and usage of professional resources in the field of Geriatrics. Approach to the elderly patients in the emergency room, internal medicine and surgical departments.

There is a relatively high rate (20-30%) of hospitalized elderly 65 years and over in all wards. The hospital management staff is aware of MOH directives for elderly treatment, but implementation is partial.

There is no medical or nursing expertise in the field of geriatrics amongst staff. The hospital does not provided special programs/projects for improving knowledge in geriatric medicine for professionals involved in elderly treatment. Since the last audit, there has been some improvement in nursing documentation (emergency room and hospital wards) concerning evaluating patient function such as ability to walk / to carry out daily activities of self care. Yet the hospital lacks a geriatric hospitalization framework, physicians and nurses trained in geriatrics and/or rehabilitation.

There is no physician expert in Geriatrics who can set recommendations for continued rehabilitation treatment for elderly patients with medical or post-
surgical problems, requiring rehabilitation or long term hospitalization on a geriatric ward. Such patients are not are evaluated by physiotherapists, nurses and physicians of the internal/surgical wards as required. Patients with medical insurance are referred for approvals to the representatives of the medical insurance organizations, such as Kupat Holim Clalit. Since the hospital treats mainly patients who lack such insurance, there are very few referrals to continued care frameworks at "complex nursing" institutions, "rehabilitation" or, "prolonged mechanical ventilation". There is no mechanism of directly transferring these patients to such frameworks.

Emergency room
About 15 % of the patients visiting the E.R are 65 yrs and over. Most of them are referred to hospitals. Nursing evaluation has improved. Documentation of "pain scale" and ability to carry out daily functions was noticed. There is a social worker "On call". The staff doesn't include a physician or an advisor specialist in geriatric medicine. No recommendations like referral to geriatric assessment on discharging are made.

Internal Medicine Ward:
Diagnoses such as acute confusional state, depression, presence of bed sores are mentioned when relevant. The medical staff is aware of the definitions of medical / functional status of the elderly patients requiring continued treatment. The evaluation for rehabilitation potential is performed by the team of the internal medicine ward and not by a multidisciplinary team that includes a Geriatrics physician and/or rehabilitation. Yet efforts are made to begin the rehabilitation therapy during the hospitalization. Data about changes in actual cognitive status of the elderly are not consistently documented.

Orthopedic Ward:
The postoperative rehabilitation therapy begins during the hospitalization. The postoperative evaluation of rehabilitation potential of the elderly is performed
by the team of the orthopedic ward, without the participation of a Geriatric Specialist, MD physician or an rehabilitation specialist. (No change since the last audit). Physician's discharge letters do not always include recommendations for continuing treatment for home care units or detailed instructions for physicians or other care-giving personal.

19. Licensing and Distribution of beds
    Areas audit: Distribution of beds and their accordance to the license:
    The occupancy of beds and the extent of the activity per departments

    Intermediate Cardiac Intensive Care - 6 beds are listed in the license, with an occupancy level of 0%.
    The activity is reported within the scope of Cardiac Intensive Care (Occupancy level higher than 200%) The Hospital was directed to report correctly.

    Orthopedics Dept. - 20 beds, Burns Dept. - 4 beds, Oral and Maxillofacial Dept. - 2 beds. No occupancy (0%) is reported in those departments. The hospital was asked to report about its bed occupancy rate, as per their licensed deployment.
    It should be pointed out that the aforementioned comments were also written down in the previous audit report.

    Children's Intensive Care - In May 2013, the Hospital requested to convert 10 surgery beds and establish a pediatric cardiac intensive care department.
    The application was not approved by the Ministry, and it was determined that the Committee will examine the conditions and announce its recommendations. During the control inspection it was found that those beds are being operated since Feb. 2013, without the approval of the Ministry of Health. The hospital management has been instructed to report bed activity according to the departments listed in the license. A consultation will take place at the Ministry of Health, concerning the conversion of 10 beds from the Surgery Department to Pediatric Cardiac Intensive Care.
A Summary of the dictates for improvement:

1. Hospital administration

For immediate correction:
- Medical students training and participating in patients examination should be done according to the MOH regulation circular no 44/1996
- Malpractice insurance should be renewed
- Fire department certificate should be renewed
- Veteran Employees’ vaccination should be completed as recommended.
- A copy of the Informed consent form should be given to the patient.
- According to MOH regulation, a review of sexual assault should be obtained from every male employee, even for external contractor workers prior to employment.
- Smoking restrictions should follow the MOH instructions circular no 32/2011
For correction within three months:
- The hospital management should create a system for completion and updating all the relevant protocols and regulations of the MOH for each sector.
- Any change in the distribution of the active hospital beds should be carried out only following consultation with the MOH.

For correction in one year:
- Hospital administration should arrange with the social work unit to refer the discharged patients to rehabilitation and nursing centers as needed.

2. Medical Administration

For immediate correction:
- Patient's identification details should be found on all file sheets.
- The orders of dispensing medication should be written in capital letters, according to the MOH regulations.
- The medical orders, consent forms, medical prescriptions, discharge summary and documentation should be signed and stamped by an official stamp including physician name and license number.
- The use of medical abbreviations is not permitted
- Medication should be written in capital letters

For correction within three months:
- All hospital physicians should be licensed to practice medicine in Israel.

For correction in one year:
- Medical files should be computerized.
- ICD 9 coding is recommended.
- Resident's night duty should be managed according to the MOH protocols.

3. Nursing administration
For immediate correction:

- All nurses should be licensed to practice nursing in Israel, according to Israeli law.
- Resuscitation trolleys should be upgraded in order to be efficient in case of emergency.
- An oxygen cylinder should be attached to the resuscitation trolley.
- A sticker containing patient data should be attached to each page in the patient's file.
- The nursing admission sheet should be signed with a full name or stamped.
- Medication should be written in capital letters.
- A sticker containing "name, dose and nurse signature" should appear on IV administration lines.
- Antiseptic soap should be refilled according to the recommendation of the Israeli National Center for Infection Control.

For correction within three months:

- The nursing management should obtain all the nursing protocols according to the MOH recommendations. All nurses should be oriented by the protocols and sign their names.
- Personal nursing discharge summary should be submitted to the patient.
- All resuscitation team members and committee should pass ACLS refreshing course every three years.
- Patient safety: complete installing toilet hand rails and assistance bells in the patient's bathrooms in all the departments.

For correction in one year:

- In charge nurses employed in special units should pass postgraduate course according to the nature of the unit (ICU, PICU, CCU, Intermediate ICU, NICU, ER, OR, delivery room), according to the nursing administration directive no. 71.
- Computerization of patient's nursing records is highly recommended.
- Install sinks with no touch hand taps in each patient's rooms.
- Skin assessment documentation should be added to the admission sheet

4. Dental Clinic
For immediate correction
- The files and documentation must comply with Ministry of Health guidelines.
- There must be files and documentation for all patients who continue treatment outside the hospital.

5. Operating Theater safety
For immediate correction
- The diathermy unit should be numbered
- The range of the diathermy unit has to be specified in the patient chart.
- Checkups of diathermy units after 100 rounds, must be executed and recorded on a regular basis.
- Drugs in cabinets should be organized in alphabetical order

For correction in one year
- All nurses in charge at the OR during all shifts must complete a post graduate course in operating theater nursing.
- Gowns and the linen used during surgery should to be water and fire resistant.
- Cleaning and disinfection prior to sterilization of the instruments, should to be done automatically by washing machine that reaches 94° C or by an ultra-sonic machine.

6. Recovery Room safety
For immediate correction
- Monitor patient pain level using the VAS scale as a vital sign following surgery.
- Check level of consciousness as a vital sign in all patients following surgery.
- A written report of patients discharge status should be sent to the respective ward with the transferred patient.

7. Anesthesiology

For immediate correction
- Upgrade preoperative chart.
- Institute an adequate form for record-keeping while transferring the patient to the Recovery Room.
- Add the time when fast begins to the preoperative chart.
- Surgeons must sign and stamp all their charts.
- Locate a ventilator in the Recovery Room and in the area of Radiology and the Cardiac Laboratory.
- An antiseptic bottle must be put at each bed in the Recovery Rooms.

For correction in one year
- It is recommended to start courses for staff who are interested in pain care.
- The inadequate facilities and conditions of the staff need to be improved.
- Recovery Room beds should number 1.5 for each surgical station.

8. Engineering Systems

For immediate correction

In the vicinity of the Operating Theaters
- A clear separation must be made between the clean and unclean area.
- Controlled automatic doors must be installed in order to prevent unauthorized entry to the operating theaters.
- The taps in the surgical hand washing basin must be replaced with taps that can be operated without palm of the hand contact.
- Air suction should be installed above the surgical hand washing basin.
- A designated room should be provided for family consultation.
- Control of Humidity in the air conditioning system must be installed.
in every operating theater in accordance with Ministry of Health Procedure AC-01.

- A positive pressure status must be permanently present during activity in all theaters
- Marking of gas piping must be completed.
- Illuminated emergency exit signs must be installed.
- The usually accepted colored of the various sockets must be installed, including signs indicating circuit numbers.
- A transparent cover must be installed including signs, for the cut-off taps in the recovery room.
- Two medical gas, electricity and communications positions must be put in place in the recovery hall.
- Installation of supply lines for medical gases, electricity and communications must be completed in the patients’ reception room.

**In the Washing/Sterilization Room within the Operating Theaters Complex**

- An air suction system must be installed above the washing area
- An autoclave must be installed
- An electrical washer reaching a temperature of 93 degrees centigrade must be installed for the washing of surgical instruments.

**Sterile Supply (located outside the Operating Theater Area)**

- An appliance must be installed for the exhalation of filtered compressed air for drying of pipes and hollow appliances (i.e. containing cavities)
- Validating procedure of autoclaves should be carried out yearly by an outside source.
- A partition must be made to completely separate a clean and a dirty area.

**The Oxygen Supply System**

- A certificate must be produced from a qualified external inspector as to quality of the oxygen in the medical center as stipulated by the
Ministry of Health's requisite standards.
- The pipe should be colored and marked according to the type of gas.
- Signs marking the flow direction of oxygen in the machinery room and exit to the hospital should be installed.
- Means of fire protection must be put in place.
- Light fittings with protection against mechanical damage must be installed in back-up central gas exchange area, installation of emergency lighting must be completed.
- The oxygen generating station and the containers should secured against earthquakes.
- Signs on the entrance door and at the front of the machinery room should be installed, reading:
  (a) Caution, Medical Gases
  (b) Smoking and naked flames prohibited
- Location of fire fighting point should be marked and identified. (As soon as the fire brigade arrives to put out a fire they will identify the material emerging from the oxygen station room).

**Medical Compressed Air System**
- A device must be installed to continuously monitor the dew point in the air
- A device must be installed to continuously monitor of carbon dioxide concentration in the air
- A refrigeration dryer system and a chemical absorption dryer should be installed parallel to the compressed air system.
- Air filters must be installed at the free air suction points outside the machinery room.
- An emergency connection to the compressed air supply system from the hospital wards must be installed.
- Signs and identification panels must be put in place on the entrance door and at the front of the machinery room.

**Medical Vacuum Supply System**
- Biological filters and a liquids separator must be put in place in the
production generating device.
- The pipe must be colored and marked with appropriate identification
- Signboards and identification must be installed at the entrance to and at the front of the machinery room.
- A separation must be made, in the various machinery rooms, between a medical vacuum system and medical compressed air system.

**In the High Voltage Room**
- A detailed and framed electricity plan must be installed and hung on the wall of the high voltage room.
- The emergency lighting arrangement in the high voltage room must be completed.

**In the Main Electricity Room**
- Signs and markings must be completed on the stoppers.
- A detailed and framed electricity plan must be installed, hanging on the wall of the main electricity room.
- The room should be completely secured and locked in order to prevent unauthorized entry; the access to it should be controlled.
- Emergency lighting installation must be completed.

**Generators**
- The room of the Chief Engineer and maintenance staff should be moved into a different location, far away from the boiler room and generator room.
- Dust should be removed from the floor and the equipment of the generator room.
- Steps must be taken to ensure that there is an emergency connection from the hospital's external generator connection to the city electricity system.
- A detailed and framed electricity plan must be put in place and hung on the wall of the generator room.
- The following means of protection must be put in place: gloves, protective spectacles, appropriate signboard.
- Extra lighting must be installed in generator room.
- Emergency lighting system should be fixed.

**Air Conditioning/Pump Compressors**
- A system to prevent back flow of water should be installed in the expansion containers in the air conditioning room.
- Emergency lighting must be installed

**Steam Boilers**
- The steam boiler must not be used as a dryer for wet Clothes; this is a safety hazard.
- A Health and Safety warning signboard must be put in place.

### 9. Laboratory services

**For immediate correction**
- Hasten renovation of the new CL.
- The Genetics laboratory must report and inform regarding its activities to the MOH.
- The CL night shift should have proper supervision and necessary help in case of an emergency.
- All the stool samples should be processed under a biosafety hood and not on the bench.

**For correction in 6 months**
- The Pathology laboratory has to provide proper ventilation of its premises. At least 6 cycles of air flow per hour should be in place at any room of any clinical laboratory, especially at a laboratory where chemicals, stains and fixatives are used on daily basis.

**For correction in a year**
- Purchase and implement a central software program in order to allow traceability, delta check and reduction of human error relative to CL data and results.
- The CL should monitor daily QC of all blood gases tests.
- External QC for the blood gases test should be implemented.
- The CL should monitor QC of all tests including glucometers and any additional Point of Care Testing (POCT).
- The CL has to be supported in order to participate in a certification or accreditation program based on the ISO 9001:2008 or ISO 15189.
- The CL laboratory should perform and follow up the daily QC and the EQC for all the tests and any other POCT test at the different units of the Hospital.
- The Pathology laboratory has to participate in external QC testing for all the tests performed.

10. Social Work Services

For immediate correction

- The service must be clearly and formally distributed between the wards. This is vital for extending the continuity of care between the members of staff and for of strengthening working relations.
- The social worker must ensure that a record is made in the patient file and a periodical quality check should be carried out regularly.

For correction in 6 months

- Contact must be made with the Social Service Director in the English Hospital in Nazareth with a view to familiarization with the main procedures and their translation into Arabic/English. A Letter of Request from the National Social Work Service will be sent to the Director of the Nazareth Hospital in order to facilitate such joint action.
- Safeguarding of patient rights and exercising them to the full must be meticulously observed, subject to familiarization with the relevant procedures of the Ministry.
- Consideration must be given to an increase of personnel in the Social Services in order to fully address the special psycho-social problems that are a feature of this sector of the population.
11. Diet & Nutrition

For immediate correction

- Steps must be taken to ensure a varied and adequate stock of specially designated food for hospitalized patients.
- Ground/shredded food must not be given as a substitute to enteral feeding; only special food which has received Ministry of Health approval.
- Whole-wheat bread must be used for all the hospitalized patients, not only for diabetic patients.
- "Sharp" non-saturated oil (olive oil or canola oil) must be used in at least 2/3 of the total use of cooking oil.

For correction in 6 months

- Steps must be taken to ensure that relevant MOH directives concerning nutrition are translated.
- It is mandatory to proceed in accordance with the Nutrition Directives issued by the Ministry of Health.
- It is mandatory to proceed with and implement the provisions of Food Basket Circular 5/2013.
- Steps must be taken to ensure the purchase of a Seat Scale and a Bed Scale, for the purpose of complete nutritional evaluations as required for accreditation.
- Requirements in respect of a dietician positions (1/100) must be followed in order to conform to the standards under Circular 13/93.
- Steps must be taken for the professional enrichment of the staff of dieticians by participation in courses, advanced studies and relevant day study and tour seminars.

12. Pharmaceutical Services

- None

13. Sanitation and Environmental Health

For immediate correction
- Salads should be kept under the required circumstances while transferred to the wards
- Heating trolleys for serving hot food to the patients should be repaired
- There should be a special place for cleaning and disinfecting containers designated for collecting regular waste

For correction within 3 months

- The storage rooms for keeping and collecting regular waste should have artificial ventilation, negative air pressure, drainage and hand washing sinks.
- Rooms in the different departments used for storing waste transportation containers should have proper drainage.

For correction within 6 months

- The waste disposable center should be re-located with no access to the public.
- There should be a separate elevator for evacuation and transportation of regular waste.
- The regular waste trash container should be kept in a room with a sealed floor covering and washable walls.

14. Laundry handling

For immediate correction

- All laundry should be classified and treated as infected.
- The ward area for storing full bags of dirty laundry should be for that use only.
- Dirty laundry trolleys should be fitted with a strong non porous cover and cleaned and disinfected in accordance with Ministry regulations.
- There should be a separate elevator for transporting dirty laundry.
- Laundry transferred by chute must be properly bagged.

For correction within one year
- Rooms designated for dirty laundry concentration should have washing hands' sinks, a proper drainage and a constant artificial fresh air change two times an hour at least.
- There should be a separate room for sorting dirty and infectious laundry.
- There should be a separate elevator for transporting dirty laundry.

15. Waste Collection and Disposal

For immediate correction

- In the pharmacy, the cupboard used for storing expired medicines must be clearly labelled: "Dangerous Waste". The contents should be placed on a separate waste trolley and transferred to the dangerous waste store, for disposal.
- A sign: "Dangerous Waste" must be placed on the outside of the dangerous waste store.
- The number of large bins in the infectious waste store should be increased to ensure all waste is stored within closed bins.

16. Endoscopes management (gastro)

For immediate correction

- After flushing the channels with enzymatic detergent, they should be flushed with water.
- The room in which the hand cleaning is carried out needs at least 10 air changes an hour, especially as it is such a confined space.
- At the end of the disinfection process, the scope should be flushed with 70 % alcohol and dried with medical air.
- Cleaning staff should wear surgical masks while cleaning.
- Scopes used for the first time in a day must be disinfected again before use.
17. **Physical Therapy Service**

*For correction within one year*

- The physiotherapy records should be included in the new computerized program which the hospital is planning to implement in the near future (high priority).
- Since the team was reduced from 5 to 4 physiotherapists. There is a need for more physical therapy positions in both the inpatients and the outpatient settings in order to provide adequate services, including functional assessment of geriatric patients, and to make optimal use of equipment and facilities.
- Allocate a specific room in the main building for physical therapy treatments. Bringing hospitalized patients to the clinic in the outpatient facility is not recommended.

18. **Geriatrics**

*For immediate correction*

- Include recommendations for continuing care for discharged patients in the discharge summary letters.
- Assess and document changes in actual cognitive status of the elderly in the physician’s data reports.
- Include a geriatric/rehabilitation medicine specialist as a member of the medical staff or as a permanent advisor.

*For correction within one year*

- Conduct special programs / projects for improving the knowledge in gerontology / update in geriatric medicine,
- Initiate a proper training program in geriatrics for nurses and other staff members

19. **Licensing and Distribution of Beds**
- The hospital management has been directed to report bed activity according to the departments listed in the license.

- On behalf of the audit team we would like to express our appreciation to the El Makassed administration for the openness and cooperation during the visit.

Yours Sincerely,

Dr. V Ezra, M.D
Director-Division of General Medicine
Medical Administration

Mrs. R. Freund, RN, MPH
Departmental Head Hospital audit Division of General Medicine

Copies
Dr. Chen Stein-Zamir-- District Health Officer, Jerusalem Health Bureau
Dr. Yoram Lotan – Head, Medical Facilities & Appliances Licensing Division
Prof. Arnon Afek- Director of Medical Administration