# AN EFFECTIVE CONSULTATION SERVICE; LESSONS FROM NORTHWESTERN MEDICINE









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### SUMMARY

This report summarizes my experience from an elective in Cardiology Consult service at Northwestern University, Feinberg School of Medicine, Chicago, IL, USA from 03/03/2025 to 03/28/2025. The elective was a profound achievement in my academic and personal development journey. It has transformed my outlook to the field of medicine and to life.

This elective exposed me to healthcare in a high resource setting and what we could learn. I enjoyed the diversity in healthcare providers and slightly different healthcare system at large. The teams were very supportive and willing to teach and share knowledge.

Aside from academics, I got to do various other activities which included; the 2025 ACC Chicago Community Health Fair, visiting friends in Chicago and tours in the city. This enabled me to make new networks and learn new ways of looking at life. It also exposed me to lessons that we can take from these high income systems.

Arriving at the end of winter, I missed the extreme cold but got to see spring. I also got an understanding of the general demographics in Chicago.

Great appreciation to God, my mentors, friends, family in addition to the MakCHS International Office and Northwestern University all without whom the rotation could not have progressed smoothly

After the rotation, I determined to try to continue the collaboration as much as I humanly could; inviting guest lecturers from Northwestern and linking the same to other Ugandan projects with similar goals

### ACKNOWLEDGEMENT

I extend my appreciation to Makerere University College of Health Sciences School of Medicine for according me the opportunity to undertake the rotation which has enriched my medical knowledge and experience through the elective placement abroad

Northwestern Medicine has been the best hospital in Chicago, IL for 13 years in a row and scheduling rotations at this place is very limited. I truly appreciate how easy this became for me due to the collaboration between the two universities

I am extremely grateful to the following people for the different roles played in ensuring that I meaningfully gain from the exchange program

- Makerere College of Health Sciences International office for supporting students to complete clinical electives at universities in the developed world.
- Northwestern University Feinberg School of Medicine, Visiting Students' Office coordinators; Mr. A.J Schwartz in addition to Dr. Mohamed Alkazaz and Ms. Heather Munn the coordinators of my elective

I would also love to extend my appreciation to all staff during my rotation; Attendings; Dr. Vera Rigolin, Dr. Nausheen Akhter, Dr. Neela Thangada and Dr. Issam Mikaati

Cardiology fellows; Dr. Eric Yang, Dr. Aishwarya Pastapur and Dr. Anthony Pensa Nurse Practitioners; Ms. Maribeth Beahan and Ms. Catherine Gotz

They welcomed me with open arms, shared their knowledge with me and guided me through the entire month. They taught something better than medicine; How to be a good person!

Special thank you to; Dr. Allan Bakesiga, Dr. Amir Mbonde, Dr. Richard Kazibwe, Dr. Shafic Kakooza, Dr. Dan Semakula, Dr. Emmanuel Okematti, Dr. Kwadwo Ofuso-Bwako, Dr. Quentin Youmans, Dr. Clyde Yancy, Dr. Lydia Nakiyingi, Dr. Mark and Martin Kaddumukasa and Mr. Otto Andrew, Mr. Arnold Bwambale and Mr. Lauben Muhurura who are my mentors.

Heartfelt gratitude to the Departments of Paediatrics and Internal Medicine who made special arrangements to make the elective a reality

Lastly, I extend my heart most felt gratitude to my God, family and friends for their unwavering support and guidance during the application process.

#### Contents

SUMMARY	2
ACKNOWLEDGEMENT	3
INTRODUCTION	5
SELECTION CRITERIA	5
PREPARATIONS	5
ARRIVAL IN CHICAGO	6
ACCOMMODATION	6
CHICAGO	6
THE CARDIOLOGY CONSULT SERVICE	
THE OUTPATIENT SERVICE	
THE LABS	8
LESSONS AND WHAT WE COULD LEARN	8
CONCLUSION	
SELECTED PICTURES	

# INTRODUCTION

In the midst of my fourth-year studies, an exciting opportunity arose: the chance to study abroad. This was a thrilling prospect for me to be able to travel and study another health system as well as improve my skills as well as I explore. The application list contained eight universities, some offering full scholarships and others partial.

# SELECTION CRITERIA

Upon receiving the call for applications, I delved into researching the various universities available for study abroad placements. This involved gathering insights from colleagues who had previously participated in such programs, seeking advice from trusted individuals like my parents and friends. I carefully evaluated each university on the list based on factors such as reputation, scholarship opportunities, and alignment with my academic and personal interests. My favorite sister really wanted Northwestern University for me and she's glad I got it.

After I handed in my application letter, CV, and recommendation letter to the international coordinator's office, I waited anxiously to see if I'd get an interview. Luckily, three weeks later, I got an email inviting me for one. I felt both excited and nervous about it. But, I did my best during the interview, and it went well.

After that, I just had to wait nervously to hear who got chosen. Finally, the good news came—I was picked to be one of the students for the exchange program. It was a big honor for me, and I was really happy about it.

### PREPARATIONS.

After being selected, both the International Coordinators at Makerere University and the Northwestern University were helpful. They provided all the necessary logistical documents like the Letter of Acceptance and Invitation to Northwestern University, which made things much easier for me. I then took photos for my US visa and thereafter applied for a Visitor's B1/B2 Visa through the American Embassy. The entire process was truly seamless due to the support and guidance of especially Ms. Susan Bwekyaso and Mr. Alex of the MakCHS international office.

To prepare for my studies abroad, I consulted with my mentors both in Uganda and in the USA who guided me on how best to maximize my time while doing the exchange program as well as my family members for any guidance and advice as I sojourned the land of America.

I also liaised with the departments of Medicine and Paediatrics which made special arrangements to enable the rotation. The office of the Dean also provided much support.

In addition, I got required vaccination, health and travel insurance as requirements for the exchange program

### ARRIVAL IN CHICAGO

I set off for my travels to Chicago on the 02/22/25 accompanied by family. The costs of the flight had been covered by Makerere University. From Entebbe Airport, I travelled using Ethiopian airlines which had one stopover at Addis Ababa. After a journey of more than 20 hours, I finally landed in Chicago. My first time on a plane, first time outside Uganda and first time in the USA. I truly recognize how impossible this would have been without this program to which I am very grateful.

Upon arrival, we were received by a one Shafic Kakooza, a Ugandan living in the USA whom we met through online platforms. He therefore eased our settling in in Chicago. Much grateful to him.

# ACCOMMODATION

Northwestern University does not provide student housing and the rent in Chicago is expectedly expensive, being the third largest city in the USA. However, the International Office catered for all this in addition to living, travel allowances. I am very much grateful for the support.

# CHICAGO

This was a large city, very organized with bus stops, pedestrian walk ways, and almost no motorcycle riders. It was however organized with the Caucasian predominated "North" being safer than the African American predominated "south" Future students are advised to reside in the North or nothing further than the 35<sup>th</sup> street. I'll be sure to reach out to them.

Public transport was well organized, the food not better than Ugandan. But with the most handsome Architecture, people, beautiful dogs and parks

#### **Northwestern University**

The University's School of Medicine was renamed after Mr. Reuben Feinberg who made sizable donations to it. Other people also did the same with the Law School being named after Pritzker, several pavilions, hospital rooms named after families, et cetra et cetra.

The School of Medicine is continuous with the city with no fences or demarcations. A few signs here and there do the job. A huge contrast to our building in Uganda.

### THE CARDIOLOGY CONSULT SERVICE

'Hi, it's Denis with the Cards returning a page on....' And this was the order of the day. A fellow answering pages from 7am to 5pm every day.

This is run by an Attending who changes every week, a fellow in Cardiology who changes every 2 weeks and two nurse practitioners who are permanently on the service but working 40 hours weekly hence alternate to be off on Friday. Internal medicine residents also sometimes join the team. Medical students such as myself could also join after applying. The service is located at Arkes Pavilion on level seven with cardiac surgery and the valve team

Everyone's day typically begins at 7am. With Grand rounds and daily conferences scheduled at 7.30am after which we head to the fellow's room to start reviewing patients. Everyone is assigned patients. The fellow and nurse practitioners can have as many as 4 patients in the afternoon and 4 in the morning, residents usually two for each session and myself a patient in the morning and another in the afternoon

A variable number of consults are received on a daily anywhere up to 100. However the fellow answers them and triages which patients need to be seen by the team.

During evaluation, every member of the team initially reviews and examines their patient alone. We then round in the conference room on the patients that we are to see at 10am. Everyone presents their cases to the Attending. This is a major learning opportunity.

We then see the patients for the morning, make notes in Epic (online medical records, contrast to paper records in Mulago)

We then break off at noon for lunch and noon conferences. Conferences usually provide food. We return at 2pm to repeat the morning process and end the day at 5pm. Though

writing notes could end as late as 6pm. Which could be dark or light depending on the weather.

I did all my 4 weeks on the inpatient service due to the massive learning opportunity but also visited other services for exposure; Electrophysiology lab for Cardioversion, the Echocardiography lab for Stress testing, the outpatient service and the Cardiac Catheterization lab. These are briefly discussed.

### THE OUTPATIENT SERVICE

In private patient rooms, the team reviews patient after patient. Usually about 10 patients are seen by a team manned by an Attending, a Cardiology fellow (the fellow attends clinic with the same attending across their three years. This match is based on interest and thus fosters mentorship) and a nurse practitioner.

Total privacy is observed

### THE LABS

Northwestern Medicine (NM) has fully dedicated teams for cardioversion and fully equipped.

For the echo lab, a different person takes the imaging and a Cardiologist reads it. Same with the EKGs.

The Cath lab was my best moment. I was scheduled by Ms. Maribeth Beahan who connected me to Dr. Quentin Youmans. I met many people. NM has four functional labs each fully operating. I scrubbed in and assisted in the right and left Cardiac catheterization

### LESSONS AND WHAT WE COULD LEARN

Effective consultation;

- This requires many resources but the character of the team members plays a huge role. The service ran 7am to 5pm with all members of the team available until then. Availability is key to making this work
- Team work; teaching was a priority for the team which, in addition, everyone was willing to help and go an extra mile. For example; attendings made calls to fellow

attendings, to lab teams to expedite investigations and so did everyone according to their capacity.

- Going the extra mile; fellows responded to all calls as early as they could and even called back several times if that is what it took to return a page. Similarly, when we consulted other services, we got a response on the same day.
- There is also effective utilization of consultation with calls to make it timely and quick. Many times, the team consulted the different people who had read the different imaging to get clarification which made the work easier. The same went for consulting different teams to get their thoughts on even the smallest issues. We can truly adapt these measures given people are ready to take more responsibility and accountability
- If NM did it, Lacor Hospital has provided an excellent example and I think we could greatly improve patient care and the consult services in Mulago through team work, availability and going the extra mile to take responsibility and accountability

#### Research heavy presentations;

Dr. Stavros G. Drakos, a visiting lecturer from Utah University, was invited to give a talk and did so by through a one hour presentation of developments in myocardial recovery. I was greatly inspired by this and will schedule a meeting with the HOD Internal medicine to see what we can learn from this

#### **Collaboration;**

- Education; all the presenters for the Grand rounds during my stay were visiting from other universities. This strengthened collaboration
- Research; multiple presenters hinted on the extensive collaborations that make research a possibility.
- Other; the ACC Chicago Community Fair had multiple Universities combine to make it a success. Inspired by this, I reached out to Dr. Nausheen Akhter, my Attending in the second week and organizer of the fair, to potentially collaborate with Nomadic Doctors' Uganda and she agreed to a meeting which we had.

**Hierarchy**; this is not as emphasized with surnames preferred to titles like Professor or Doctor. The fellows and residents also preferred wearing sweaters to clinical coats. Given our current settings in Uganda, this would not be very practical. However, we could tune down the emphasis on hierarchy

**Patient Presentations;** these are investigation and management focused with less emphasis on history and examination. Treatment is also based on current clinical trials. I would recommend that students do their best in terms of extensive preparation but not at Ugandan standards

**Availability and contact time;** contact time with the teachers was truly great, the student has one on one discussion with the specialist too. A similar approach can be adopted with one specialist on the service weekly with more contact time than the current arrangement. Increasing contact time would be better especially if the teachers are to take on longer times on the wards

**Healthcare**; this emphasized patient privacy, patient centered care. The patients had private rooms and generally emphasized informed consent at each step. We could have more screens on the wards for privacy, round before seeing the patients for confidentiality. Patients and their care takers are greatly respected and informed thus improving outcomes. This is an approach that can truly be adopted in Uganda.

**Donors**; a silver platter at NM recognizes the donors who made the hospital a possibility, the same is seen in parks and numerous other institutions. This is particularly encouraged by the government. Donors really get a lot done in the USA. Our government could also incentivize this through tax cuts.

**Breaks and vacation**; almost everyone on the team could not stop talking about what place they visited during their paid leave. This work life balance prevents burn out and we could look for ways to actualize this.

Northwestern also has an allowance for their students and staff to attend conferences. This could be evaluated in terms of donations to actualize it in Uganda.

Medical records are also electronic making follow up quite easy. This should be rolled out to all government facilities as soon as possible.

**Evaluation;** given that the medical student works closely with members of the team which is small, their evaluation is more realistic and effective. Therefore, our teachers should increase focus on having closer evaluation of the individual medical students on their wards based on one to one experiences.

# CONCLUSION

- I appreciate the opportunity and recognize the necessity of such ventures for advancement of healthcare in Uganda.
- Sub-Saharan Africa has been unfortunate in terms of education and development, to advance our healthcare and standards of living, we need to improve our education and also take lessons from others in the world. We thus need to not only continue such collaboration but also to make more collaboration for learning. It will take time but we need to help ourselves. Our representatives should thus be our ambassadors to encourage further collaboration.
- For an effective consultation service, our healthcare system would need more resources but even more important, they would need teams which go the extra mile in terms of patient care and taking responsibility for their actions.

# SELECTED PICTURES



At Arkes Pavilion



With the Consult service team



With Dr. Cedrick Mutebi at the ACC Health

Fair



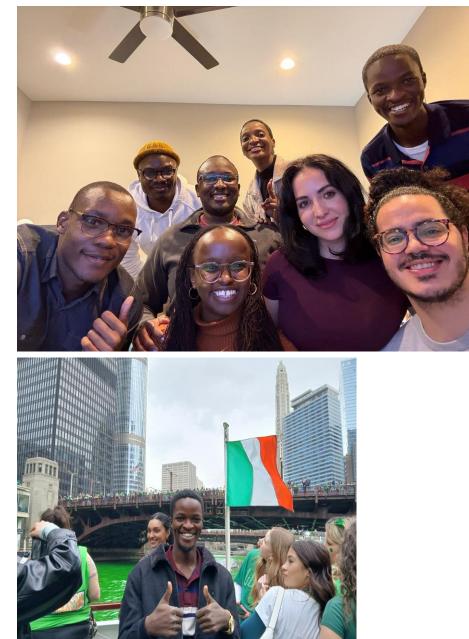
At the noon conference



With Dr. Quentin Youmans and Dr. Kamari at the Cath lab



At the Cath lab



Chicago Architecture tour

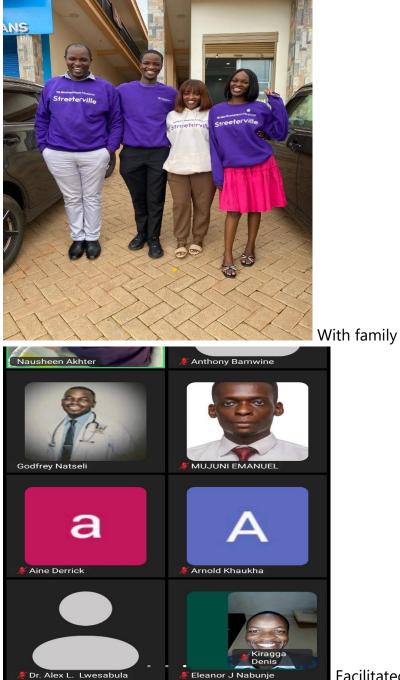
At Shafic Kakooza's





London building

Millennium Park with Martinluther



Facilitated a meeting between Nomadic

Doctors Uganda and Dr. Nausheen Akhter, both have interest in reaching underserved communities.