

2024 MID-TERM REPORT

CENTRE FOR BIOENGINEERING AND BIOTECHNOLOGY (CBB)



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The Clinical Council was originally conceived as an application to the first round of the Graham Seed Fund in 2022. Many of the principal investigators named in the application now serve on the Clinical Council Operations Committee. Senior leadership at the University of Waterloo suggested that the Centre for Bioengineering and Biotechnology (CBB) spearhead the initiative as a home of interdisciplinary programs, rather than the proposed program be funded as a one-year research initiative. The Operations Committee was established to set parameters of the initiative and first met in April 2023. For further details on the makeup of the Operations Committee see page 6, for the committee Terms of Reference see appendix 1.

The purpose of the program is to connect researchers and clinicians to develop innovative solutions to health-care challenges. Originating from a recognized need from both researchers and local health-care professionals, the Clinical Council builds a collaborative community driven by the insights of clinicians as they engage with health technology innovators and facilitate broader connections within the health-care community. The Clinical Council initiative aims to support these collaborations with the community at the University of Waterloo by: providing networking opportunities, facilitating interdisciplinary collaborations with the health-care community, and inspiring meaningful innovations.

The Clinical Council officially met for the first time on February 5, 2024. For further details on the Clinical Council members see page 11, for the Terms of Reference see appendix 2.

During the pilot year the vision will be realized by hosting six (6) events.

MESSAGE FROM THE EXECUTIVE DIRECTOR



The Centre for Bioengineering and Biotechnology (CBB) is a flagship University centre dedicated to enhancing and enabling interdisciplinary research impact at the intersection of human health, technology, and societal need. To maximize the potential of research advances, key stakeholders must be engaged to ensure the relevance, timeliness, and practicality of innovations in an array of human-facing environments.

The CBB Clinical Council represents an intentional series of interactions between practicing health professionals, clinicians, and university researchers at all levels. The primary purpose is to release the potential of transformative innovations in the health-care space, including medical devices, health data science, digital health, novel delivery modes including remote care, diagnostic tests, and many other applications. By including

clinicians in the discussion of new ideas and concepts for advancing health through research, the efforts can more reliably result in needs-based development, accelerating future adoption and quality of the final outcomes. The conversation is two-way as researchers share their findings and ideas while clinicians also outline the pressing challenges facing clinical practice, to identify and focus on strategic overlaps in needs and research expertise.

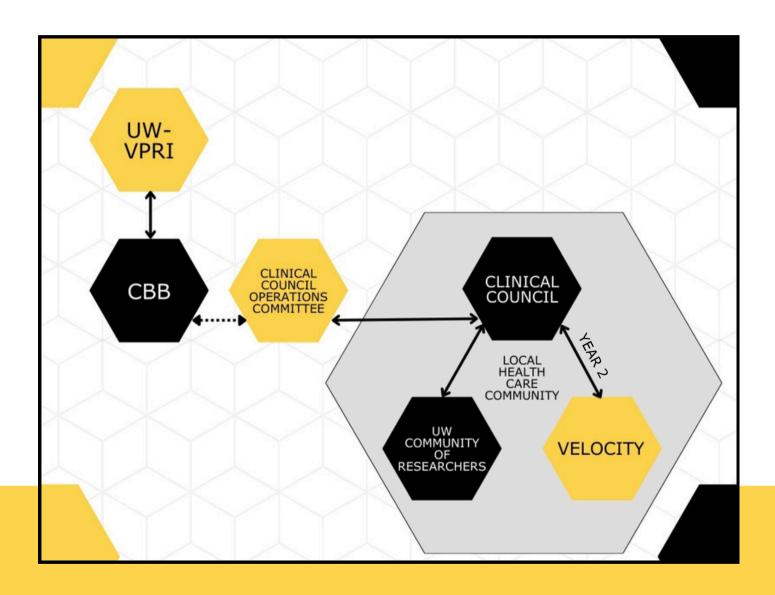
Health research has progressively come to the forefront of societal needs, as many factors including rising costs, accessibility issues, and a generally aging population create unprecedented challenges in the health domain. The Clinical Council exists as a powerful and novel approach to maintaining The University of Waterloo's cutting-edge development of new technologies and solutions to pressing global needs and focuses squarely on health.

This is an exciting time for health research at UWaterloo, and CBB is motivated and enthusiastic to support this unique and formative initiative to bring powerful health innovations to clinical practice and working towards improving health outcomes for all. This report describes the mid-term of launching and delivering an initial formative iteration of the Clinical Council, which is intended to be improved and expanded in the coming years. I for one cannot wait to see the future benefits and transformational outcomes it enables.

Sincerely,

Clark Dickerson

ORGANIZATIONAL STRUCTURE



^{*}For details on the local health-care community that we are connected with, please see appendix 3



OPERATIONS COMITTEE

MANDATE

The Clinical Council Operation Committee's mandate is to provide advice and recommendations, including a clear application process, in relation to the functions and activities of the Clinical Council.

The Clinical Council Operations Committee is responsible for planning and executing the activities related to the Clinical Council.

The Operations Committee is responsible for:

- ensuring that members of the clinical council are provided resources to engage with the University of Waterloo community.
- ensuring that the interactions with and functions of the clinical council are useful to members of the Clinical Council and the University of Waterloo community.

Initially, in year 1, as a pilot, the Clinical Council Operations Committee planned to focus on UW Engineering Faculty and to scale its efforts to include all faculties in year 2. In actuality, the launch event and problem expo were advertised broadly across UWaterloo's campus, see the event metrics on pages 15-17 for details.







CURRENT MEMBERSHIP



CLARK DICKERSON

Executive Director, The Centre for Bioengineering and Biotechnology (CBB)



MOHAMED Alarakhia

Digital Health and Innovation Faculty Lead, McMaster University



MAUD GORBET

Professor, Systems Design Engineering



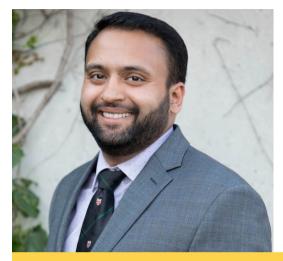
JENNY HOWCROFT

Lecturer, Systems Design Engineering

CURRENT MEMBERSHIP



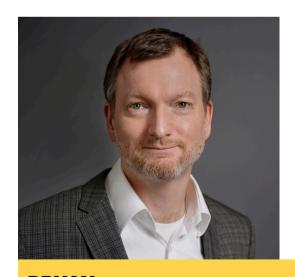
KATE
MERCER
Liaison Librarian, Systems Design
Engineering and Biomedical Engineering



NEIL
NAIK
Physician Advisor, eHealth Centre for Excellence



BEN
THOMPSON
Professor, School of Optometry & Vision
Science



BRYAN
TRIPP
Associate Professor, Systems Design Engineering

CLINICAL COUNCIL

- **6** Members
- 1 Chair
- 1 Year renewable term



MANDATE

The Clinical Council's mandate is to review applications presented by researchers and innovators and actively provide input and respond to questions during presentations by researchers and innovators.

The Council must present problems in the health-care and social care system to researchers/innovators and at various events.

Council members must provide advice to the Clinical Council Operations Committee on how to improve functioning of the Clinical Council. Finally, the Clinical Council champions the work of researchers and innovators and support connection with other clinicians in the community and with health and social care institutions.

MEETINGS

There will be six (6) meetings/events during this first year of the Clinical Council. The events will all be in person with the option to attend virtually, but in-person attendance is encouraged. Food and beverages will be provided at all meetings/events, and parking will be provided or reimbursed.

CLINICAL COUNCIL (CONT'D)

CHAIR

The Clinical Council will have a Chair, who will be elected by a simple majority of the Clinical Council, sit on the Operations Committee, and be the liaison between the Clinical Council and the Operations Committee.

The Chair will be supported by the CBB staff who will act in a secretariat function.

The Chair will work with the Operations Committee to set the agenda for the Clinical Council meetings and the Chair will run the meetings with CBB staff support.

The Chair will provide feedback from the Clinical Council to the Operations Committee.

MEMBERSHIP

The Operations Committee will select clinicians to sit on the Clinical Council.

There will be six (6) members.

Expertise will be sought from across the health system representing primary care, specialty care, and other sectors including the indigenous community.

TERM

Members are appointed for one (1) year terms that may be renewed, there will be no limit on renewals.



REMUNERATION

Members of the Clinical Council will be remunerated at the agreed upon rate for time spent at the clinical council meetings and events where clinical council member attendance is required.

*For the complete Terms of Reference see appendix 2 – finalized on December 3, 2023

CURRENT MEMBERSHIP



NEIL NAIK (CHAIR)Physician Advisor, eHealth Centre for



DOUG DITTMERChief and Medical Director, Grand River-Freeport Hospital



TEJAL PATELClinical Associate Professor, School of Pharmacy, University of Waterloo



STEVEN DAINChief Medical Informatics Officer, DocBox Inc.



CHRYSSA MCALISTER
Co-Division Chief of Ophthalmology,
Saint Mary's General Hospital



KEVIN SAMSONFamily Physician, East Wellington Family Health Team



TOTAL BUDGET

Yr 1 Budget

2024 Actuals

Difference

Expected, not posted as of Nov. 15, 2024

*AS OF NOVEMBER 15, 2024					
Costs of working with Clinical Partners, Patients or Health-care Providers					
a. Collaborator participation remuneration	\$13,221.00	\$4,818.14	\$8,402.86	\$4,919.67	
b. Parking costs	\$180.00	\$99.03	\$80.97	\$28.00	
c. Participant payments					
d. Clinical Council Chair active in Ops Meeting	\$1,800.00	\$678.00	\$1,122.00	\$339.00	
e. Thank you gifts for Clinical Council	\$300.00		\$300.00	\$271.87	
	\$15,201.00	\$4,917.17	\$8,483.83	\$5,558.54	
Catering costs for meetings and social events					
a. Clinical Council meetings (x2) Feb 2024, Dec 2024	\$600.00	\$363.33	\$236.67		
b. Social Mixer Launch event March 2024	\$1,500.00	\$1,731.80	-\$231.80		
c. Clinical Problem Space Exposition October 2024	\$2,000.00	\$649.74	\$1,350.26	\$1,147.42	
d. Engagement Sessions (x2) June 2024, November 2024	\$1,500.00	\$324.16	\$1,175.84	\$462.69	
e. Alcoholic drinks					
	\$5,600.00	\$2,919.04	\$2,680.96	\$1,610.11	
Materials and supplies					
a. Travel					
b. Knowledge mobilization	\$2,500.00	\$0.00	\$2,500.00		
	\$2,500.00	\$0.00	\$2,500.00		

\$23,301.00

\$7,045.07

\$7,168.65

\$16,255.93

BUDGET JUSTIFICATION

COSTS OF WORKING WITH CLINICAL PARTNERS, PATIENTS OR HEALTHCARE PROVIDERS

The Clinical Council members are renumerated at \$150/hr plus tax for a total of 13 committed hours in year 1 for six (6) events. This hourly rate was selected based on advice from the clinical members of the operation committee to reflect a reasonable level for a practicing family physician.

Parking fees for each of the six (6) events are reimbursed.

The Clinical Council Chair is renumerated at the established hourly rate for participation in the monthly Operations Committee meetings (pro-rated for asynchronous contributions to the program).

Not all Clinical Council members participated in early events due to availability. The program has since pivoted to allow for asynchronous participation.

CATERING COSTS FOR MEETINGS AND SOCIAL EVENTS

- Clinical Council meetings (start and end of year): 6 members + support staff meals.
- Launch event: 6 members + Operations
 Council boxed meals from EVO Kitchen.
- Problem Space Exposition: Council,
 Operations Committee, guest speakers and audience cocktail style reception food.
- Engagement Sessions (June and November 2024): 6 members + approximately 3 support staff meals.

MATERIALS AND SUPPLIES

The funds for knowledge mobilization will be used to support open-access dissemination of project results through open-access journal publication (JMIR, BMJ) or conference papers (IEEE EMBC, ASEE) of project results.



CLINICAL COUNCIL EVENTS



FEB 5, 2024



6:00 -8:00PM



DEAN'S BOARDROOM (E7-7411)

MEETING OF THE CLINICAL COUNCIL

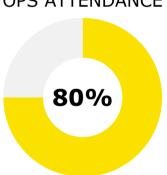
Event Type: Operations meeting **Event Audience**: Clinical Council, Clinical

Council Operations Committee

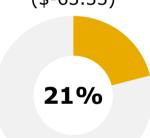
CLINICAL COUNCIL
ATTENDANCE



CLINICAL COUNCIL OPS ATTENDANCE



COST VARIANCE (\$-63.33)



COMMENTS FROM COMMITTEE FOLLOWING EVENT

- Thought it went very well.
- Ethics was the liveliest topic.
- People were engaged and getting to know each other. Clinicians seemed interested. Heard feedback that clinicians are excited for future of CC. How do they continue to stay engaged? Maybe we can have more opportunity to learn more about the clinicians and how we can get them to share more about their wants/desires for impact. How do we ensure we don't overwhelm them informal talks between meetings.
- If I was on CC, I would want more information on what I am being asked to do at social event and what my role is need to communicate this to them via email and maybe an optional meeting to attend if they have questions or want more details once we have a clear plan of what we want from them.
- Clinicians were asking about how the council will measure success, Clark discussed briefly with Mohamed Alarakhia and with Catherine Burns.

SOCIAL LAUNCH

Event Type: Panel + networking Event Audience: UW Deans, department/faculty heads, Biomedical Engineering members, Velocity, MACcelerate, CBB members



ATTENDANCE

Goal	80
Registered	40
Attended	25
Attrition	37.5%

COST VARIANCE (\$-231.80)



EVENT ADVERTISING AND REACH

A VIP invite list was created and used as a first tier of email marketing efforts. Once VIPs had sufficient time to register, invitations were sent out to CBB's mailing list.

79

VIP invitees

129

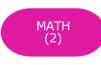
CBB mailing list invitees (excluding repeat invitees from VIP list)

REACH TO DIFFERENT UW FACULTIES

CBB's member mailing list contains professors from all six faculties and 23 Schools and Departments across the University of Waterloo.













Read the article written about the success of the Clinical Council Social Launch on **CBB's webpage**.

COMMENTS FROM COMMITTEE FOLLOWING EVENT

- How do we get the audience more involved?
- A lot of interest in participating.
- Questioning on what kind of ideas would be appreciated.
- A lot of Engineering members didn't show up.
- The time of day was probably challenging for most academics try to make the upcoming (problem expo) event earlier in the day to suit this demographic.

ENGAGEMENT SESSION 1

Event Type: Project pitch

(application process)

Event Audience: University of

Waterloo faculty, staff and graduate

students

SIX APPLICATIONS RECEIVED FROM FIVE UWATERLOO FACULTY

Early Career Researcher

KIN (2)

Professor

ECE

Assistant Professor

SYDE

Associate Professor

MME

Adjunct Professor

ECE

CONNECTIONS MADE PER APPLICATION

.....

The Clinical Council Operations Committee will determine this metric at two separate intervals post Engagement Session Round 1:









JUNE 11, 2024

(J

5:00 - 7:30PM



DEAN'S BOARDROOM (E7-7411)

EVENT ADVERTISING AND REACH

The Engagement Session was a closed event. UWaterloo members submitted an application that was vetted by the Clinical Council Operations Committee. CBB members were invited via the centre's mailing list, and friends of the Clinical Council were contacted to share with their audiences (see appendix 3 for list).

190

CBB mailing list invitees

5

Friends shared

REACH TO DIFFERENT UW FACULTIES

CBB's member mailing list contains professors from all six faculties and 23 Schools and Departments across the University of Waterloo.

ENGINEERING (7)

SCIENCE (7)

MATH (2)

HEALTH (2)

ARTS (3) ENVIRONMENT (2)

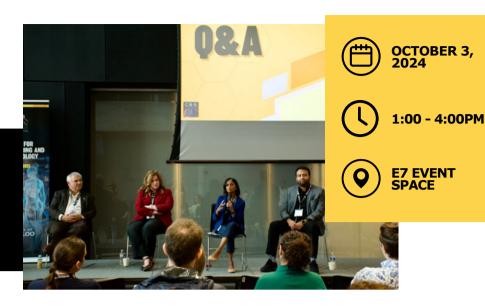


COMMENTS FROM COUNCIL FOLLOWING EVENT

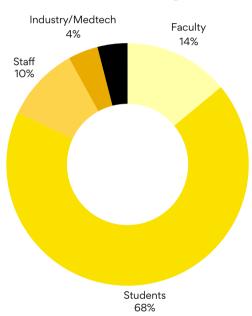
- 20-minute presentations extended to 30 minutes next round? PLUS buffer (4 presenters only).
- Thinking about honing the message of what it is we have to offer, clarify that you are applying to present to the CC only, they MAY be able to connect you to a further network. Flowchart of application process.
- Considered: If they don't have the specialty of the presenter, do they invite someone else, or is this first stage to just provide feedback? Decided: this first stage was best used more to vet the projects and then connect them with the proper contacts after, CBB to coordinate.
- Challenge is clinicians and engineers have different schedules.
- Time of launch was in the evening because clinicians could Wed afternoon can work better for clinicians because they are typically off (after 5:30 is best for clinicians), allow hybrid.
- Have a bio of the researcher so it's easier for clinicians (request in application).
- There is an opportunity to help the clinicians in providing/supporting with connections so they aren't the ones chasing down other clinicians MACcelerate.
- Nobody on CC is as experienced with clinical trials this came up a few times, thinking about expanding the council to include this experience.
- Ensure participants know the Council is closed (only participate for your assigned time).

CLINICAL PROBLEM SPACE EXPOSITION

Event Type: Panel + networking **Event Audience**: University of Waterloo researchers (faculty), students, staff, external health-care and industry members



ATTENDANCE



Registered	87
Attended	55
Attrition	36.7%
Audience % of students and researchers	84%

EVENT ADVERTISING AND REACH

CBB members were invited via the centre's mailing list, external partners were sent personalized email invites, and friends of the Clinical Council were contacted to share with their audiences (see appendix 3 for list).

190

CBB mailing list invitees

3

Partner invitees: Velocity, Grand River Hospital, MIX **17**

Friends shared

REACH TO DIFFERENT UW FACULTIES

CBB's member mailing list contains professors from all six faculties and 23 Schools and Departments across the University of Waterloo.









HEALTH (2)



ENVIRONMENT (2)



PARTICIPATION SATISFACTION FROM SURVEY

- 4.6/5 average "satisfaction" with event.
- All would attend again.
- Future ideas: collaborative engagement with tech industries and clinicians; Including other allied healthcare professionals within the panelists would be good as well!

FUTURE PLANS



- Host Engagement Session 2 on November 12, 2024.
- Host the End of Year Gathering in January 2025 to collect Clinical Council feedback on Year 1 Programming.
- Engage with KidsAbility and Brightshores Health System.
- Include commercialization representation on Operations Committee.
- Student representation on Operations Committee.
- Third Engagement Session in Year 2 for Velocity entrepreneur audience, including applicants outside of Waterloo.
- Expand our network of partners.
- GRH Innovation and Research Office for RCT expertise.
- Create contact list of MDs.
- Clinicians interested in being future members of the Council:
 Stephen Giilck.
- Budget: travel for clinicians from outside Ontario or remote Ontario.
 - Lump sum payment as remuneration?



Key Operations Lessons Learned: schedule events with minimum 4 months notice; schedule Operations meetings with minimum 2 months notice

APPENDIX



Clinical Council Operations Committee Terms of Reference

Mandate

- The Clinical Council Operation Committee's mandate is to provide advice and recommendations, including a clear application process, in relation to the functions and activities of the Clinical Council.
- The Clinical Council Operations Committee is responsible for planning and executing the activities related to the Clinical Council.
- The Operations Committee is responsible for ensuring that members of the Clinical Council are provided resources to engage with the University of Waterloo community.
- The Operations Committee is responsible for ensuring that the interactions with and functions of the Clinical Council are useful to members of the Clinical Council and the University of Waterloo community.
- In year 1, as a pilot, the Clinical Council Operation committee will have a larger focus on UWaterloo Engineering Faculty and will scale its efforts to include all Faculties in year 2.

Meetings

- Meetings are chaired by the CBB Executive Director, and CBB Manager, Portfolio and Operations (ex-officio member, non-voting) of the Committee.
- Committee members may send a delegate to meetings, especially in the case of Conflict of Interest
- In year 1, the Operations Committee should meet at least once a month.
- Members who are absent from four (4) meetings in a year may be asked to resign from the Operations Committee.
- Minutes from the Operations Committee meetings will be distributed to the Operations Committee within one month of the meeting.
- Operations Committee members are invited to attend all events organized by the committee.
- If members of the Operations Committee wish to submit an application to present to the Clinical Council, they cannot review the cycle of application.

Membership

- The Operations Committee is comprised of faculty members of the University of Waterloo and at least two clinicians from the Waterloo Region. One regular clinician member and the chair of the Clinical Council.
- In year 1, the Committee should be comprised of representatives from at least two different
 engineering departments and research directions and reflect the diversity of inter- and transdisciplinary research the CBB fosters and supports.
- In year 1, the size of the Committee will be 7 persons + the Clinician Council Chair
- In subsequent years, the size of the committee is expected to grow to include a member of at least each faculty and may also adjust to reflect diversity of interests and communities within CBB.

Terms

• Faculty members are appointed for two (2) year terms that may be renewed up to another two (2) years. The CBB Executive Director retains a voting position on the committee for the duration of their tenure as ED. The Chair of the Clinician Council holds the position for one (1) year as per the Clinician Council TOR.

- Approximately one quarter (1/4) to one third (1/3) of the operations committee should turn over every two (2) years.
- In the event of a member's absence for any prolonged period, the Chair of the Operations Committee CBB Executive Director may initiate the process of filling the vacancy.

Nomination Process

 Active Operations Committee Members will nominate prospective members and vote. The CBB Manager may also suggest nominees.

Conflict of Interest

 Conflict of Interest will be disclosed following the University of Waterloo Policy 69, using the <u>UW COI Form</u>.

Other Considerations

- Committee needs to define application process for Clinical Council and it size as well as call for rep on Operations Committee.
- Do we have adhoc advisory for commercialization or do we have a member on the Operations Committee?
- Student representation on the Operations Committee will be considered after the pilot term is complete.
- Year 1 complement of Operations Committee focuses on members who are involved in other Health efforts across campus. Future years will expand to consider commercialization/entrepreneurship.

Clinical Council Terms of Reference

Final December 2023

Introduction

The health technology industry and health technology research is poised for significant growth. However, there is sometimes a disconnect between what is needed to support physicians and other clinicians in practice and the aspirations of researchers and technology innovators. While well meaning, there are often interventions and technologies that are developed that do not solve the critical problems in health and social care.

Health technology researchers may be far into development of their solutions before they have had meaningful engagement with enough clinicians. This leads to critical conversations where researchers may need to make significant revisions to their work and waste a substantial amount of time and resources. Clinicians are often frustrated by the research and technologies that are presented to them and that they use in practice. Health technology, if not properly designed, has been shown to contribute to clinician burnout and has an impact on the capacity of clinicians to support patient care. Burnout is an epidemic among clinicians.

Integrating technological solutions into health care is one area of engineering research and design where diverse stakeholder engagement, involvement, and considerations are necessary to ensure a successful design process and project output [1-5]. A multi-stakeholder co-design process has been recommended for health-care technology projects to ensure that solutions meet the needs of the diverse stakeholders in health-care systems [1,6]. Human-centered design processes, like co-design, intentionally emphasize user involvement and integration throughout the entire design process [2,7] and have demonstrated effectiveness in technological development for health care [8,9]. Involvement of key stakeholders throughout the research and design process can also yield benefits when translating and integrating new technologies and processes into the health-care environment. Clinicians would already be involved in the development process and can then serve as well-informed local champions to facilitate and promote engagement and utilization of newly developed solutions. This approach is well established in participatory methods [9] and knowledge translation in health care [13,14].

The formation of a Clinical Council will help health technology researchers and innovators engage with clinicians who can provide insight and guidance. The clinicians can also connect research groups with other health-care providers, patients, and families as appropriate, and facilitate testing and implementation of health-care technologies in local health-care institutions. The clinician advisory council will participate in events where clinicians will present problems in the health-care system to innovators and health technology researchers.

Mandate

- Review applications presented by researchers and innovators and actively provide input and respond to questions during presentations by researchers and innovators.
- Present problems in the health-care and social care system to researchers/innovators and at various events.

- Provide advice to the Clinical Council Operations Committee on how to improve functioning of the Clinical Council.
- Champion the work of researchers and innovators and support connection with other clinicians in the community and with health and social care institutions.

Meetings/Events

There will be six (6) meetings/events during this first year of the Clinical Council. The events will all be in person. The meetings could be attended virtually, but in-person attendance is encouraged. The events are listed below in planned order of occurrence. Food and beverages will be provided at all meetings/events. Parking will be provided or reimbursed.

Members who are absent from two (2) meetings/events in a year may be asked to resign from the Clinical Council by the Operations Committee.

Summary of Meetings/Events

- 1. Clinical Council Meeting #1:
 - Attendees: Clinical Council.
 - Activities: Introductions, elect chair, review TOR and planned events for the year. Any questions or concerns will be brought to the Operations Council by the chair.
 - Duration: 1.5 hrs.
- 2. Social Mixer: Intros, mingling, engagement session application
 - Attendees: Clinical and Operations Council, Researchers, Strategic Invites.
 - Activities: The Clinical Council will be introduced to the University of Waterloo community. This will be followed by mix and mingling.
 - Duration: 2.5 hrs.
- 3. Engagement Sessions with Clinical Council:
 - Attendees: Clinical Council, invited research groups.
 - Activities: Selected researchers will present to the Clinical Council across seven 15-minute slots. Information about the researchers' projects/interests will be provided in advance. The Clinical Council will also have 30 minutes before the Lightning talks to eat and review applications.
 - Duration: 2.5 hrs.
- 4. Clinical Problem Space Speaker Event:
 - Attendees: Clinical and Operations Council, Researchers, Strategic Invites, Guest Speakers.
 - Activities: Guest speakers will present on challenges facing the health-care system and community. These speakers may be internal or external to the Clinical Council. Afterwards, there will be an opportunity for mix and mingling.
 - Duration: 2.5 hrs.
- 5. Engagement Sessions with Clinical Council:
 - Attendees: Clinical Council, invited research groups.
 - Activities: Selected researchers will present to the Clinical Council across seven 15-minute slots. Information about the researchers' projects/interests will be provided in advance. The Clinical Council will also have 30 minutes before the talks to eat and review applications.
 - Duration: 2.5 hrs.

6. Clinical Council Meeting #2:

- Attendees: Clinical Council.
- Activities: The Clinical Council will reflect on past events and identify improvements. Expressions of interest for future service on the Clinical Council will be requested. The Chair will bring a summary report to the Operations Council.
- Duration: 1.5 hrs.

Chair

- The Clinical Council will have a Chair, who will be elected by a simple majority of the Clinical Council, sit on the Operations Committee, and be the liaison between the Clinical Council and the Operations Committee.
- The Chair will be supported by the CBB staff who will act in a secretariat function The Chair will work with the Operations Committee to set the agenda for the Clinical Council meetings and the Chair will run the meetings with CBB staff support.
- The Chair will provide feedback from the Clinical Council to the Operations Committee.

Membership

- The Operations Committee will select Clinicians to sit on the Clinical Council.
- There will be six members of the Clinical Council but that number could be increased at the sole discretion of the Operations Committee.
- Expertise will be sought from across the health system representing primary care, specialty care, and other sectors including the indigenous community.
- Academic and community clinicians will be part of the Council.

Decision Making

• The Clinical Council will be an advisory committee and not be a decision making body with the exception of the process to select the Chair. In the case of selecting the Chair, the decision will be made by a simple majority of voting members (50 plus 1%).

Terms

- Members are appointed for one (1) year terms that may be renewed, there will be no limit on renewals.
- Approximately one quarter (1/4) of the Clinical Council should turn over every two (2) years.
- In the event that a member resigns, the Operations Committee will follow the membership process to fill the vacancy.

Remuneration

 Members of the Clinical Council will be remunerated at the agreed upon rate for time spent at the clinical council meetings and events where clinical council member attendance is required.

Conflict of Interest

Given the committee is only advisory in nature, conflicts of interest should be disclosed during
meetings, but will not preclude the member from participating in discussions. Except in the
case of a commercialization conflict, then the committee member will need to step away and be
excluded from the conversation.

 The Chair will also have to follow the Conflict of Interest approach in the Operations Committee Terms of Reference.

Review of Terms of Reference

• Annually or at the call of the Chair.

References

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- [2] B. Ku, E. Lupton, "Health Design Thinking: Creative products and services for better health", Cooper Hewitt, Smithsonian Design Museum, New York, NY: 2020.
- [3] R. Li, W.J.C. Verhagen & R. Curran, "Stakeholder-oriented systematic design methodology for prognostic and health management system: stakeholder expectation definition," Advanced Engineering Informatics, vol. 43, no. 101041, 2020.
- [4] I.B. Rodriguez-Calero, M.J. Coulentianos, S.R. Daly, J. Burridge & K.H. Sienko, "Prototyping strategies for stakeholder engagement during front-end design: design practitioners' approaches in the medical device industry," Design Studies, vol. 71, no. 100977, 2020.
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FRIENDS OF CLINICAL COUNCIL

OUTREACH ASSISTANCE

The following list documents all parties who support the Clinical Council and/or aid in expanding the reach of events and initiatives to audiences above and beyond the CBB, whose membership includes 180 faculty members in all six faculties and 23 departments at the University of Waterloo.

COMMUNICATIONS STAFF IN UWATERLOO FACULTIES

- Faculty of Engineering
- Faculty of Science
- Faculty of Health
- Faculty of Math
- Faculty of Arts
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COMMUNICATIONS STAFF IN UWATERLOO SCHOOLS AND DEPARTMENTS

- School of Pharmacy
- School of Optometry
- School of Computer Science
- Systems Design Engineering
- Mechanical and Mechatronics Engineering
- · Biomedical Engineering
- Chemistry
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- Human Computer Interaction
- United College

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- Capstone
- CREATE
- Office of Research
- WIN

EXTERNAL

- Grand River Hospital
 - Peter Potts (Chief of Staff)
 - Carla Girolametto
 (Integrated Director of Research & Innovation)
 - Sarah Laferriere (Manager of Research & Clinical Trials)
- Princess Margaret Cancer Centre
- MACcelerate
- MIX
- Velocity
- MDs referred by the Clinical Council

ADDITIONAL RESOURCES AVAILABLE FROM CBB

- <u>Clinical Council website</u> (hosted on the CBB site)
- Clinician renumeration invoice template
- Engagement session communication SOP
- Engagement session application template
- Engagement session application evaluation rubric
- Various invitation copy
- Operation Committee meeting minutes
- Program metrics for success





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