

## ADDENDUM A: Community Engagement Award<sup>1</sup>

### 1. Nominee's information

Name	Department of Community Dentistry		
Title	Department of Community Dentistry		
e-mail	Ahmed.bhayat@up.ac.za	Telephone number	0840209906

### 2. Nominator Information

Name	Ahmed Bhayat		
Title	Prof		
e-mail	Ahmed.bhayat@up.ac.za	Telephone number	0840209906

### 3. Recommendation by the nominator (100-200 words)

The department is proactive in identifying schools and dental clinics for dental and oral hygiene students to visit. We meet with the various stakeholders to discuss the services we plan to offer and obtain buy in and consent from them.

The students provide a range of curative and preventive dental services to school learners via the mobile dental unit (MDU) and via Primary Health Care (PHC) facilities in and around Pretoria.

The department works in collaboration with other departments including Family Medicine, dieticians, Department of Health and private dental stakeholders in ensuring the students work within a multidisciplinary approach.

The department has two MDUs that are based at a school and a PHC clinic. The students also render services at a PHC facility which exposes them to the public dental sector and prepares them for community service.

Due to water shortages and load shedding, the team had to innovate and more PHC facilities were included and levies were used to purchase diesel for the generator. During times of extreme load shedding, students provide preventive and educational services that did not require water nor electricity. The staff were also pro-active in sourcing funds to refurbish one of the units last year.

### 4. Nominated Module's Information

Name of module	Public Oral health (Oral Hygiene and Dental students)		
Module code	POH 570 and POH 371		
Module outcomes	Screen for oral diseases Provide curative and preventive dental services to underprivileged communities To offer mother and child oral and general health education, including dietary advice Exposure of students to the community environment Exposure of students to schools, special schools, Primary health Care facilities and hospital wards		
Number of credits	POH 371 -8 credits POH 570 -5 credits		
Student success rate over the last three years (2019 – 2021)	2021 POH 371-100% POH 570-100%	2022 POH 371-100% POH 570-100%	2023 POH 371-100% POH 570-100%

<sup>1</sup> Adapted from the MacJannet Award Criteria, Talloires Network

Number of students registered in current academic year	POH 371-14 POH 570-63 Total: 77		
Number of years the programme has been running	POH/GAP 371 -10 years POH/GAP 570 – 10 years		
Total number of academic or administrative staff involved in the current academic year	9 staff members involved in both modules-includes administration and service rendering		
Total number of community members served by the programme in the last 3 years	2021 ±500 Mother and child dyads received oral health education 300 children received dental treatment ±200 children were screened ±100 patients were given advise at the Steve Biko Oncology ward	2022 ±600 Mother and child dyads received oral health education 400 children received dental treatment ±200 children were screened ±100 patients were given advise at the Steve Biko Oncology ward	2023 Still busy with treatment and screenings ±280 Mother and child dyads received oral health education 180 children received dental treatment ±100 children were screened

5. Please provide a brief overview of the module, describing each of the following in order: History (when the module was established, who established it and for what purpose), how the module is currently run (role of lecturer, students, Community Engagement Office, community members). (300-400 words)

POH 371 – In existence for over twenty years with regular amendments. The name of the module changed from GAP 371 to POH 371 in 2015.

POH 570-This module has been presented for over twenty years with regular amendments and in 2018 the name changed from GAP 570 to POH 570.

However, the principal outcomes of these modules have remained the same.

These modules were established by the Department of Community Dentistry and their purpose includes: provision of dental services to low socio-economic communities, the exposure of dental students to the needs of the community, the exposure to real life situations away from the dental school, the improvement of their dental skills, improve their confidence and to make an impact on the health, education and general wellbeing of community members. Lastly, it is a requirement from the Health Professionals Council of South Africa and this also aligns to one of the key strategic goals for the University of Pretoria.

The project is run by two module chairs who carry out the administration duties. All staff members assist with the daily administration duties, the supervision and transport and ensure that all equipment and materials that are required are available to the students. Students, allocated into groups of two, spend a week at the outreach sites. They provide a variety of dental services including preventive, curative and general health services. In addition, students are responsible for the administration duties including charting and capturing of dental statistics on a daily basis. All dental procedures contribute towards their yearend clinical and professional quotas. These services are also aligned to the Gauteng Operational plan for the School of Dentistry and is a means of providing dental care by reaching out to communities instead of them accessing the Oral and Dental Hospital to seek dental services.

In addition, schools that require dental services but which cannot be accessed due to logistic issues, are visited on a quarterly basis and students provide oral health education and screenings. There are also events such as the World Oral Health day and South Africa Oral Health Month which the department participates in.

The community engagement (CE) office provides funds for maintenance and for the transport costs.

The community members include teachers, principals and school governing bodies at the schools. They provide feedback on the dental services and support us by allowing the learners to leave classes to attend for dental treatment.

6. How are lecturers and administrative staff involved in the leadership or advising of the module? In particular, give some details of the involvement of the lecturer nominated for this award. (200-300 words)

Although each module has its own module chair, the entire department is involved and hence the department is being nominated.

The department has regular meetings to discuss and plan the outreach initiatives, provide feedback and to raise concerns from staff and students. All staff members assist with the supervision, transportation, collection of daily and monthly statistics and auditing the equipment and materials on the MDUs to ensure there are adequate materials for the dental services. Staff members go annually to different sites and liaise with community members with regards to identifying a new site for the next year. Schools invite us to offer services and the department has to decide on the site we choose depending on the distance, travel time, type of services required and safety. The department ultimately decides on the sites and the module chairs plan the rosters for staff and students. They also arrange meetings with the Gauteng Department of Oral Health and stakeholders' such as Colgate and Glaxo-Smith Kline to plan the projects and obtain toothpastes and toothbrushes for the learners.

7. What is the role of communities in the module's activities? Do community members have leadership roles in the activities? Are communities engaged in sustaining the activities for the long-term? (200-300 words)

The principals, teachers and SGB at the schools we visit represent specific communities in which the outreach projects take place. They provide feedback on the needs and disease profile of learners attending the schools. They decide on the types of services they feel the students need, they also request for toothpaste and toothbrushes and decide on the times and days that suit them best. Hence, they do have leadership roles in these activities but it's often shared leadership between the department and these community members.

Annually principals and teachers from various schools invite the department to come to them and render services. The department carries out a screening to determine the need and then based on the needs, location, safety and ease of access to the sites, schools are selected. The schools have committed to provide access to the students, provide electricity and a space for the MDU to be parked. The teachers and school Governing bodies also ensure that learners take home the consent forms and that parents sign it so that the learners can be included into the projects.

The teachers at the school also receive oral health education brochures and training, this enables them to supervise the learners and impart oral health knowledge to the learners when we are not present. This ensures continuity of the project as the teachers then take control. The department provides toothbrushes and paste if required. The department also conducted a study and found that in general teacher's oral health knowledge was fair to good

and required more training. Teachers are also urged to enrol for the Colgate Bright Smiles project which provides school with toothpaste, brushes and educational brochures.

8. Write a short description of what the students actually do in the community. Do students have leadership roles in the activities? What roles do students play? (200-300 words)

All learners receive consent forms which must be signed by their parent/guardian before the learners can be screened or receive any dental treatment. The dental students provide preventive and curative dental care to learners and to patients. Students also offer oral hygiene and dietary advice to ante-natal clinics at which mother and child cohorts attend. The dental services include oral and general health education, brushing programmes, mother and child educational information, screening for oral diseases, fluoride treatment, fissure sealants, preventive resin restorations, scaling and polishing, restorations and extractions. They also offer advice on dietary practices and give feedback to the schools regarding food being sold at the tuck shops.

The students do have leadership roles; they identify patients, screen them and develop a treatment plan and then treat them. They work as a team and each student has an opportunity to be a group leader to arrange the patient logistics and to plan the services. As a team, one student treats the patient and the other assist with the dental procedures. As a result, one student will take on a leadership role and decide on the diagnoses of the patient, the treatment plan and then provide the treatment. The second student will assist the leader in managing the patient and materials during the procedure. The roles are swapped for every patient and hence each student has an opportunity to work as a leader and as an assistant. All procedures are supervised by staff members. The students also offer general and dental health advice, as role models in terms of career guidance, they provide dental services and perform administrative duties (recording and collecting statistics).

The students refer any patient who cannot be treated at the MDU to the closest PHC facility or the Pretoria Oral and Dental Hospital.

9. What is (are) the primary issue(s) addressed through this module. How were the issues identified and how are they significant concerns of the community? How is the community involved in decision making about module outcomes and activity outputs? Include any relevant historical background or contextual information. (200-300 words)

The primary goal of community projects is to provide access to dental care for underprivileged communities, to expose dental students to the communities and to improve the dental student's clinical and professional skills.

These community projects meet all of these goals. The department provides prevention and treatment of dental and systemic diseases to communities which either cannot afford or don't have access to dental care. Dental students visit rural and low-socioeconomic communities which exposes them to the living conditions of the surrounding communities; this also creates empathy and professionalism within the students.

Some of the students are unaware of the living conditions in informal settlements and in low socioeconomic environments. These projects take the students into the communities and expose them to real life situations that the majority of the South African population deal with on a regular basis. It provides context to these students as to where and how their patients live. It also prepares the students for their yearlong community outreach service which is often carried out in rural communities.

There have been numerous research projects identifying the dental needs in communities

and all of them have highlighted the high prevalence of dental caries, especially amongst children. Much of this is left untreated due to a lack of access to dental care or a lack of education. Dental caries has a huge impact on children resulting in non-attendance of school, stunting in growth, speech, mastication, wellbeing and emotional issues. As a department we have published research on the positive impact community outreach has had on the students' academic and personal lives.

The department visits the schools annually to determine the needs in order for the students to plan and provide dental services.

10. How has the module affected students who have participated? What knowledge or skills do they gain in the module? How are they assessed (be specific, including any role played by the community in the assessment)? (200-300 words)

Before embarking on the community projects, the entire class is given a lecture on what to expect, what the requirements are and what the procedures entail. They are shown videos of previous groups performing the outreach activities and a past student is invited to detail how the outreach project impacted on their life.

Students complete a reflection portfolio and, in these reports, students have indicated that the outreach has made them more empathetic towards their patients and communities, helped identify the community's needs, improved their work readiness, made them more independent in their working and assessment of patients, made them work in teams and with people from other disciplines and improved their leadership skills. Students have also reported that the outreach project improved their social and civic responsibilities and had a positive impact in their academic growth. We have published two papers on the impact that community outreach has had on the students social, professional, academic and leadership skills. The majority of students reported that the outreach has had a positive impact on their personal lives.

The community does not assess the students directly, however indirect assessment is received from the principals who provide feedback from parents and SGB on a regular basis. To date, all the feedback we received was extremely positive and the communities have expressed their gratitude on numerous occasions.

Formal assessments are done by staff to ensure calibration and standardization of the assessment process. The students are assessed on their clinical, educational and professional competencies.

The staff use a rubric to ensure a fair and transparent assessment process. This is an attendance project and the clinical quotas are added on to their quotas achieved at the dental school. The portfolio reflection is part of the assessment but is used for formative evaluation only.

11. How engaged or supportive of this module is the Faculty/ university? What resources are provided by the university? How will the module find the needed resources to continue running into the future? What policies or mechanisms support the ongoing success of the module? (200-300 words)

These modules are supported by the University, Faculty and the School. The School of Dentistry is also fully supportive of these projects as staff in other departments have also confirmed the positive impact that these community activities have on the clinical and professional competencies of the students.

The university has provided funding through the CE department of the refurbishing of the

MDU. The university has also allowed these modules to have a built-in levy for the transport fees. These levies are transferred into the department cost centre and are used for transport and diesel for the generator. The School also provides financial support for rental agreements of the outreach vehicles.

The MDUs are supported by private stakeholders such as GSK and Colgate. GSK has donated one of the MDUs and they see to the running maintenance of that unit. The Department of Health provides dental equipment and materials as these services are seen as treating of patients at community centres. The Department of Health also supports these projects through inviting us for oral health workshops and oral health days.

The students contribute to the sustainability of these projects through their fees which have a levy ring-fenced for the transport to these sites.

There is a MOU with the Department of Health for allowing our students to visit and treat patients and provide oral health education for patients attending their PHC facilities. We are currently revising the MOU for the school services as this will ensure sustainability of these projects.

With the rising costs of fuel and more common threat of load shedding, these levies might not be sufficient to continue running these projects in the current format. Additional sources of funding should be looked at by the university to ensure the continuation of these projects.

12. What has the module accomplished to date? Please be specific in describing positive outcomes, using qualitative and quantitative examples when available. Also indicate how the module has facilitated the ideal of university social responsibility (200-300 words)

Many learners who would not have received oral health care had access and were relieved of their dental problems. Learners were educated on how to brush and maintain oral hygiene. Students were exposed to different communities and different environments outside the dental school. All procedures carried out were based on scientific and sound methods and technology as taught by the dental school. The dental services have not had any negative impact on the environment as all procedures carried out in the MDU and PHC facilities use minimum amounts of water and electricity. The dental by-products (gloves, gowns, masks, bibs etc) are disposed of at the dental school with other dental hazardous waste products and materials.

Free toothbrushes and paste and provided to learners to facilitate and help improve and maintain good oral hygiene practices. These are sponsored by either Colgate or GSK and are intended to have a sustainable impact on oral health.

Various research projects have been developed, presented and published in peer reviewed journals. Hence this has also become a source of research innovation and the production of community based, practical and relevant research projects.

The principals and SGBs of different schools have also expressed gratitude and insisted on us going back to the school in future. We have had a training workshop for teachers based in a study that reported fair levels of oral health knowledge amongst teachers. We have educated special needs teachers and caregivers at schools to ensure sustainability of these projects when students cannot visit them anymore. Students have also provided feedback to the principals regarding foods sold at tuckshops and hopefully this has been addressed at some of the schools. Anecdotal evidence showed that there has been a decrease in oral health conditions after the team had provided dental services.

## ADDENDUM B: Rubric

Nominee's first name and surname: Ahmed Bhayat

Each Criterion counts 25%	Exceeds expectations (5)	Meets Expectations (3)	Total (25% x 5/ 3)
General impact of module (See section 4, Nominated Module's Information; section 5, Brief overview of the module and Section 12, Accomplishments to date)	The module outcomes are coherent and enable student learning and application of learning Module outcomes are aligned to programme outcomes Activities are aligned to the learning outcomes of the module Assessment is aligned to learning outcomes, activities and the context Student success rate exceeds UP target success rate Outcomes enable full community participation The module has proven sustainable, flexible and scalable Evidence shows that activities have made a difference/ had impact Publications on community engagement in the discipline or more generally and/ or joint research projects	The module has clear and achievable outcomes aligned to the programme outcomes Activities are aligned to learning outcomes Assessment is aligned to learning outcomes, activities and the context Student success rate is at least equal to target UP success rate ( $\pm 82\%$ ) Outcomes enable some community participation The module is fairly new so sustainability not yet fully established The module is fairly new so evidence of making a difference not yet available	
Impact on UP, lecturers and staff (See sections 6, 11)	Degree of involvement of nominee Leadership of nominee Influence on resource allocation and policy to sustain community engagement Evidence of institutional, national or international, impact through committee work, subject or community engagement associations Independent evidence showing impact, level of engagement, leadership, etc.	Degree of involvement of nominee Student advising/ briefing by the nominee Liaison with other UP staff Use of UP resources, policies, etc. to sustain the module	
Impact on students (See sections 8, 10)	Students achieve learning outcomes aligned to the purpose of the module and relevant to their field of study Students are clear about what they need to do in the community Students are clear about the knowledge and skills they gain in the module The knowledge and skills are rigorously assessed The community participates in the assessment Student leadership is evident	Students achieve learning outcomes aligned to the purpose of the module and relevant to their field of study/ Activities address the primary issues identified by the community, are sustainable and making a difference (even if they might not directly relate to a student's field of study) Students are clear about what they need to do in the community Students are clear about the knowledge and skills they gain in the module The knowledge and skills are rigorously assessed	
Impact on community (See sections 7, 9)	Partnership in an equal and developmental relationship with communities, NPOs, municipalities, professional councils, private sector etc. in line with Goal 3 of the UP 2025 Community leadership is evident. There is evidence of mutually beneficial relationship/s (qualitative and/ or quantitative). Activities address the primary issues identified by the community. Procedures to identify issues are transparent. Beneficiaries of activities are asked to provide formal feedback (qualitative or quantitative) <sup>2</sup> Communities are involved in sustaining the activities in the long term.	Partnership in an equal and developmental relationship with communities, NPOs, municipalities, professional councils, private sector etc. in line with Goal 3 of the UP 2025 Community leadership is evident. There is evidence of mutually beneficial relationship/s (qualitative and/ or quantitative) Activities address the primary issues identified by the community. Beneficiaries of activities might or might not provide feedback.	
TOTAL/100			

<sup>2</sup> A maximum of 5 pages of evidence may be submitted.