



Ziauddin University

Program: MD PAEDIATRIC

Department: PAEDIATRIC

Submitted to

Ziauddin University

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Criterion 1: Program Mission Objectives and Outcome

Standard 1-1: Mission and Objectives

Table 4.1: For program objective Assessment attached after documentation of outcomes

1-11: Mission statement of Institution

Vision:

To be a prestigious institution of higher education recognized for its academic excellence and research, nurturing ethical and intellectual curiosity in the recipients of higher education and positively contributing towards the development of a knowledge based society in Pakistan which can fully understand global challenges in the rapidly changing political, economic and social paradigm.

Mission:

Ziauddin University seeks to have a futuristic approach in imparting knowledge, skills and confidence in students and to inculcate in them such critical abilities, wisdom and values which are necessary for a forward looking coherent civil society where knowledge is disseminated and service rendered with the highest sense of moral uprightness and social responsibility to the nation, region and the world at large.

1-12: Mission statement of Department

Mission of the Paediatric department is to produce high quality professionals who are compassionate and committed to improve the child's health locally and globally through their best clinical care, innovative biomedical research and leadership in the medical profession.

1-13: Mission statement of program

Our structured training program is based on the commitment to excellence in education, academic leadership and professionalism to make self-directed, lifelong learners and researchers who are compassionate and competent to provide comprehensive and coordinated care to a broad range of pediatric patients in the community and at all levels of the Health care system.

1-14: Program Objectives

Objectives and their alignment with program, departmental and institutional mission statements. Main elements of the strategic plan to achieve the program mission and objectives.

Objective	Description	Strategic Plan
<p>1a) Objective 1: KNOWLEDGE AND TEACHING</p>	<p>To give comprehensive knowledge of the broad range of pediatric problems so at the end of the course the trainee shall be able to:</p> <ul style="list-style-type: none"> - Understand the normal pattern of child growth and development and diagnose and manage its common problems. - Acquire knowledge of common pediatric problems and emergencies in terms of epidemiology, etiology, pathophysiology, clinical features, diagnosis, appropriate therapy and rehabilitation. - Diagnose and manage some of the more complex problems and challenges encountered during child health care. - State age related requirements of nutrients, fluid, drugs in health and disease. - Acquire knowledge of National child health programs: IMNCI, EPI etc. 	<p>Lectures, Seminar (Case based discussion, Journal club, morbidity and mortality conference), Tutorial, Teaching during work rounds (Grand round), and morning meeting. Subspecialty rotation.</p>

<p>2a) Objective 2: SKILLS AND OTHER ATTRIBUTES</p>	<p>Trained the students to develop the competencies pertaining to pediatrics patient management so at the end of the course the trainee shall be able to:</p> <ul style="list-style-type: none"> - Take detailed pediatric history, perform appropriate physical examination of a child/neonate including neurodevelopment and behavioral assessment and make clinical diagnosis in the light of gained information. - Formulate investigation and management plan for the common and complex pediatric disease - Integrate and evaluate gathered information from a variety of resources. - Prioritize, anticipate and refer to a higher level when necessary. - Perform common pediatric bedside procedures; IV cannulation, Intraosseous and central line, administer vaccine, bag and mask ventilation, Intubation, Nasogastric feeding, Urinary catheter and chest tube placement etc. - Conduct diagnostic procedures; Lumbar puncture, Pleural and Ascetic tap, Observe Bone marrow, liver and kidney biopsy.- Efficiently and confidently exchange information with patient family and health professionals. - Deal effectively in routine as well as in unexpected and complex situations. - Management of potentially incomplete and conflicting information- Facilitate 	<p>Bed side teaching, clinical reasoning and problem based learning, Role play, peer learning, Audio-video demonstration, Demonstration of procedural skill on manikin and clinical patients.</p>
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	learning of team members/ paramedics and medical students.	
3a) Objective 3: PREVENTIVE MEDICINE	<p>To give comprehensive knowledge of preventive medicine to make the trainees able to:</p> <ul style="list-style-type: none"> - Knows, apply and evaluate primary, secondary and tertiary prevention, including screening, counseling, therapeutic and palliative medicine. - Recognize and assess the health condition related to occupational and environmental exposure. - Knows etiology and prevention of communicable diseases. - Formulate the immunization plan and passive and active immunization of infectious diseases. - Knows Expanded program of immunization (EPI), EPI and Non EPI vaccines, principle of immunization, Investigation and reporting of vaccine preventable diseases for eg. AFP (Acute Flaccid Paralysis) Surveillance. 	Seminar, Bed side teaching, Role play and Posting in OPD and Vaccination clinic.

4a) Objective 4: BIOETHICS OF PATIENT CARE	<p>To impart the knowledge and to maintain good physician-patient relationships. At the end of the course the trainee shall be able to:</p> <ol style="list-style-type: none">1. Develop understanding of management in the best interest of the patient by considering both; potential risk and the expected benefits.2. Understand and respect the Autonomy of patient and importance of informed consent.3. Understand the patients' dignity in terms of their privacy, confidentiality, emotions and relationship.4. Capable of building rapport with pediatric patients of different ages by recognizing their emotional and behavioral needs.	Role modelling, feedback and Reflection.
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<p>5a) Objective 5: PROFESSIONALISM</p>	<p>To train students to demonstrate utmost professionalism and work according to the needs of the community with regards to ethics. At the end of the course trainee shall be able to:</p> <ol style="list-style-type: none"> 1. Demonstrate the attitude of giving priority to patients' needs regardless of their own self-interest. 2. Demonstrate the consistent level of commitment, responsibility and accountability, in patient care and educational activities. 3. Work as a productive member of a team engaged in patient care and education. 4. Acquire and demonstrate skill of self-directed and evidence based learner who is capable to utilize appropriate learning resources and has ability to critically analyze the published medical literature and make sound clinical decisions in patient care. 5. Demonstrate empathy and humane approach towards patients and respect emotional, religious and cultural needs. 6. Organize and supervise the desired academic task efficiently. 7. Perform effectively in complex and unpredicted conditions while considering the ethical and moral values. 	<p>Role modelling, Bed side and OPD clinical demonstration, feedback and Reflection.</p>
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<p>6a) Objective 6: RESEARCH</p>	<p>To make the students research oriented and carry out research as a course requirement and for academic excellence. At the end of the course trainee shall be able to:- Knows the basic concepts of research methodology and epidemiology.- Formulate research questions and generate hypotheses appropriate to those questions. Use research databases to collect study information, using appropriate design software application and methods.- Prepare and submit a manuscript for publication in medical journal and for thesis.- Critically analyze the medical literature.</p>	<p>Research methodology workshop, Journal club, conferences, support of community medicine department, statistician and Clinical research committee in designing and conducting research.</p>
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Standard 1-2: Documenting Outcomes

1-21: Expected outcomes which support the program objectives including the expected competencies of graduating students

- Provide safe patient care that is appropriate for the treatment of health problem and promotion of health.
- Integrate core scientific knowledge in understanding the mechanism, diagnosis, management and prevention of disease.
- Acquire the competencies to deal with common and complex pediatric problems.
- Self-directed learners who keep updated about the recent advances and developments in medical science and the National health programs.
- Integrate the principles of clinical epidemiology and practice evidence based medicine.
- Communicate effectively with patients, family members, colleagues and other health care workers.
- Acquire the skill of academic and administrative leadership.
- Achieve excellence in professionalism.
- Contribute as researcher.

Table 4.2: Program Outcomes supporting the Program Objectives

Outcome	Objectives						
		1 (Knowledge)	2 (Skills)	3 (Preventive medicine)	4 (Bioethics of patient care)	5 (Professionalism)	6 (Research)
1	Attendance				*	*	
2	Mini-CEX	*	*	*	*	*	
4	Presentatio n	*	*	*		*	
5	Procedure	*	*		*	*	
6	Portfolio/log book	*	*	*	*	*	*
7	Assessment of rotational training	*	*	*	*	*	
8	Term Evaluation(6 monthly)	*	*	*	*	*	
9	External assessme nt	*	*	*	*	*	
10	CME	*	*	*	*	*	*

	11	Research work						*
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Form A (attached as annexure): Survey of graduating seniors (to be conducted every semester)

Observations and recommendations related to the Graduating student survey:

- a) Program
- b) Training
- c) Faculty

Form B (attached as annexure): Survey of Alumni (To be conducted every 2 years)

Observations and recommendations related to the Alumni survey:

- a) Knowledge
- b) Communication skills
- c) Interpersonal Skills
- d) Work Skills

Form C (attached as annexure): Survey of Employers (To be conducted every 2 years)

Observations and recommendations related to the Employers survey:

- Knowledge
- Communication skills
- Interpersonal Skills
- Leadership Skills

Standard 1-3: Assessment Results and Improvement plans

(Table 4.1): Program Objectives/outcome Assessment

Objective/outcome	How measured	When measured	Area identified for Improvement	Improvement made

Knowledge and teaching	Mini-CEX Term exam	Continuous Biannually Final exam	Clinical knowledge	<ul style="list-style-type: none"> · Seminar/tutorial · Bedside teaching · External subspecialty rotation in 4th year of training
Skills	Grading, Mini-CEX, Rotation Evaluation and Term exam	Continuous Biannually Final exam	Clinical judgment and decision making	<ul style="list-style-type: none"> · PBL · Structured logbook
Preventive medicine	Mini-CEX, Rotation Evaluation and Term exam	Continuous Biannually Final exam	Knowledge of primary, secondary and tertiary prevention and rehabilitation	Frequent field visit CME, Conference
Bioethics of patient	Logbook Continuous evaluation	Continuous assessment	Empathy and age appropriate behavior	Role play
Professionalism	Attendance Logbook	Continuous assessment	Log book are not timely updated	Structured logbook

	Feedback from patient and colleagues			
Research	Data collection, CRC review, thesis evaluation Poster and presentation	At the time of submission of synopsis, Article and Thesis.	Delay in the submission of synopsis	Time limit of synopsis submission and approval by the end of 2 nd year and Thesis at 4 th year of training

1-31: Actions taken based on the periodic assessments

- The importance of subspecialty rotation was realized hence rotation in pediatric cardiology, nephrology, and oncology has been introduced.
- Frequent Small group discussion and problem based learning sessions are programmed to enhance the clinical knowledge and management skill.
- To make evaluation more effective and holistic, OSCE along with single best and short answered questions are included.

1-32: Major future program improvement plans based on recent assessments.

Strict induction criteria, Research methodology, communication skill workshops and CME sessions on regular intervals.

1-33: Strengths and weaknesses of the program

Our training program is well structured and accomplished with problem based learning, frequent CME sessions, continuous and periodic evaluation and frequent feedback to individual candidates.

We experienced few drops out mainly due to inability and professional incompetency of trainees to cope up with desired standard of MD program. It is therefore decided to have strict selection criteria before inducting the candidate for the MD program.

It was noticed that the trainees did not have adequate depth of knowledge and clinical exposure related to important subspecialty of pediatric such as cardiology, nephrology, obstetrics, haemato-oncology and intensive care unit so we have included mandatory

rotations for 2 months each in the above mentioned subspecialties to upgrade our student clinical experience.

1-34: Significant future development plans for the program

Knowing the weakness of our trainees in Research orientation and conduction such as poster and paper presentation and publication which is also the major requirement of the course (publication of two articles and 1 thesis) we recommend introducing the research module including basic research course, statistics, data collection and analyses and manuscript writing.

Development of Sub-specialties in Paediatric includes pediatric cardiology and nephrology.

Standard 1-4: Overall Performance

Form D (attached as Annexure): Faculty Course review report

Form E (attached as Annexure): Student course evaluation Questionnaire

1-41: Graduating Students: NA

Year	Number of graduating students	Students in 1st Highest percentile	Students in 2 nd Highest percentile	Students in 3 rd Highest percentile	Graduating Average score	Average time for Completion (Years)	Faculty Student's Ratio:
	NA						

Overall satisfaction of students as assessed by graduating student's survey:

To be conducted by Quality enhancement cell of the University.

1-42: Faculty

a) Journal publications

Other publications of the faculty members are present in the Curriculum Vitae of the consultants submitted to the HR Department.

b) Funded projects: None

c) Conferences attended per faculty

Once a month approximately 12/year)

d) Excellence/ awards

NA

e) Overall Faculty satisfaction as assessed by the **Faculty survey (attached as annexure)**:

1-43: Community services:

a) Workshops:

Conducted two monthly and trainees are also encouraged to attend workshops on pediatric problems being held at other hospitals of the city.

b) Courses:

Revision course held for the residents and postgraduate trainees regularly.

c) Seminars:

Seminars are held also three to four times yearly. Also active participation of faculty and trainees in seminars held at other Universities of the city as AKU and DUHS.

Criterion 2: Curriculum Design and Organization:

a) Degree Title:

MD in Paediatric medicine

b) Definition of a Credit hour:

NA

c) Degree plan (flow chart):

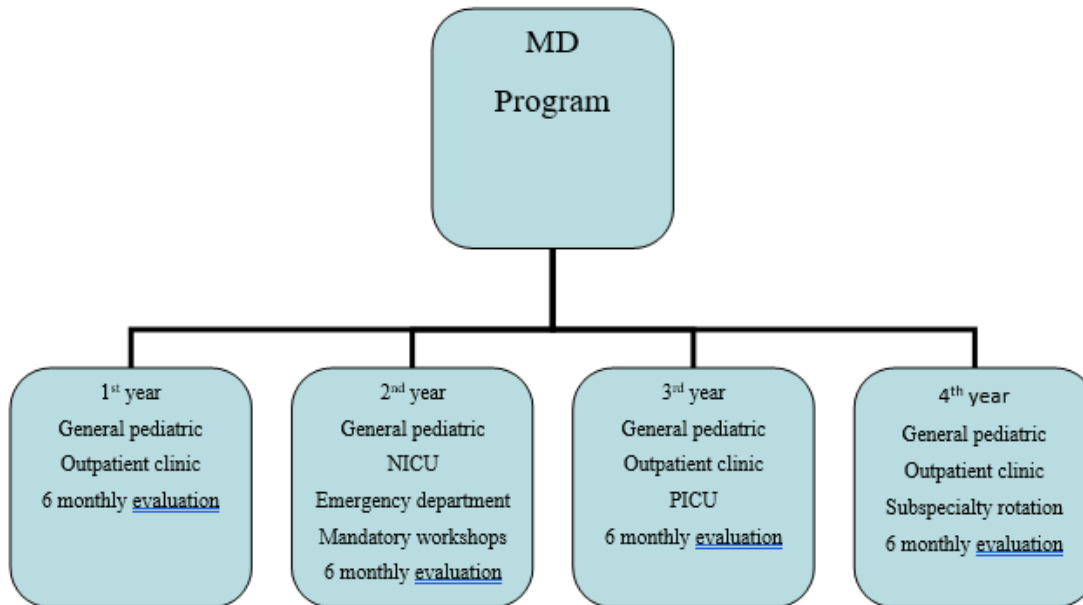


Table 4.3

Year	Category (Teaching Hours)				
	Basic Sciences Course	Clinical rotations	Others/CME Hours	Independent clinics	Field work
1 st year	NA	OPD 3MONTHS	- Monthly journal club, and mortality morbidity meeting	NA	NA

			- weekly problem case ,and grand round		
2 nd year	NA	Emergency dept. and NICU rotation 4months each	- Same as above - Research methodology workshop	Vaccination clinic	NA
3 rd year	NA	PICU 4months	- Monthly journal club, and mortality morbidity meeting - weekly problem case ,and grand round	ER OPD	NA
4 th year	NA	Mandatory 2 month rotation in 2 disciplines	- Monthly journal club, and mortality morbidity meeting - weekly problem case ,and grand round	ER OPD	NA
Total					
Minimum Requirement					

(For Each Course)

Course title: General Paediatrics, Neonatology, Intensive care medicine, and mandatory subspecialty training course.(for detail refer to Appendix 1

Course objectives: To meet the objectives mentioned in CRITERION 1.

Catalog description:

Text book and references: Refer to Appendix II

Syllabus breakdown in lectures:

Child development, behavioral disorders of childhood, fluid and electrolyte balance, nutrition and nutritional disorders, genetic disorders, inborn error of metabolism, Gastroenterology/hepatology, Cardiology, nephrology, neurology, hematology/oncology, respiratory disorders, disorders of the musculoskeletal system, infectious diseases, common pediatric skin diseases, endocrine disorders.

Computer usage: Facility available in the seminar room and library.

Laboratory: N/A

Content breakdown in credit hours: N/A

Standard 2-1: Courses versus Objectives

2-11: How the program content (courses) meets the program objectives:

The program content is carefully drafted and grouped over the 4 years progressing from core knowledge to skill development and clinical treatment of patients. The entire program is based on continuous assessments, clinical rotations and the structured evaluation biannually and final exam at the end of 4 year training. The clinical experience and clinical practicum are logged in the logbook across the 4 years in order to ensure objectives are being met.

2-12 (Table 4.4): Courses Vs Program Outcomes:

1= Knowledge, 2=Skills, 3= preventive medicine, 4= bioethics of patient care, 5= Professionalisms, 6= Research

Courses/ Clinical rotations	Outcomes					
	1	2	3	4	5	6

General paediatric	*	*	*	*	*	
Emergency medicine	*	*	*	*	*	
Intensive care medicine	*	*	*	*	*	
Neonatology	*	*	*	*	*	
Subspecialty rotations (Paediatrics cardiology, nephrology, obstetrics, Surgery, haem-Oncology)	*	*	*	*	*	
CME activities (Research methodology, MM meeting, Journal club)						*

Standard 2-2: Theory, Problem analysis and Solution design

Courses containing a significant portion (more than 30%) of the elements in standard 2

(Table 4.5)

Elements	Courses/ Clinical rotations
Theoretical knowledge	Applied to all courses/clinical rotation
Problem Analysis	Applied to all courses/clinical rotation
Management	Applied to all courses/clinical rotation

Standard 2-3: Basic sciences requirements: Not Applicable

Curriculum satisfies the basic sciences requirements for the program as specified by the respective accreditation body.

a) Yes/No

b) Accreditation body:

c) Requirements:

d) Deviations (if any) and justification for deviations: NA

Standard 2-4: Major requirements as specified by Accreditation body:

Curriculum satisfies the major requirements for the program as specified by the respective accreditation body.

a) **Yes/No**

b) Accreditation body: **PMDC**

c) Requirements: **Clinical and Theory Hours**

d) Deviations (if any) and justification for deviations:

PBL is incorporated in our program which is not required by PMDC. This incorporation of PBL in dental program is consistent with all other programs offered in the university by applying basic and clinical knowledge to real life problem scenarios. PBL is shown to be an effective tool in adult learning.

Standard 2-5: Humanities, social sciences, Islamiat, Arts, Ethical, professional, Pak studies as specified by Accreditation body:

Curriculum satisfies Humanities, Ethical, professional, as specified by Accreditation body:

- a) **Yes/No**
- b) Accreditation body: **PMDC**
- c) Requirements: **Communication skill workshop**
- d) Deviations (if any) and justification for deviations: **NA**

Standard 2-6: Information technology contents: NA

Information technology contents of curriculum courses and its integration throughout program:

Course	IT Content
MD	Internet usage, computer usage for online research, computer assisted learning

Standard 2-7: Communication Skills:

How development and application of oral and written communication skills of students are applied and integrated throughout the program:

Communication skills is integrated in the first year of MD program. The 2 hour interactive session with students apprises them of the key elements and importance of communication.

Communication skills is also assessed throughout training period at the bed side and during regular teaching sessions and during OSCE biannually.

Course	Communication skills content
MD pediatric	1. Counseling of parents regarding both acute and chronic pediatric illnesses and their management including counseling regarding genetic disorders and breaking of a bad news.
	2. Perform effectively in complex and unpredicted condition while considering the ethical and moral values.

Criterion 3: Laboratory and computing Facilities(N/A)

Laboratory title	N/A
Location and area	
Objectives	
Software available	

(if any)	
Major apparatus	
Major Equipment	
Adequacy for Instruction	
Safety regulations	

Laboratory title	
Location and area	
Objectives	
Software available (if any)	
Major apparatus	
Major Equipment	
Adequacy for Instruction	
Safety regulations	

Standard 3-1: Availability of Lab manuals/ documentation/Instructions

3-11: How students and faculty have adequate and timely access to the manuals/ documentation and instructions:

N/A

3-12: Shortcomings in laboratory (bench marking with similar departments in reputable institutions)

N/A

Standard 3-2: Adequate Personal support for Labs:

For Each Lab Not Applicable

<i>Lab</i>	<i>Support personnel</i>	<i>Level of support</i>	<i>Instructional support</i>

Standard 3-3: Adequate computing infrastructure and facilities

3-31: How computing facilities support the computing component of program

_____ N/A _____

3-32: Shortcomings, benchmarking with similar departments in reputable institutions:

_____ N/A _____

Criterion 4: Student support and advising

Standard 4-1: Sufficient number of students and frequency of course offerings

Frequency and number of students enrolled in each of the following courses:

a) **Core:** The Institute offers a 4 years MD Paediatric program from 8th March 2010 onwards. A total of 18 students were inducted. Out of them 11 are retained and rest are either expelled due to unsatisfactory performance, or left due to personal issues. The core courses are outlined in the study guide and are offered throughout the four years.

Elective: mandatory subspecialty training course. (Refer to Appendix 1)

Core courses offered by other departments: Yes

We send our students for elective in mandatory subspecialties rotation 2 months each in any 2 of the following.

Obstetrics	Perinatal Care	In Campus
Pediatric	Surgery	In Campus
Pediatric	Cardiology	NICVD
Pediatric	Nephrology	SIUT
Pediatric	Hematology / Oncology	CCH

Standard 4-2: Effective student/faculty interaction

Achievement of effective student/faculty interaction in courses taught by more than one faculty member/lecturers or teaching assistants. Daily morning class ensures effective interaction between the students and faculty members.

Standard 4-3: Course decisions and Career counseling

4-31: How students are informed about program requirements:

The postgraduate office located in North Nazimabad campus provides career counseling and guidance to the students and provides them with the syllabus, rules and regulation and study guidance at the beginning of the program as well throughout the training period.

4-32: Advising system and measurement of its effectiveness

The postgraduate office (PG Office) situated at the North campus is designated to provide career counseling to the interested candidates, throughout the year, but mainly during the admission process. The number of students inducted and retained each year will reflect the effectiveness of the system.

4-33: Student counseling system and how students get professional counseling when needed.

The faculty office at the main North campus provides an advising system during the office hours between 8:30 am and 4:30 pm. All Dept. heads can also counsel students and other faculty members as and when the need arises. A postgraduate studies meeting by the Postgraduate committee is held regularly to discuss problems with the faculty members. A student's performance evaluation report is submitted to the postgraduate office six monthly.

4-34: Student's access to professional counseling when necessary

Postgraduate office in the North Nazimabad campus provides professional counseling whenever required. This counseling is designed to assist students in resolving personal problems that are interfering with their academic progress and success. Such problems might include difficulty in adjusting to the institution, family concerns and/or low self-esteem. There is no document on hold to highlight any evidence however they are informed of this process and are integrated in their course.

4-35: Opportunities available for students to interact with practitioners and to have membership in technical and professional societies.

Students are encouraged to participate in workshops and therefore interact with pediatricians in other hospitals of the city and actively participate in seminars related to child health and to make presentations.

Criterion 5: Process control

Standard 5-1: Admission criteria

5-11: Program admission criteria at the institutional level and departmental level

Criteria for the eligibility is as follows:

1. 6 months experience in pediatrics.
2. Pass Written test with 60% marks
3. Interview of the candidates before final selection

5-12: Policy regarding transfer from other universities/ credit transfer or transfer to the program from another major within the college:

_____N/A_____

5-13: Frequency of evaluation of the admission criteria and if evaluation results are used to improve the process.

The admission committee reviews the criteria on a need basis and makes recommendations for amendment to the academic council for review and action.

Standard 5-2: Process of registration

5-21: How students are registered in the program

Admission test followed by interviews in which candidates who are selected are offered admission in the program.

5-22: How student's academic progress is monitored and how their program of study is verified to adhere to the degree:

There is a biannual evaluation system that comprises continuous assessment of 20% weightage, and written exam with BCQ and Short Essay Questions, Objectively Structured Clinical Examination (OSCE) along with long and short clinical case

examination. The postgraduate office and the dean of postgraduate studies monitor the program.

5-23: Frequency of evaluation of process of registration and monitoring and if the evaluation results are used to improve the process

Academic committee meetings evaluate the registration as needed.

Standard 5-3: Faculty recruitment, evaluation and promotion

5-31: Process used to ensure that highly qualified faculty is recruited to the program

Program faculty is recruited by advertisement in the newspaper faculty fulfilling the PMDC criteria is being offered the job. Work experience and qualifications are verified. Additionally, faculty evaluation forms are being filled by the students as per policy of university, which are then evaluated by the QEC.

5-32: Methods used to retain excellent faculty members

N/A

5-33: How evaluation and promotion processes are in line with the institution mission statement.

The faculty members are evaluated and promoted based on their performance and experience.

5-34: Frequency of evaluation of this process and if the evaluation results are used to improve the process.

It is evaluated six monthly and the results and performance of the individual candidates is discussed and with the candidate and faculty feedback, measures are taken to improve the program.

Standard 5-4: Teaching and delivery of course material

Form F (attached as Annexure): Teacher's Evaluation Form

5-41: Process and procedures used to ensure that teaching and delivery of course material is effective and focused on students learning

The guidelines set forth by PMDC in regards to curriculum and time reserved for teaching and clinical training ensures the content and curriculum is directed towards

Postgraduate student learning. The postgraduate office continuously monitors the program and six monthly feedbacks regarding the course that has been taught is provided to the postgraduate office.

5-42: Frequency of evaluation of this process and if the evaluation results are used to improve the process:

The program reviews the delivery of course material every year whilst reviewing the curriculum, timetable and teaching methods used.

Standard 5-5: Graduation process

5-51: Procedures used to ensure that graduates meet the program requirements

Regular monitoring of students' performance by the faculty members. Pre-defined standards are made and are approved by the Postgraduate office.

5-52: When this procedure is evaluated and whether the results of this evaluation are used to improve the process

It is evaluated six monthly and the results and performance of the candidates at the end of each evaluation is discussed with them and feedback from them is taken so as to improve the method of teaching.

Form G (attached as Annexure): Survey of Departments offering PhD program

NA

Criterion 6: Faculty

Program's area of specialization	Courses in the area and average number of sections/year	Number of faculty members in each area	Number of Faculty with PhD degree
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<p>First year (first 6 months)</p>	<ul style="list-style-type: none"> ● Nutrition ● growth and development ● Fluid and electrolyte balance ● Infectious diseases ● Immunization, immunological disorders. 	<p>2/campus</p>	<p>FCPS/ FACP</p> <p>No PhD</p>
<p>First year (last 6 months)</p>	<ul style="list-style-type: none"> ● Neonatology, Inborn errors of metabolism, genetic disorders ● childhood psychiatric illnesses ● Gastrointestinal system ● Nephrology/ Urology 	<p>2/campus</p>	<p>FCPS/ FACP</p> <p>No PhD</p>
<p>Second year (First 6 months)</p>	<ul style="list-style-type: none"> ● Pediatric cardiology ● Respiratory illnesses ● Pediatric hematology /oncology ● Pediatric dermatology. 	<p>2/campus</p>	
<p>Second year (last 6 months)</p>	<ul style="list-style-type: none"> ● Endocrine disorders ● Central nervous system ● Neuromuscular disorders, and musculoskeletal system. ● Rheumatological disorders 	<p>2/campus</p>	

Third Year	<ul style="list-style-type: none"> ● Pediatric emergencies ● NICU ● Emergency dept./ Casualty ● PICU ● Outpatient Clinic with consultant 		FCPS/ FACP No PhD
Fourth year	<ul style="list-style-type: none"> ● Independent clinic at casualty ● Subspecialty Rotation 		FCPS/ FACP No PhD

Standard 6-1: Faculty numbers and Qualifications

6-11: Program areas and number of faculty in each area

6-12: Faculty Resume (attached as form H)

Standard 6-2: Faculty Development

6-21: Criteria developed by the department, for faculty to be deemed current in the discipline.

The faculty members of Paediatric have post-graduate qualifications from recognized universities, both foreign and local as registered by PMDC. The faculty is updated with current practices by attending continuing education programs (seminars/workshops) both national and international level and professional development activities.

6-22: Based on the above criteria and information in the faculty member’s resumes the percentage of them who are current

All faculty members are employed full time. They have valid PMDC registration and have FCPS qualification or equivalent .The newly inducted faculty is also registered by PMDC.

6-23: Means for ensuring that full time faculty members have sufficient time for scholarly and professional development

They are encouraged to actively participate in seminars and conferences and have access to online resource material which is used for educational activities.

6-24: Existing faculty development programs at the departmental and university level and their effectiveness in achieving faculty development

Regularly scheduled CME activities are conducted for faculty professional development and it is mandatory for faculty members to attend them.

6-25: Frequency of evaluation of faculty programs and if the evaluation results are used to improve the process

The evaluation is done on a six monthly basis and results are used to make improvements in the method of teaching.

6-31: Program and processes in place for faculty motivation.

No administrative help for office work. And the salary offered to FCPS qualified consultants is far less compatible with their experience and qualification.

Form I (attached as annexure): Faculty input using faculty survey on programs for faculty motivation and job satisfaction

6-32: Overall rating of the faculty. Attached as annexure.

Criterion 7: Institutional Facilities

Standard 7-1: Supporting Infrastructure

7-11: Infrastructure and facilities that support new trends in learning

The classrooms have multimedia projector and air-conditioned facilities. There is a well-equipped NICU with 14 incubators and 05 latest ventilators for mechanical ventilation and one Nasal CPAP and a well-equipped six bedded PICU and general ward with 09 beds, Semi private and Private ward with the capacity of 4 and 11 beds respectively, is available at all the three campuses. Moreover we have a 4 bedded fully

equipped pediatric emergency working 24/7. The faculty for MD pediatrics is also fully qualified in their field.

7-12: Adequacy of the facilities.

There is a lecture hall, a seminar room, on-call room for residents, skills Lab and library facility.

Standard 7-2: Library

7-21: Adequacy of the library's technical collection

The students of MD Pediatrics use the Ziauddin University library to update their knowledge. The library has an adequate number of books, which are updated each year after being approved by departmental heads and the dean. More subject Pediatric journals need to be added in the print section, and complete internet access to all international Pediatric journals especially UP TO DATE, ARCHIVES OF DISEASE IN CHILDHOOD and PEDIATRICS journal should be provided.

7-2: Support rendered by the library

The hospital library lends books for reference and has a photocopy facility on site for student's access over nominal cost. In addition, a computer facility is also present in the library.

Standard 7-3: Classrooms

7-31: Adequacy of the class rooms

Adequate classroom facilities are present with multimedia and projector for teaching purposes.

7-32: Adequacy of faculty offices

No office for the Professor is provided; however there is a combined faculty lounge for consultants of all specialties.

Criterion 8: Institutional support

Standard 8-1: Support and financial resources

8-11: How the program meets the standard of adequate support and financial services. If it does not, the main causes and plans to rectify the situation

The program is funded and supported by Ziauddin University.

8-12: Level of adequacy of secretarial support, technical staff and office equipment

Lack of secretarial and administrative staff and lack of office for the faculty members.

Standard 8-2: Graduate students and research assistants

Number of graduate students, research assistants, PhD students and the faculty graduate ratio for the last 3 years.

	Year 20__	Year 20__	Year 20__
Graduate students	N/A	N/A	N/A
Research assistants			
PhD students			
Faculty graduate ratio			

Form J (attached as Annexure): Research Student Progress review form

Not applicable.

Standard 8-3: Financial resources

8-31: Resources available for the library

The library has the following resources:

Ziauddin University Libraries Network

- 9 libraries are working under the ZU umbrella in different colleges at different campuses.
- The chart of the libraries is enclosed at Flag “A_”.

Area Main Library

- 5,184 square feet
- Library map at Flag “B_”

Library Hours

- Monday to Friday: 8:30 am to 8:30 pm
- Saturday: 8:30 am to 4:30 pm

Libraries’ Staff

- Chief Librarian: 1
- Deputy Librarian: 2
- Assistant Librarian: [Not specified]
- Library Assistant: 4
- Peon: 3
- Detail of Library Staff at Flag “C_”

Library Collection

Printed

- Books: 11,506 volumes
 - Summary of the books subject-wise
 - List of books (subject-wise)
 - List of books (college-wise)
 - Detail of total books at Flag “D_”
- Journals (Subscribed): 58
 - List of total journals at Flag No. 5
 - List of journals (college-wise) at Flag No. 6
- Journals (Complementary): 24
 - List of journals enclosed at Flag
- Magazine / Newspapers: 8
 - List enclosed at Flag “F_”
- Theses: 49
 - List enclosed at Flag “G_”
- Archive / Manuscripts: Various documents
 - List enclosed at Flag

Electronic

- CDs / DVDs: 798
- Slides / Microfilms: 707
- Audio Cassettes: 53
- Video Cassettes: 59
- Transparencies: 250
 - List enclosed at Flag “I”

Online Resources

- Databases: HEC
- Journals (all databases)
 - Sorted, classified, and organized by subjects
 - Used NLM Classification
 - Wiley-Blackwell
 - Springer Link
 - HighWire
 - List of journals at Flag “J”
 - PubMed: 874 full-text indexed journals are available
 - List of full-text journals enclosed at Flag “K”
- Free books for doctors
- Free medical journals including Pak Medinet and others

Infrastructure / Facilities

For Library Users

- Seating: 98 chairs
- Cubicles (for individual reading): 12
- Computers: 20 (specifications at Flag “L”)
- Library software (under process): KOHA
- Scanner: 1 (HP Scan Jet 2400)
- Printers:
 - Heavy duty color: 1 (HP Color LaserJet 2600n)
 - Black & white: 1 (HP LaserJet P2035)
- Photocopy: outsourced
- Library website on intranet: www.zu.edu.pk

For Library Staff

- Seating: 6

- Chief Librarian's chamber: 1
- Office for professional staff: 1
- Work room: 1
- Circulation counter: 1
- Computers (for staff): 4
- Computer (for library software): 1

Library Committee and Other Forums

- Number of library committee members: 14
- Dean of College of Pharmacy is the Chairman of the committee
- Chief Librarian is the Secretary of the Committee
- Frequency of meeting: bi-monthly
- Minutes of library committee are discussed and approved in the Academic Council
- Chief Librarian is a member of Academic Council and of the Information Technology Core Committee (ITCC)

8-32: Resources available for the Laboratories

The laboratory has the following resources: Not applicable.

Course	Lab	Equipments
N/A	N/A	N/A

8-33: Resources available for the computing facilities

The laboratory for computing facilities has the following resources: NONE

Course	Lab	Computing equipments
MD PAEDIATRICS	Library	20 desktop computers in main library Clifton campus

		05 desktop computers in North campus library
	Seminar room	1 desktop computer

LIST OF PAEDIATRIC BOOKS AVAILABLE AT ZIAUDDIN HOSPITAL LIBRARY

Ziauddin University- Libraries				
College of Medicine-Department of Pediatric				
The following books are the part of ZU libraries' holdings				
S. N o.	Author	Title	Edit on	Y e ar
1	Accardo	A Neurodevelopmental Perspective on Specific Learning Disabilities.		1 9 8 0
2	Aggarwal	IAP colour atlas of pediatrics (3 copies)		2 0 1 2
3	Arvind	100+ Clinical Cases in Paediatrics	3rd ed.	2 0

				0 8
4	Baller	The Psychology of Human Growth and Development.		1 9 6 1
5	Banerjee	Text book of Community and Social Pediatrics. .	2nd ed	2 0 0 8
6	Barratt	Pediatric Nephrology. .	4th ed	1 9 9 9
7	Behrman	Nelson Textbook of Pediatrics.	16th ed.	2 0 0 4
8	Behrman	Nelson Textbook of Pediatrics.	17th ed.	2 0 0 0
9	Berg	Gellis & Kagan's Current Pediatric Therapy. 17th ed.	17th ed.	2 0 0 2
10	Bergstrom	Prenatal Health Care with Limited Resources.		1 9

				9 4
11	Berman	Pediatric Decision Making. 1994		1 9 9 4
12	Boi	Breastfeeding.		2 0 0 4
13	Boi	Child Care. 2004		2 0 0 4
14	Brown	Pediatrics.		2 0 0 5
15	Cameron	Contemporary patterns of breast feeding.		1 9 8 1
16	Campbell	Forfor and Arneil's Textbook of Pediatrics.		1 9 9 8
17	Chakraborty	Critical Care of The Newborn.		1 9

				9 1
18	Cloherty	Manual of Neonatal Care.	5th ed.	2 0 0 4
19	Cloherty	Manual of Neonatal Care.	4th ed.	1 9 9 8
20	Cole	The Development of Children. .	2d ed	1 9 9 8
21	Dworkin	Pediatrics.		1 9 8 7
22	Elizabeth	Nutrition and Child Development.	3rd ed.	2 0 0 4
23	Field	Pediatrics: An Illustrated Colour Text.		1 9 9 7
24	Field	Pediatrics.		2 0

				0 2
25	Haneef	Textbook of Pediatrics.		2 0 0 0
26	Haouimi	Atlas of Pediatric Radiology: 250 cases(common diseases).1 st 2009	1st ed.	2 0 0 9
27	Hay	Current Pediatric Diagnosis and Treatment.	20 th ed.	2 0 1 1
28	Hay	Current Pediatric Diagnosis and Treatment. .	17th ed	2 0 0 7
29	Hay	Current Pediatric Diagnosis and Treatment. .	17th ed	2 0 0 6
30	Hay	Current Pediatric Diagnosis and Treatment. .	15th ed	1 9 9 9
31	Hay	Current Pediatric Diagnosis & Treatment.	16th ed.	2 0

				0 3
32	Hinman	Atlas of Pediatric Urologic Surgery.	2nd ed.	2 0 0 9
33	Hoff	Language Development.	4th ed.	2 0 0 9
34	Hughes	Pediatric Procedures.		2 0 0 9
35	Hull	Essential Pediatrics.		1 9 8 0
36	Hutchinson	Practical Paediatric Problems.	6th ed.	1 9 9 9
37	Insley	A Pediatric Vade-Mecum.	12th ed.	1 9 9 0
38	Johnson	The New Born Child.	8th ed.	1 9

				9 8
39	Kempe	Current Pediatric Diagnosis and Treatment.		1 9 7 0
40	Khan	Textbook and Atlas of Paediatric Dermatology.		2 0 0 3
41	King	Helping Mothers to Breast Feed.		
42	Kirkwood	Understanding Medical Immunology.	2nd ed.	1 9 8 9
43	Kliegman	Practical Strategies in Pediatric Diagnosis and Therapy.		1 9 9 6
44	Kliegman	Nelson Essential of Pediatrics.	5th ed.	2 0 0 6
45	Krugman	Review of Pediatrics. .	4th ed	1 9 9 2

46	Kugel	Children of Deprivation		1 9 7 6
47	Larer	The Hospital for Sick Children: atlas of Pediatrics.		2 0 0 5
48	Lissauer	Illustrated Textbook of Pediatrics.	2nd ed.	2 0 0 1
49	McCandless	Children and adolescents.		1 9 6 1
50	Mcdonald. G	Avery's neonatology pathophysiology & management of the newborns. 3 copies	6th ed	2 0 0 5
51	McIntosh	Forfar & Arncil's Textbook of Pediatrics.	6th ed.	2 0 0 3
52	McLutosh	Farfei & Arneils Textbook of Paediatrics.	6th ed.	2 0 0 3

53	Milner	Hospital Pediatrics.	2nd ed.	1 9 9 2
54	Milner	Hospital Pediatrics.	3rd ed.	1 9 9 8
55	Moyer	Evidence-based Pediatrics and Child Health.		2 0 0 0
56	Nair	Multiple Choice Questions in Neonatology		2 0 0 6
57	Nelson	Essentials of Pediatrics.	2nd ed.	1 9 9 4
58	Nelson	Essentials of Pediatrics.	4th ed.	2 0 0 2
59	Nelson	Textbook of Pediatrics.	13th ed.	1 9 8 7

60	Nelson	Textbook of Pediatrics.	15th ed.	1 9 9 6
61	Nelson	Textbook of Pediatrics.	16th ed.	2 0 0 0
62	Nelson	Textbook of Pediatrics.	17th ed.	2 0 0 3
63	Nelson	Textbook of Pediatrics.	18th ed.	2 0 0 8
64	Odam	Andrew's Diseases of the Skin.	9th ed.	2 0 0 0
65	Owens	Language Development: an introduction.	4th ed.	1 9 9 6
66	Rajalakshmi	Pre-School Child Malnutrition.		1 9 7 5

67	Ritchie	Nutrition and Families.		1 9 8 3
68	Robert M.	Nelson's text book of pediatrics .3 copies	19th ed	2 0 1 2
69	Roberton	Textbook of Neonatology.	2d ed.	1 9 9 2
70	Roberton	250 MCQs for the MRCPH.	2nd ed.	2 0 0 6
71	Romaine	Bilingualism .2nd ed.	2nd ed.	1 9 9 5
72	Samuel	Clinical Sonology.		1 9 9 7
73	Save the Children Fed.	State of World's Newborns		

74	Sawyer	Pediatric Physical Examination and Health Assessment		2 0 1 1
75	Schaeffer	Pediatrics: Pretest Self Assessment and Review.		1 9 9 2
76	Schwartz	The 5-minute Pediatric Consult.	3rd ed.	2 0 0 3
77	Stockman, James A	Year book of pediatrics 2012		2 0 1 2
78	Talekar	Self-Assessment in Pediatrics & Neonatology.	1st ed	2 0 0 7
79	Trauner	Childhood Neurologic Problems.		1 9 7 9
80	Udani	Textbook of Pediatrics.	3 volumes	1 9 9 8

81	Valman	ABC of One to Seven.		2 0 0 0
82	WHO	Pocket Book of Hospital Care for Children.		2 0 0 5
83	Margaret Cameron	Manual on feeding Infants and Young children.	2nd ed.	1 9 7 6
84	Cherry,J.	Feigin and Cherry's textbook of pediatric infectious disease(2 vols.)	7th ed	2 0 1 4

Annexures

- Employer Survey

- Alumni Survey
- Student Course Evaluation
- Faculty Course Review
- Faculty Survey
- Teacher's Evaluation
- Research Student Survey
- Faculty Resumes
- Rubric for SAR Assessment
- Assessment Checklist (by Assessment Team)
- Executive Summary
- Action Plan
- Others (Prospectus, Study Guide, etc.)

Paediatrics MD Training Program at Ziauddin University

'''	8:30 am to 10:30 am	10:30 am to 12:00 pm	12:00 pm to	2:00 pm to 3:00 pm	2:00 pm to
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			2:00p m		4:30 pm
Monday	Morning meeting / round (PICU/Ward) with Registrar (Dr. Lubna)	Bed-side teaching Dr. Farhana	Detailed follow ups of allotted patients	Bed-side clinical skills demonstration by the senior PG with final year students. (Monthly topic allocation)	OPD
Tuesday	Morning meeting/ round (PICU/Ward) with registrar (Dr. Lubna)	1. Morbidity & Mortality meeting (monthly) 2. Journal Club (Dr. Farhana) 3. Basic course of research and methodology (Dr. Farah Ahmed)	Detailed follow ups of allotted patients	Bed-side clinical skills demonstration by the senior PG with final year students. (Monthly topic allocation)	OPD

Wednesday	Morning meeting/round (PICU/Ward) with Registrar (Dr. Lubna)	Problem case (PG Presentation) weekly Prof. Dr. Iqbal	Detailed follow ups of allotted patients	Bed-side clinical skills demonstration by the senior PG with final year students. (Monthly topic allocation)	OPD
Thursday	Morning meeting/ Round (PICU/Ward) with registrar (Dr. Lubna)	Under graduate Presentation Dr. Farhana	Detailed follow ups of allotted patients	Bed-side clinical skills demonstration by the senior PG with final year students. (Monthly topic allocation)	OPD
Friday	Morning meeting/ Round (PICU/Ward) with registrar (Dr. Lubna)	Bed-side teaching Prof. Dr. Iqbal	Detailed follow ups of allotted patients	Bed-side clinical skills demonstration by the senior PG with final year students. (Monthly topic allocation)	OPD

Saturday	Morning meeting/round (PICU/Ward) with Registrar (Dr. Lubna)	Monthly Synopsis/ Dissertation assistance	Detailed follow ups of allotted patients	Bed-side clinical skills demonstration by the senior PG with final year students. (Monthly topic allocation)	OPD
		Bed-side teaching Dr. A. Malik			

**APPENDIX 1
MANDATORY ROTATION FOR MD PAEDIATRIC**

The Department of Pediatrics has proposed a structured 4-year program for their MD trainees. The goal of the Pediatric MD Residency Program is to train residents in the practice of general and subspecialty medicine. This exposure will enhance their clinical experience and skills.

Program Outline:

Major Specialties Rotation	Duration
General Paediatrics	2 years, 2 months
NICU	4 months
PICU	4 months
Emergency / Casualty	4 months
Social & Preventive Paediatrics	3 months
Infectious Disease / Isolation	3 months

Additional Subspecialties Rotation (2 months each, choose any 2 of the following):

Subspecialty	Location
Obstetrics / Perinatal Care	In Campus
Pediatric Surgery	–
Pediatric Cardiology	NICVD
Pediatric Nephrology	SIUT
Pediatric Hematology / Oncology	CCH

Note:

PGs who have completed 2 years of training and have an approved synopsis will be eligible for additional clinical rotation in other proposed institutions.

APPENDIX II

LIST OF TEXTBOOKS AND REFERENCE BOOKS

1. Nelson Textbook of Pediatrics, 20th Edition, 2015
2. Robertson's Textbook of Neonatology / Janet M. Rennie, 5th Edition; Manual of Neonatal Care by Cloherty, Latest Edition
3. Red Book: Report of Committee on Infectious Diseases, American Academy of Pediatrics, 2016
4. Red Book Atlas of Pediatric Infectious Diseases, 2013
5. Current Diagnosis and Treatment Pediatrics, Latest Edition by Henry Kamope or William W. Hay Jr.; Pocket Book of Hospital Care for Children by WHO, 2013
6. Textbook of Pediatrics, Pakistan Pediatric Association, Latest Edition; Textbook of Pediatric Infectious Diseases by Feigin, Ralph D, Latest Edition
7. Pediatric Neurology: Principles and Practice by Kenneth F. Swaiman, Latest Edition; Rogers' Textbook of Pediatric Intensive Care by David G. Nichols, 5th Edition
8. Walker's Pediatric Gastrointestinal Disease, 5th Edition (2 Volume Set) by Ronald Kleinman
9. Liver Disease in Children by Frederick J. Suchy, Ronald J. Sokol, William F. Balistreri

10. Pediatric Nephrology (Avner, Pediatric Nephrology), 6th Edition, 2009 by Ellis D. Avner, William E. Harmon, Patrick Niaudet, Norishige Yoshikawa; Manual of Pediatric Nephrology, 2014 by Kishore D. Phadke, Paul Goodyer, Martin Bitzan
11. Comprehensive Pediatric Nephrology: Text with CD-ROM, 1e by Denis F. Geary MB, Franz Schaefer MD
12. Pediatric Endocrinology, Fifth Edition (Two-Volume Set) by Fima Lifshitz
13. Case Based Reviews in Pediatric Endocrinology, 1st Edition by M.D. Jain Vandana, Ram K., M.D. Menon
14. Nathan and Oski's Hematology of Infancy and Childhood: Expert Consult: Online and Print, 7th Edition by Stuart H. Orkin MD, David G. Nathan MD, David Ginsburg MD
15. Manual of Pediatric Hematology and Oncology, Fifth Edition by Philip Lanzkowsky
16. Pediatric Clinics of North America (Periodical)
17. Archive Pediatrics
18. BMJ Pediatrics
19. Clinical Methods, Hutchison's Clinical Methods, 23rd Edition (3 copies in each campus)
20. Neurologic Examination by Robert J. Schwartzman; Blackwell Publishing
Pediatric at a Glance by Lawrence Miall
21. Neonatology at a Glance by Tom Lissauer and Avroy A. Fanaroff